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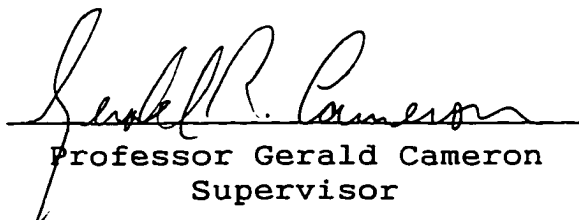


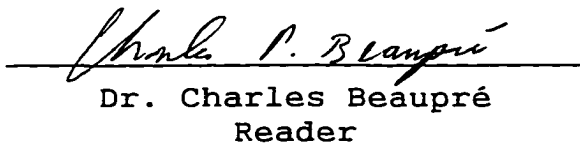
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A CASE STUDY OF TAIWAN

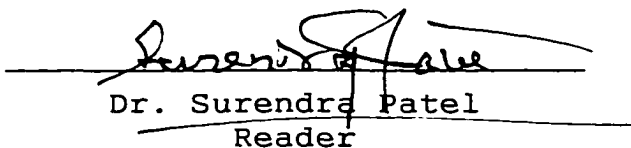
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**A STRATEGY FOR ACCELERATED DEVELOPMENT:  
A CASE STUDY OF TAIWAN**

**ABSTRACT**

Taiwan's rapid economic development over the past four decades has been seen as a "miracle." How Taiwan was able to achieve this economic miracle has been a topic for discussion for a long time. The purpose of this thesis is to examine Taiwan's economic development and the role of the Taiwanese government bringing about this economic success with respect to modernization theory and the state-centered approach. Taiwan's rapid economic development cannot be simply explained by a single theory or perspective because Taiwan's economic development is more complex than any single theory or perspective would predict. Although Taiwan's rapid economic development could be explained as a series of modernizing processes, it is necessary to put the Taiwanese government in a pivotal position when we try to understand Taiwan's economic development clearly. Finally, in the chapter entitled "Taiwanese Miracle or Efficient Strategies?" whether or not Taiwan's economic development serves as a model for other developing countries to learn from will be discussed.

Shih-jie Wang  
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## TABLE OF CONTENTS

ABSTRACT . . . . .	i
ACKOWLDEGEMENTS . . . . .	ii
TABLE OF CONTENTS . . . . .	iii
LIST OF TABLES . . . . .	v
CHAPTER ONE: INTRODUCTION . . . . .	1
1.1. Rationale . . . . .	1
1.2. Overview of the Thesis . . . . .	4
CHAPTER TWO: THEORETICAL FRAMEWORK . . . . .	6
2.1. Introduction . . . . .	6
2.2. Modernization Theory . . . . .	7
2.3. State-centered approach . . . . .	21
2.4. A Brief Comparison of Basic Orientation of Modernization Theory and the State-centered approach . . . . .	27
CHAPTER THREE: HISTORICAL BACKGROUND OF TAIWAN'S ECONOMIC DEVELOPMENT . . . . .	30
3.1. Introduction . . . . .	30
3.2. Profile of Taiwan . . . . .	31
3.3. Taiwan's Political Development in the 20th Century . . . . .	35
3.4. Conducive Conditions for Taiwan's Economic Development . . . . .	40
3.5. Conclusion . . . . .	54
CHAPTER FOUR: TAIWAN'S ECONOMIC DEVELOPMENT AND THE ROLE OF THE TAIWANESE GOVERNMENT . . . . .	56
4.1. Introduction . . . . .	56
4.2. Taiwan's Economic Development . . . . .	56

4.3. The Role of the Taiwanese Government in Economic Development . . . . .	90
4.4. Analysis of Taiwan's Economic Development and the Role of the Government with Respect to Modernization Theory and the State- centered approach . . . . .	100
CHAPTER FIVE: SOME CONCLUSIONS: TAIWANESE "MIRACLE" OR EFFICIENT STRATEGIES? . . . . .	105
BIBLIOGRAPHY . . . . .	110



## LIST OF TABLES

3.1.	People with a Level of Education as a Percentage of the Population at and over the Age of Six Years . . . . .	43
3.2.	Sexual Equality in Education Female/Male x 100	44
4.1.	Area and Households Affected by Land Reform (by Type of Reform) . . . . .	61
4.2.	Types of Families Before and After Land Reform	62
4.3.	Changes in the Number of Landowners Before and After the Implementation of the Land-to-the-Tiller Program (by Size of Holding) . . . . .	62
4.4.	Structure of Exports . . . . .	70
4.5.	Private Foreign and Overseas Chinese Investment in Approvals . . . . .	72
4.6.	Foreign Investment by Industry . . . . .	73
4.7.	Socioeconomic Indicators During the Export-led Industrialization Period (1962-72) . . . . .	74
4.8.	Socioeconomic Indicators During the Oil Shock (1973-80) . . . . .	79
4.9.	Distribution of Industrial Production by Ownership . . . . .	97

## CHAPTER ONE:

### INTRODUCTION

#### 1.1. RATIONALE

From a small island country to a big economic substance, Taiwan's extremely rapid economic growth over the past four decades has been seen as a "miracle." Taiwan's economic development has gone through four stages of transformation: land reform and import substitution in the 1950s, export-led industrialization in the 1960s, second phase of import substitution in the 1970s, and, finally, high-technology industrialization in the 1980s and '90s. And Taiwan's rapid economic growth has brought higher per-capita income, stable prices, full employment, improved income distribution and a higher standard of living. Such economic success was achieved by a poor country with few natural resources and under the administration of a government that had failed to promote development in China during the 1930s. After the retreat of the Kuomintang (KMT

National Party) government from Mainland China to Taiwan in 1949, the KMT government was bearing in mind the lesson from the failure of control of farmers and chaos of political and economic situations. Therefore, the KMT government in Taiwan heavily intervened in these issues in order to prevent the same failure that they experienced in Mainland China.

Taiwan's development also enjoyed many special conducive conditions, such as the Japanese legacy, US aid, favourable timing of the world economy, and Confucianism, but it was the effective economic policymaking of the KMT government that brought these advantages fully into play and overcame the disadvantages, such as the lack of natural resources, small economic scale, high population density, heavy national defence burden, serious inflation during the earlier period, and diplomatic isolation in recent years.

In terms of international development, Taiwan's political economic development occurred at rates and in forms that are different from many other developing countries, mainly due to the efficient intervention of the KMT government in formulating and executing various development policies. These policies can be roughly included under a few broad development strategies: promoting industrialization from a solid base of agriculture; systematic development of industry in

accordance with comparative advantages; great emphasis on economic stability; and encouragement of exports. Above all, a modernization of the economy along with the process of development can be clearly noted. Through these development strategies, the KMT government played an active role in regulating Taiwan's economic transformation. It led Taiwan's economy to overcome several crises and create the experience of "growth with equity."

For a Taiwanese who was born in the late 1960s and grew up during the export boom era in Taiwan, the author was very curious as to how Taiwan could achieve its economic success. Especially, after studying the problems of economic development in Latin American countries, the author became interested in researching Taiwan's political economic development pattern. Why and how were Taiwan's economic strategies and policies formulated? How could these policies be carried out effectively? And why was Taiwan's political economic development more successful than that of other developing countries? And, finally, could Taiwan's experience be used as model for other developing countries to learn from?

In order to attempt to answer these questions, it is very important to bring the role of the KMT government into the discussion. The KMT government has been strenuously involved in both the political and

economic aspects of Taiwan's development. Therefore, Taiwan's unique development pattern cannot be properly explained without mentioning the pivotal role played by the KMT government. Indeed, this statement has been supported by comments in the literature, for example by Cal Clark in his work, *Taiwan's Development: Implications for Contending Political Economy Paradigms*, and by Chien-kuo Pang in his work, *The State and Economic Transformation: The Taiwan Case*. These two works emphasized the importance of the role of the Taiwanese (KMT) government in its country's economic development.

## 1.2. OVERVIEW OF THE THESIS

This thesis addresses Taiwan's economic development and the role that the Taiwanese (KMT) government played in its development. Chapter 1 presents the rationale and an overview of this thesis. Chapter 2 outlines the modernization theory and the state-centered approach, building towards a theoretical framework for the study of Taiwan's economic development and the role of the Taiwanese government played in its development. Chapter 3 outlines the historical background of Taiwan's economic development. Chapter 4 addresses the stages of Taiwan's economic development and the role of the Taiwanese government in economic development, and presents an analysis of Taiwan's economic development

and the role of the government with respect to modernization theory and the state-centered approach. Chapter 5 concludes with a discussion of Taiwan's experience as a model for other developing countries.

## CHAPTER TWO: THEORETICAL FRAMEWORK

### 2.1. INTRODUCTION

The East Asian experience, including that of Taiwan, stands out as a unique example in world economic development. Its growth rates, both of total as well as per capita GDP were unparalleled. Its population spread was larger, the duration of its high rate of growth was much larger. The volume of the export and foreign exchange reserves accounts for the largest part of the world exchange reserves.<sup>1</sup> In short, the East Asian countries have beaten all past records of development anywhere in the world. These are the reasons why no existing development theories of liberal, neoclassicism, various theories on trade, industry and technology can serve effectively in the study of the East Asian

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<sup>1</sup> Surendra J. Patel, *Technological Transformation Volume V: The Historic Process* (Aldershot, England: Avebury, 1995), pp. 240-246.

experience of the post-Second World War period. A new way of looking at that experience, including that of Taiwan, is essential. In this study, I have attempted to analyze Taiwan's experience in this light.

For the purposes of this thesis, this chapter uses the two basic theoretical frameworks that deal with economic development -- modernization (or neoclassical) theory and the state-centered approach. This chapter, therefore, has to be selective. We will analyze the pattern, structure, policies, and institutions involved in development in relation to the liberal market dependent approach and the wholly state dependent approach, and then focus on a combination of these two approaches. The first section of this chapter describes modernization theory and discusses its relevance to economic development. The second section describes the state-centered approach and its relevance to economic development. Finally, this chapter makes a brief comparison of their basic orientation.

## 2.2. MODERNIZATION THEORY

From the seventeenth century to the nineteenth century, the Western countries, especially Western Europe and North America, benefited from the industrial revolution and capitalism, and obtained a level of development far more advanced than that of the rest of the world. Western countries came to believe that the



means by which they achieved their development were best for developing countries to follow as well. Therefore, the modernization theory came to be derived from Western economic history. This theory was based on the assumption that the experience of Western countries (Western Europe and North America) that had led the industrial revolution provided a good way for illustrating the economic, social, and political components of development. It also assumed that the pattern of development in the West was the universal model of development for other developing countries, and if they wished to achieve the same kind of economic success they would have to adhere to the Western model.

The modernization theory begins with a dichotomy: the traditional society (or "rural," "backward" or "underdeveloped") and the modern society (or "urban," "developed," or "industrial"). The traditional society is supposed to follow the same pattern of change experience in earlier times by modern societies.<sup>2</sup> Therefore, the transformation from a traditional society to a modern society is the main discourse of modernization theory. Several important "modern" values have thus been identified that are seen as actively promoting capitalist economic growth. The central values focus on the material world and free market. People are

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<sup>2</sup> Jorge Larraín, *Theories of Development: Capitalism, Colonialism and Dependency* (Cambridge: Polity Press, 1989), p. 87.

encouraged to pursue their material interests through competition in the economic system. The opportunity is equal for everyone: those who contribute more to economic activity can gain a greater benefit from the marketplace.<sup>3</sup>

The modernization theory has also placed the emphasis on the sustained growth as one of the important components of development. This sustained growth depends on two major factors. First is technological innovation that would increase production. Second is the growth of savings and investment that would permit the application and spread of the technology. First, technological innovation is the main component to help a developing country in the process of transforming from a traditional society into a modern society. Second, the modernization theory has also placed the emphasis on the increasing gross levels of savings and investment (both internal and external, private and state) until the economy accelerated into the stage of self-sustaining development. The modernization theory presupposes a strong relationship between capital accumulation and the subsequent level of economic development.<sup>4</sup> The developing countries find it very difficult to generate

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<sup>3</sup> Cal Clark, *Taiwan's Development -- Implications for Contending Political Economy Paradigms* (New York: Greenwood Press, 1989), p. 237.

<sup>4</sup> Bret L. Billet, *Modernization Theory and Economic Development: Discontent in the Developing World* (Westport: Praeger Publisher, 1993), p. 4.

capital. Besides limited domestic savings for investment, foreign direct investment and foreign aid are the alternative way to augment capital formation. And increasing capital capacity would provide the energy for developing countries to improve and spread their technology, and to drive through the process of "stages of growth" which would bring the benefits of modernization to the developing countries.

There are many visions for modernization theory. For the purpose of this thesis, I will limit this discussion of modernization theory to its economic vision.

The most well known economic contribution within modernization theory is Walt Rostow's "stages of economic growth." Rostow proposed that all societies pass through five stages on their way to becoming modernized: 1. traditional society, 2. preconditions for take-off, 3. take-off, 4. road to maturity and 5. the age of high mass consumption. Rostow's thesis about the relationship between the stages of economic growth and the situation of the newly industrializing countries (NICs) matches exactly the premises of modernization theories. He argues that "it is useful, as well as roughly accurate, to regard the process of development now going forward in Asia, the Middle East, Africa, and Latin America as analogous to the stages of preconditions and takeoff of other societies, in the

late eighteenth, nineteenth and early twentieth centuries."<sup>5</sup>

In Rostow's *The Stages of Economic Growth: A Non-Communist Manifesto*, he identified the stages of economic growth in a society in the following terms:

*Traditional society:*

In the first stage, it is a traditional society that developed with limited production functions, based on pre-Newtonian science and technology, and on pre-Newtonian attitudes towards the material world. Newton is used as a watershed in history when people came to widely believe that the external world was systematically capable of productive manipulation. This is not to say that there is no growth in a traditional society; however, the main fact for the traditional society was that the level of attainable output per head was limited. The reason for this limitation was the modern science and technology were neither available nor regularly and systematically applied for the traditional society. Because of limited productivity, the traditional society had to concentrate a very high proportion of their resources on agriculture. Therefore, land became a very valuable resource in the traditional society. Rostow gives an example to explain the

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<sup>5</sup> Walt W. Rostow, *The Stages of Economic Growth: A Non-communist Manifesto*, 3rd ed. (Cambridge: Cambridge University Press, 1990), p. 139.

importance of land in traditional society. In Chinese villages, there was an endless struggle to acquire or to avoid losing land, yielding a situation where land rarely remained within the same family for a century.

On the other hand, a central political rule often existed in the traditional society; and this political power generally had a very close connection with those who owned or controlled the land. Although these landlords maintained instability but they usually had a deep influence over such central political power and even its following of civil servants and soldiers.

In sum, because traditional society lacked modern science and technology it could not make substantial improvements in its social and economic structure.

*The precondition for take-off:*

The second stage of growth is the period when the preconditions for take-off are developed. Because it takes time to change a traditional society, it is necessary for it to utilize the fruits of modern science to increase its ability to grow.

Britain was the first to fully develop the preconditions for take-off in the late seventeenth and early eighteenth centuries. Britain translated modern science into new production functions in both agriculture and industry.

In modern history, however, many cases indicate that the stage of preconditions did not arise from internal forces within traditional society but from external forces from other advanced societies, those so-called colonial or quasi-colonial powers for their limited economic purposes. These incursions motivate the traditional society to open its doors to the rest of the world. New types of enterprising people in the private economy are willing to mobilize savings and to take risk in pursuit of profit or modernization. Meanwhile, the investment increases especially in transportation, communications, and in raw materials in which other nations may have an economic interest.

Politically, it is trying to build an effective centralized nation that is based on a new conception of nationalism in order to oppose the traditional landed regional interests and colonial powers. All activities in this period progress at a limited pace within an economy and a society that is characterized by traditional low-productivity methods, by the old social structure and values and by the regionally based political institutions. Although there was just a small step of improvement in the traditional society, it was a necessary condition for take-off.

*The take-off:*

The take-off, the great watershed in modern societies, is the period in which the old blocks and resistance to steady growth are finally conquered. Growth becomes the common situation in this period, and the composite interest of the whole society is built into its institutional structure. In this stage, it is looking for not only the increase of GNP or GDP and the enlargement of technological development in industry and agriculture, but also the materialization of the government prepared to consider the modernization of the economy as a serious and high-level political issue.

During the take-off stage, new industries developed very quickly, and this development resulted from a good circle of reinvestment in new industries. The profits which produce from the new industries, in large proportion, are reinvested in new industrial activities; and these new industries require more factory workers to work in the new plant; then those workers need other manufactured goods and services to support them; and these goods and services become another subject for reinvestment. Therefore, a positive circle was completed. The whole process of expansion in the new industries makes income increase, but the increase in income is only in the hands of those who reinvest their money into the new industrial activities, not those who put their money into the bank. Hence, the

new class of entrepreneurs expands, and it directs a large amount of investment into the private sector.

In this period, Rostow assumed that it needs ten or twenty years to transform the basic structure of the economy and the social and political structure of the society into a state where it maintains a steady and regular rate of sustained growth.

*The drive to maturity:*

In this period, the structure of the economy is continually changing because of the improve of technique. The older industries are replaced by new industries. The economy has its new place in the global market. The goods formerly imported are now produced in domestic factories; new import requirements develop, and new export commodities appear. The economy, compared to the take-off period with respect to the relatively narrow complex of industry and technology, has widened its range into more technology and more complex processes, such as the shift from heavy industry to the electrical equipment industry. Formally, the maturity can be defined as the stage in which the economy demonstrates the capacity to move beyond the original industries and to absorb and apply the most advanced modern technology. This stage demonstrates that the economy has the technological and entrepreneurial skills to produce anything that it chooses to produce, but not



everything. It may lack the raw materials or other supply conditions to produce a given type of output economically; but its dependence is a matter of economic choice or political priority rather than a technological or institutional necessity.

Rostow assumed that, historically, from the beginning of take-off to maturity, it required sixty years to move a society through the process.

*The age of high mass-consumption:*

In this stage, the leading sectors shift towards durable consumer goods and services. As societies achieve maturity, two things happen: first, when the real income per head rises to a certain high point where the majority begin to over-consume, above and beyond their basic needs; and, second, the structure of the working force changes which increases not only the urban population, but also the population working in offices or in skilled factory jobs. Besides these economic changes, the society ceases to accept the further expansion of modern technology. Request for social welfare and security increase. The appearance of the welfare state demonstrates that a society has moved beyond technical maturity. But the resources also tend increasingly to be directed to the production of

consumer durable goods and to the diffusion of services on a mass scale, if consumer autonomy prevails.<sup>6</sup>

The modernization theory is usually paralleled with the neoclassical approach, especially where economic growth is concerned. In the 1960s and '70s, the neoclassical approach emphasized capital formation as the main engine of growth, and underlined the efficient allocation of resources as the primary source of growth. According to Robert Wade,<sup>7</sup> neoclassical economists believe that short-run efficient resource allocation is the key to rapid long-term economic growth. They have emphasized that "getting the price right" is a necessary and nearly sufficient condition for maximizing the rate of long-term growth.<sup>8</sup> Therefore, as long as the economy stays within the free market framework, economic growth is sustainable. The East Asian economies such as Taiwan, Japan, South Korea, Singapore and Hong Kong are good examples that have adhered to these principles to achieve success. According to James Reidel,

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<sup>6</sup> The information in the preceding section has been derived from W. W. Rostow, *The Process of Economic Development* (2nd ed), (New York: W. W. Norton & Company, 1962).

<sup>7</sup> Robert Wade, "Review Article: East Asian Economic Success: Conflicting Perspectives, Partial Insights, Shaky Evidence," *World Politics*, Vol. 44 (1992), pp. 270-320.

<sup>8</sup> "Getting" means letting prices find their right levels; "right" refers to the relative prices established in freely operating domestic and international markets.

"Neoclassical economic principles are alive and well, and working particularly effectively in the East Asian countries. Once public goods are provided for and the most obvious distortions corrected, markets seem to do the job of allocating resources reasonably well."<sup>9</sup>

The cornerstone of the free trade tenet seems to lie in the concept of comparative advantage. The neo-classical approach to international trade theory shows that any two or more nations will be better off if they concentrate on those activities for which their costs are concentrated on producing goods with resources which are domestically abundant.<sup>10</sup> According to Balassa, exports contribute to resource allocation according to comparative advantage. At the same time, these gains accumulate over time as the efficiency of new investment is enhanced through its orientation toward industries that correspond to the comparative advantage of the countries concerned.<sup>11</sup>

Therefore, according to the above discussion, the emphasis of modernization theory (or neo-liberal perspective) is capitalism, free market, sustained

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<sup>9</sup> Tan Kock Watt and K. S. Jomo, "Economic Theory and Industrial Policy in East Asia," in Robert Fitzgerald, ed., *The State and Economic Development: Lessons from the Far East* (London: Frank Cass, 1995), p. 19.

<sup>10</sup> *Ibid.*, p. 19.

<sup>11</sup> Alvin Y. So and Stephen W. K. Chiu, *East Asian and the World Economy* (Thousand Oaks, CA: Sage Publications, 1995), p. 5.

economic growth and export-oriented industrialization. These elements are very important for a country's development. But in the more recent works involving the neo-classical perspective, these concepts have been challenged because of the emergence of East Asian economic success. Of particular note is Robert Wade's "governed market theory" of East Asian development. Taking both the "free market" and more sophisticated "simulated free market" versions of neoclassical theory, he systematically matches them to the empirical realities of economic transformation in the East Asian economies and finds that they are severely wanting.<sup>12</sup> The East Asian economies have been successful because the governments have been looking to maximize efficiency resulting from market-based resource allocation.<sup>13</sup> Their governments have used the strengths of both the state and market, and overcome the weaknesses of the two. In short, they treated the "market as a good servant but a bad master."<sup>14</sup> As a consequence, markets have worked more efficiently than in other developing countries.<sup>15</sup> In addition, as Wade suggests, there has been a

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<sup>12</sup> Jeffery Henderson and Richard P. Appelbaum, "Situating the State in the East Asian Development Process," in Jeffery Henderson and Richard P. Appelbaum, eds., *State and Development in the Asian Pacific Rim* (Newbury Park, CA: Sage Publications, 1992), p. 14.

<sup>13</sup> *Ibid.*, p. 13.

<sup>14</sup> Patel, p. 267.

<sup>15</sup> Henderson and Applebaum, p. 13.

secondary theme within the neoclassical works that have recognized minimal state intervention.<sup>16</sup> It is argued that East Asian governments have successfully balanced domestic market protection with export promotion strategy. Hence the neoclassical perspective has begun to recognize the important role that government plays in facilitating economic development. Originally, the neoclassical perspective merely mentioned the role of government in economic development; it appears to ignore the question of the nature and effectiveness of government intervention in economic development, and it treated government as an institution that maintains law and order to protect private property and ensure that contracts are honoured.<sup>17</sup> However, after the emergence of East Asian economic success, the neoclassical perspective has been seriously criticized because it ignored the role of government in economic development. The emergence of the state-centered approach is the main discourse of criticism. The next section will discuss this perspective in detail.

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<sup>16</sup> Robert Wade, *Governing the Market: Economic Theory and the Role of Government in East Asia Industrialization* (Princeton, NJ: Princeton University Press, 1990), pp. 23-24.

<sup>17</sup> Amitava Krishna Dutt, Kwan S. Kim and Ajit Singh, *The State, Markets and Development* (Hants, England: Edward Elgar, 1994), p. 6.

### 2.3. STATE-CENTERED APPROACH

During the 1980s, the state's role in a country's economic development has been fervently discussed since the East Asian countries (such as Japan, South Korea, Taiwan, Singapore, and Hong Kong) have achieved rapid rates of economic growth during the last few decades. This achievement was possible by a judicious balance between the role of the state and the market at a given point in time and for the given sector of development. It is true that in many developing countries the state has participated directly in production, distribution and services. Those countries following planned economic development have allocated most resources to the public sector, with a built-in bias for industrialization.<sup>18</sup> Even the World Bank, which is an ardent promoter of the free market approach, has also modified its position to say that the state may play a useful role in promoting export industries, and should intervene in certain areas if the market mechanisms is clearly not functioning efficiently there.<sup>19</sup> Therefore, the state's intervention is needed sometimes because in developing countries where certain sectors of the economy are underdeveloped

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<sup>18</sup> Idriss Tazairy, et al., "From the Old to the New Development Paradigm," *The State of World Rural Poverty* (International Fund for Agricultural Development, 1993), pp. 8-9.

<sup>19</sup> Joseph S. Lee, "The Role of State in Economic Restructuring and Development: The Case of Taiwan," Occasional Paper Series, No. 9403, April 1994 (Taipei: Chung-Hua Institution for Economic Research), p. 2.

they need the state to promote their interests. And for developing countries, the state has to play a very important role in its economic development.

The state-centered approach is one that puts the state in a pivotal position in discussing its role in a country's development. The state-centered approach emerged as a critique of neoclassical economic explanation of development countries. Contrary to stressing free market, trade liberalization, private enterprise, and the restricted role of the state, the state-centered approach argues that the state has to play a strategic role in taming domestic and international market forces and harnessing them to the national purpose. Contrarily focusing on maximum profit on the basis of comparative advantage, the state-centered approach focuses on the phenomenon of late industrialization. In this aspect, the state-centered approach is arguing for the importance of a strong state to overcome market imperfections and the various bottlenecks of industrialization.<sup>20</sup> According to Wade, in his article "The Role of Government in Overcoming Market Failure: Taiwan, Republic of Korea and Japan," a basic weakness of neoclassical development economics is its inattention to the idea that governments differ in their capacities to guide the market. He argues that the governments of the East Asian countries have an

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<sup>20</sup> So and Chiu, p. 12.

unusually well developed capacity for selective intervention, and that there are three characteristics: (a) a powerful set of policy instruments, (b) a certain kind of organization of the state and of its links with other major economic institutions in the society, and (c) superior economic performance -- notably with respect to rapid restructuring of the economy towards higher technology production.<sup>21</sup> He realizes that the governments do have powerful instruments of selective industrial promotion at their disposal, and the use of these instruments has in fact contributed to superior industrial performance. According to Pang, the state-centered approach has five characteristics. First, the state-centered approach regards politics more as a problem of rule and control than as a problem of allocation. It is more concerned with maintaining order against internal and external threats than with the allocation of interests among political actors. Second, the state-centered approach emphasizes that the state can be treated as an intervening variable in its own right. The state cannot be understood as just a reflection of social characters or preferences. Third, the state-centered approach places greater emphasis on institutional constraints, both formal and informal, than on individual behavior. The state can limit

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<sup>21</sup> Helen Hughes, ed., *Achieving Industrialization in East Asia* (New York: Cambridge University Press, 1988), pp. 130-31.



people's conceptions of their own interests and their political resources. The political outcome cannot be perfectly understood as simply the resolution of the variety of different interest groups. Fourth, the state-centered approach pays more attention to the historical face of social phenomena and of state building, because current institutional structures might be the production of certain historical particulars rather than contemporary factors, and any historical choice may facilitate alternative future choices. Finally, the state-centered approach has a greater tendency to see tension within the political system. Political life is characterized not simply by a struggle over the allocation of resources but also by conflict and ambiguity about the rules of the game within which this allocative process is carried out.<sup>22</sup>

In short, these characteristics assumed that the state can be treated as a relatively independent actor pursuing its own distinctive goals that do not necessarily reflect the interests generated from the society, and believed that the state is not necessarily a passive recipient of social pressure even though it may have special relations with certain social groups.

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<sup>22</sup> The information in the preceding section has been derived from Chien-kuo Pang, *The State and Economic Transformation -- the Taiwanese Case* (New York and London: Garland Publishing, 1992), pp. 11-12.

In addition, according to Clark, there are three necessary conditions for the state-centered approach to emerge, and all must be present. First, the state's structures must be "strong and efficient" in order to enable the state to formulate and implement policies. Strong and stable states in countries with a long history of high civilization and efficient rule will probably be constrained by a well-formed class structure, and the autonomy of rulers will probably be the greatest in unformed post-colonial regimes and societies in which state capabilities are quite weak. The second condition is a change in the political and economic nature of the international capitalist system, which will give a chance for some developing countries to improve their economies. Finally, even though these three necessary conditions exist, the state and its leaders must also have a strong commitment to promoting development and industrial transformation of their countries.<sup>23</sup>

In the global context, the developing countries needed the state to play a much stronger role as opposed to the developed countries. The "catch-up" nature of industrialization in the developing countries required rapid massive accumulation of capital for infrastructure and "new" industries (such as the steel industry) that were simply beyond the abilities of private sectors in

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<sup>23</sup> Clark, p. 41.

developing countries. Moreover, the ideological commitment and industrial strategy of the state appeared necessary to push backward economies toward industrialization.<sup>24</sup>

The "strong" state is not the only component of the state-centered approach. Besides the strong state, the state-centered approach places great emphasis on the efficiency of the state, because there is no guarantee that a strong state could achieve the goal of development, if it is not an efficient state. Efficiency is related to the state autonomy and state capacities. The concept of state autonomy means that the state may formulate and pursue goals that are not merely reflective of the demands or interests of social groups, classes or society. The concept of state capacities refers to the possibility of the state to implement official goals, especially against the actual or potential opposition of powerful social groups or in the face of adverse socioeconomic circumstances. Therefore, for an efficient state, a certain degree of state capacity and a certain amount of state autonomy must be achieved.

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<sup>24</sup> Clark, p. 36.

#### 2.4. A BRIEF COMPARISON OF BASIC ORIENTATION OF MODERNIZATION THEORY AND THE STATE-CENTERED APPROACH

The studies of development were devised to provide answers to specific research problems. When a previous study did not work in other situations, a new or alternative study would arise. When a particular problem occurred, the assumptions of the old study were first questioned and then a new way of looking at the development phenomenon appeared that provided acceptable answers to the fundamental and acute research problem.<sup>25</sup>

Modernization (neoclassical) theory was based on the research problem that explained economic growth and transition in the Western countries (such as Western Europe and North America) and presumed that the pattern of development in the West was the universal model of development for other developing countries. It also believed that growth was a natural or inherent property brought about by the market. Government's role was to provide limited "public goods" that are difficult to be developed by the private sector because of their long duration, heavy investments and often low profits. But government was not to go beyond this role and adopt policies that interfered with the free market.<sup>26</sup>

When these assumptions did not apply to the post-colonial world, a new experience appeared on the world

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<sup>25</sup> Pang, p. 17.

<sup>26</sup> So and Chiu, p. 15.

scene to challenge them. The state-centered approach argued that the pattern of Western development could not really be explained in countries' economic development, especially the East Asian economic "miracles" of the past four decades. In order to explain these miracles, one must bring the role of the state into the discussion. In East Asian countries (such as Japan, South Korea, Taiwan, Hong Kong, Singapore, Malaysia, and Indonesia), the state has played a strategic role in implementing economic policies and directing economic transformations. The state-centered approach contributed by emphasizing the crucial role of the government as in East Asia's economic success in the second half of the 20th century.

It shows that the model of East Asian development is indeed different from the Western industrialized countries. Although many Western economists tended to stress these East Asian countries' miracles which provided evidence of the success of modernization, it is nevertheless an oversimplification. Unfortunately, there is no one particular theory which can satisfactorily explain the East Asian miracle. However, combining the existing theories and perspectives might be an alternative way of explaining the East Asian miracle. In this thesis, I shall use Taiwan as a case study to do just that.

### **CHAPTER THREE:**

#### **HISTORICAL BACKGROUND OF TAIWAN'S ECONOMIC DEVELOPMENT**

##### **3.1. INTRODUCTION**

In order to study Taiwan's economic development and the role that the Taiwanese (KMT) government played in the story of that country's successful economic development, it is first necessary to briefly examine Taiwan's historical background.

This chapter, comprised of three main parts, presents a brief overview of Taiwan's historical background in relation to that country's economic development. The first part presents a profile of Taiwan, which covers the main ideas concerning what is known about Taiwan; the second part provides an overview of Taiwan's political development in the 20th century; and the final part offers an analysis of some conducive conditions that Taiwan had in its early stage of development. These three sections will build a clear historical background and help to explain the later

analysis of Taiwan's rapid economic development and the unique role played by the Taiwanese government.

### 3.2. PROFILE OF TAIWAN

#### Natural Environment

Taiwan, known as *Formosa* (beautiful island), is located between Japan and the Philippines and lies in the western Pacific Ocean off the southeast coast of mainland China. Eighty-six smaller nearby islands have an historic association with Taiwan, including the Pescadores (Penghu Islands), Green Island, Orchid Island and Shiao Liu-chiu.<sup>27</sup>

Taiwan's total land area is 36,000 square kilometers (13,986 square miles). More than two-thirds of Taiwan is mountainous, and only 25 percent of the land is arable.<sup>28</sup> There is a total of six rivers that are more than 100 kilometers long, with the largest -- Chuoshui River -- being 186 kilometers, while the Kaoping River has the largest drainage basin (3,256 square kilometers).<sup>29</sup>

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<sup>27</sup> *Great Taiwan -- Land of Prosperity, Affluence, and Contentment* (Taichung, Taiwan, ROC: Department of Information, Taiwan Provincial Government, ROC, 1995), p. 13.

<sup>28</sup> Marc J. Cohen, *Taiwan at the Crossroads* (Washington, DC: Asia Resource Center, 1988), p. vii.

<sup>29</sup> *The Republic of China Yearbook 1997* (Taipei, ROC: The Government Information Office, 1997), p. 6.

The Tropic of Cancer bisects Taiwan, passing through Chiayi County and Hualien County. Thus, Taiwan's monsoonal climate can be divided into both tropical and subtropical zones. In general, the climate is hot and humid and typhoons are common during the summer and autumn seasons.<sup>30</sup>

Although Taiwan has few mineral resources, its location has caused it be considered an island with strategic significance. For mainland China, Taiwan has been the front line of resistance to Western colonial power; for Japan, Taiwan was a stepping stone to invade Southeast Asia; and for the United States, Taiwan represented a wall of resistance to the spread of communism.

### People

Taiwan has a population of more than 21 million people and about 99 percent of these people are of Chinese descent: about 15 percent are called mainlanders who came over with the KMT government in 1949 and their Taiwan-born descendants; and the rest of the population is called "native Taiwanese," who are descended from China's settlers who arrived 300 hundred years or more ago, and the majority of "native Taiwanese" are "Minnan" (70%) and the minority, "Hakka" (12-15%). There are also

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<sup>30</sup> *Great Taiwan -- Land of Prosperity, Affluence, and Contentment*, p. 13.



nine major tribes of Aborigines with distinct language and culture; they account for no more than two percent of the total population.<sup>31</sup>

### System of Government

Taiwan was under the strong so-called soft-authoritarian regime from the late 1940s to the mid 1980s. However, in the past decade, Taiwan has moved rapidly toward becoming a full-fledged democracy, with a directly elected legislature and a popularly elected president.<sup>32</sup>

Regional autonomy is the most concrete measure Taiwan is taking to realize democratic constitutional government. Following the promulgation of the "Provincial and County Autonomy Law" in 1994,<sup>33</sup> the provincial governor and city mayors were elected by a popular vote for the first time in history.

The current ruling party of Taiwan is the Kuomintang (KMT), also known as the Nationalist Party. There are also several opposition parties to be established after the lifting of the *Emergency Decree*

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<sup>31</sup> Cohen, p. vii.

<sup>32</sup> *The Republic of China Yearbook 1997*, pp. 73-88.

<sup>33</sup> *Great Taiwan -- Land of Prosperity, Affluence, and Contentment*, p. 18.

(Martial Law)<sup>34</sup> in 1987, including the Democratic Progressive Party (DPP) and the New Party (NP).

### Economic Performance

Today, Taiwan's foreign reserves are consistently the world's second highest and it is recognized as a major force in the world economy, with its GNP surpassing US\$12,000 per person.<sup>35</sup>

Taiwan's GNP growth rates increased by an average in excess of nine percent every year during the period of 1952 to 1987.<sup>36</sup> In the 1990s, Taiwan faced a more sluggish global market, and so its GNP growth rate was depressed. However, even though the 1995 growth rate -- 6.6 percent -- is the lowest in five years, Taiwan's foreign trade of export and import values both exceeded US\$200 billion the same year. In 1995, Taiwan's GNP topped US\$263.6 billion, ranking it the 20th in the world.<sup>37</sup> More impressive is that Taiwan has low external

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<sup>34</sup> KMT government proclaimed the *Emergency Decree* (martial law) in Taiwan on May 19, 1949, when the Chinese Communist Party launched an all-out offensive on mainland China and after fierce fighting broke out in Kwangtung and Amoy in October of the same year, KMT (Nationalist Party) was forced to move to Taiwan in December 1949.

<sup>35</sup> *Great Taiwan -- Land of Prosperity, Affluence, and Contentment*, p. 28.

<sup>36</sup> Cohen, p. 79.

<sup>37</sup> *The Republic of China Yearbook 1997*, p. 155.

debt, inflation and unemployment,<sup>38</sup> and it has equitable income distribution. The gap between the richest and poorest 20 percent of income earners was about four percent in 1987, which places Taiwan among one of the countries with the most equitable distribution of earnings in the world, although the figures show a slightly increasing gap between rich and poor in the 1990s.<sup>39</sup>

### 3.3. TAIWAN'S POLITICAL DEVELOPMENT IN THE 20TH CENTURY

Taiwan's development from a poor rural society to a rich economic entity did not arise from a historical vacuum. Accordingly, it is important to firstly examine Taiwan's development from a historical perspective, particularly with respect to political development, in order to better understand how Taiwan could achieve such success. In general, Taiwan's political development in this century may be divided into two periods: the Japanese colonial period from 1895 to 1945 and the KMT government period from 1945 to the present.

#### Japanese Colonial Period: 1895-1945

The Japanese had a special interest in Taiwan due to Taiwan's key strategic position and its fear that if

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<sup>38</sup> Taiwan has kept a comparatively low unemployment rate of less than 3 percent over the past 40 years.

<sup>39</sup> The data available in the preceding paragraph has been derived from Cohen, *passim*.

any European power gained control over Taiwan this might block Japan's conquest of Southeast Asia. China and Japan went to war in 1894-1895 with Japan finally emerging as the victor. When China signed the Shimonoseki Treaty on April 17, 1895, this effectively handed Taiwan over to Japan as a prize of victory. From 1895 until Japan's crushing defeat in 1945, Taiwan was an important colony of Japan,<sup>40</sup> since Japan used Taiwan to support its strategy of invading the south and to acquire foodstuffs and raw materials for its process of industrialization.

#### KMT Government Period: 1945-present

After Japan's unconditional surrender in August 1945, Taiwan was formally returned to China (Republic of China) on October 24, 1945. In order to understand the later history of Taiwan over the past four decades, it is necessary to review briefly what had transpired on mainland China during Taiwan's decades as a Japanese colony.

After 1895, China (Ching dynasty) had continued to decline "under the combined weight of imperialist encroachment, domestic disintegration, and incompetent, reactionary leadership. . . . Some Ching officials made half-hearted attempts at reform, but it was too late. Chinese in ever greater numbers engaged in revolutionary

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<sup>40</sup> Daniel Mettraux, *Taiwan's Political and Economic Growth in the Late Twentieth Century* (Lewiston: The Edwin Mellen Press, 1991), pp. 18-20.

activities to demolish the dynastic system and establish a modern republic."<sup>41</sup>

The Ching was overthrown in October 1911 and the new Republic of China was established in January 1, 1912 by the revolutionaries.<sup>42</sup> However, there followed a period of tragic chaos and warfare that extended to 1949; that is, soon after the establishment of the Republic of China, real political power was seized by local military figures, namely "warlords," during the first two decades of the republic China had been fractured by these warlords. Chiang Kai-shek, the successor of Dr. Sun Yat-san, launched a military expedition northward in 1925 to eradicate various feuding warlords in central and northern China. This military campaign lasted three years and came to be known as the Northern Expedition. In 1927, the Republican government finally broke off the turmoil.<sup>43</sup> However, the Chinese Communist Party (CCP), which was formed in 1921, had rebelled against the Republican government (KMT) while imperial Japan was invading China in the 1930s and early 1940s. After the victory of the Eight-Year War of Resistance Against

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<sup>41</sup> Thomas B. Gold, *State and Society in the Taiwan Miracle* (New York: M. E. Sharpe, 1985).

<sup>42</sup> The most influential revolutionary was Dr. Sun Yat-san (1866-1925). He is regarded by both the governments of the Republic of China (ROC) and the People's Republic of China (PRC) as the father of modern China. See Metraux, p. 36.

<sup>43</sup> For more information, see *The Republic of China Yearbook 1997*.

Japan,<sup>44</sup> the American general, Douglas MacArthur, then ordered all Japanese forces in China to surrender their arms only to the forces of the ROC (KMT) government. Despite MacArthur's request, the Chinese Communists sent tens of thousands of political cadres and soldiers into Manchuria and acquired most of the arms of the 600,000-strong Japanese army in Manchuria which had been previously confiscated by the Russians. The valuable equipment, so crucial to China's post-war revival, was shipped to the Soviet Union, while immovable objects were mostly destroyed. The situation in northeastern China had strengthened the Communist Party's power and weakened the KMT Party's force.<sup>45</sup>

After the failure of negotiations with Communist leader Mao on the part of the KMT government in an effort to form a coalition government in China, a massive civil war started in 1946, which resulted in the KMT's defeat and withdrawal to Taiwan in 1949.

It is very important to explore some reasons for the KMT government's defeat in mainland China before looking at the success of the KMT government in Taiwan since the KMT government learned lessons from this defeat

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<sup>44</sup> On July 7, 1937, a minor clash between Japanese and Chinese troops near Peking finally led China into war against Japan, and the war was finally ended in 1945 after the surrender of Japan. This eight-year period of conflict is therefore called Eight-Year War of Resistance Against Japan in Chinese.

<sup>45</sup> *The Republic of China Yearbook 1997*, p. 57.

and undertook a series of reforms that eventually won them considerable support among the Taiwanese<sup>46</sup> and what finally resulted in Taiwan becoming one of the East Asia Miracles.

There were several reasons for the failure of the KMT government in mainland China. These include the failure to enact reforms that would win them support and compliance from the peasantry,<sup>47</sup> which made up 80 percent of the total population of the mainland. The KMT government also faced many difficulties that might have doomed their efforts to failure under any circumstances, including the poverty of China in the 1930s, the lack of outside aid, world depression,<sup>48</sup> and the most important threat of all-Japan<sup>49</sup> -- all of which made it very difficult for the KMT government to acquire sufficient resources to enact reforms and development programs successfully. As well, the Sino-Japanese war contributed greatly to the failure of the KMT government in mainland due to the Japanese invasion undermining the foundations

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<sup>46</sup> Metraux, p. 44.

<sup>47</sup> The key to the success of the Communists was able to win the support of Chinese peasants. Many of them became soldiers in the Red Army.

<sup>48</sup> The world depression did great harm to China's economy, e.g., hyperinflation and economic recession stopped China's economic development and kept Chinese society in a chaotic situation during the 1930s.

<sup>49</sup> From 1931-45, Japan pressed the KMT government constantly, robbing the resources and income of KMT, and diverting scarce resources into military expenditures.

of the KMT government, for the KMT regime were driven from the large cities where they received their main financial and political support. The war with Japan destroyed any opportunity the KMT government otherwise might have had to stabilize their regime and build a strong foundation for ruling China.<sup>50</sup> Thus, it is believed that if the KMT government had successfully won the support of millions of Chinese peasants (for example, by implementing land reform) and avoided the Japanese invasion, they might have defeated the Communists, according to the study of Daniel Metraux.<sup>51</sup>

In sum, these lessons that the KMT government learned in the failure of the civil war with the Communists had a great impact on the KMT's future policies that were implemented in Taiwan and on the role that the KMT government played after their withdrawal to Taiwan in 1949, which will be further discussed in the following chapters.

#### **3.4. CONDUCIVE CONDITIONS FOR TAIWAN'S ECONOMIC DEVELOPMENT**

Although Taiwan had many disadvantageous conditions (such as lack of natural resources, heavy density of population, etc.) in relation to its development, it also enjoyed some conducive conditions while its economic

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<sup>50</sup> Metraux, pp. 44-48.

<sup>51</sup> For more information, see Metraux.



transformation was in process. These include Confucianism, U.S. aid, the favorable timing of the world economy, and the Japanese legacy.

### Confucianism

In recent years, Confucian culture was seen as the key ingredient in East Asian development -- in the success of Taiwan, Confucianism was also considered an important positive factor. In fact, "Confucius imparts to its followers a strong sense of future, the importance of education, the importance of merit, the importance of saving for future generations . . .,"<sup>52</sup> and the cultural elements of Confucian ethics, such as thrift, diligence, respect for educational achievement, avoidance of overt conflict in social relations, loyalty to hierarchy and authority, and stress of order and harmony, are believed to have something to do with Taiwan's dynamic economic transformation.<sup>53</sup> Although the characteristics of Confucianism appear integral to Taiwan's developmental history, the Taiwanese case, however, also indicates that more is involved than simply the basic norms in the cultural tradition, since Confucianism has facets that both promote and inhibit the process. Thus the central element in elucidating the relation between culture and

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<sup>52</sup> Keith B. Richburg, "Why is Africa Eating Asia's Dust?" *Washington Post National Weekly Edition* (July 20-26, 1992), p. 57.

<sup>53</sup> Pang, p. 35.

development is the specification of the structural and policy factors that encourage varying strands of complex cultural tradition.<sup>54</sup> The culture of Confucianism was supportive of Taiwan's developmental activities in the following areas:

#### 1. Education:

Confucianism has for a long time paid particular attention to education. Thus, almost every family would try their best to educate their children, especially boys, to be officials even if they were very poor. This old tradition still has very significant influence on present Chinese societies, including Taiwan. After the KMT government moved to Taiwan in 1949, they expanded the educational system that the Japanese colonists left and worked hard to promote education.

Not only men, but also women started to have more and more opportunities to access education. As a result, the literacy rate of persons six years and older increased from 45 percent in 1946 to 92 percent in 1986 and the percentage of school-age children in primary schools grew from 78.6 percent in 1950 to 99.9 percent in 1985. Since 1968, compulsory education has been extended from six years to nine years, and so the percentage of junior-high-age youths, 12-14 years old, increased from

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<sup>54</sup> Clark, p. 237.

48.3 percent to 92.2 percent,<sup>55</sup> between 1966 and 1986.

In fact, the enrollment rates for senior high schools and universities also increased rapidly during the same period (see Table 3.1 and Table 3.2).

Table 3.1  
People with a level of education as a percentage of the  
population at and over the age of six years

Year	Higher Education	Secondary Education	Primary Education	Others*	Total
1952	1.4	8.8	43.5	46.3	100
1955	1.7	9.6	46.9	41.8	100
1960	1.9	12.4	54.1	31.6	100
1965	2.3	16.2	55.4	27.1	100
1970	3.7	26.5	51.8	18.0	100
1975	6.0	30.4	48.9	15.7	100
1980	7.1	36.9	43.3	12.7	100
1985	9.0	41.8	38.8	10.4	100

\* Uneducated people.

Source: Council for Economic Planning and Development (1986), *Taiwan Statistical Data Books*, 1986.

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<sup>55</sup> Metraux, p. 56.

Table 3.2  
Sexual Equality in Education Female/Male x 100

Academic Year	Sr. High School	Vocational School	Jr. College	College, University & Grad School
1952-52	34.4	23.9	8.8	14.8
1955-56	42.0	28.5	10.1	19.8
1960-61	45.3	41.0	55.8	26.6
1965-66	54.3	64.2	90.8	6.4
1970-71	57.2	72.1	69.5	54.1
1975-76	68.1	80.5	64.5	54.6
1980-81	78.3	93.8	77.0	65.0
1985-86	82.5	96.9	85.9	71.5

Source: Ministry of Education, R.O.C., *Educational Statistics of the Republic of China*, 1987.

The popularity of education has made a great contribution to transform what were predominantly labor-intensive industries in Taiwan into technology-intensive and capital-intensive industries because the increase in the number of people having received higher education present the fact that the quality of the white collar class has greatly improved, and the increase in the number of people completing secondary education shows that the quality of the blue collar class is also high, which means that it is no longer difficult for industrialists to adopt new methods of production and new

technology.<sup>56</sup> In fact, Taiwan's economic growth during the past four decades has been powered by this well-educated and highly motivated work force.

In short, Confucianism's emphasis of education has indeed helped Taiwan to invest heavily in human capital in the form of education and so Taiwan could attract foreign investment by having cheap and educated labor in the early stage of industrialization, and now Taiwan gradually moved forward into the high-tech stage of development because of having more and more progressively better educated people in recent years.

## 2. Respect for Authority and Social Harmony:

One of the characteristics of Confucianism is the respect for authority and social harmony, which can possibly explain the political stability on Taiwan in the face of "predictions from both developmentalists and dependency theory that rapid socioeconomic change should create instability."<sup>57</sup> Indeed, many developing countries have experienced the rapid growth and unstable societies at the same time; Taiwan, however, did not go through the same situation. Because of Confucianism's advocacy of a merit-based bureaucracy, focus on individual

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<sup>56</sup> Tzong-shian Yu, "Taiwan's Economic Development: A Case of Growth with Equity," in Y. C. Jao, Victor Mok and Lok-sang Ho, eds., *Economic Development in Chinese Societies: Models and Experiences* (Hong Kong: Hong Kong University Press, 1989), p. 216.

<sup>57</sup> Clark, p. 235.

contributions to collective accumulation, emphasis on order, respect for hierarchy, and secularism, Taiwan was able to create a very stable environment for development.

"From a historical perspective, the very process of economic development changed the emphasis that these various strands of Confucian culture received. Thus the challenge presented by Western imperialism created an impetus for applying Confucian values to economic activity in new ways that promoted development, as occurred most dramatically in Japan after the Meiji restoration."<sup>58</sup> Therefore, these values of Confucian culture helped the Taiwanese government to become an autonomous regime strong enough to create a direction for economic policies, to overcome many difficulties opposed to economic change (the success of rapid economic growth might create some significant social problems and alienation), and to make Taiwanese people follow the rules that the government set up without creating social instability. With a stable society, the Taiwanese government was able to foster its various economic politics and create such a great success for Taiwan.

In conclusion, Confucianism indeed is related to Taiwan's rapid economic growth record, although Confucianism itself cannot fully explain the Taiwanese miracle, since there are very different achievements in Taiwan and mainland China, given the fact that they have

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<sup>58</sup> Clark, p. 236.

exactly the same cultural heritage.<sup>59</sup> However, it cannot be denied that under the rule of the Taiwanese government (KMT), some values of Confucian culture did indeed have very a positive effect on Taiwan's economic development.

### U.S. Aid

U.S. aid played a crucial role in Taiwan's economic development because Taiwan lacked capital during its early period of development. Systematic American aid to Taiwan began in 1951 and continued through to 1965. During this period, U.S. economic aid, aside from \$2.5 billion contributed in military aid, amounted to \$1.5 billion, an average of about \$100 million per annum.<sup>60</sup> In fact, during the Cold War period, Taiwan and South Korea became very important strategic outposts in the defence perimeter of what was then called the Free World, under the leadership of the United States. For Taiwan, after the Second World War, the U.S. provided security for Taiwan against the threat from the People's Republic of China in order to create and maintain a political environment in which capitalist development could take place. One consequence of the strategic location and function of Taiwan in the Cold War was the commitment of the U.S. to provide Taiwan with military and economic

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<sup>59</sup> Pang, p. 36.

<sup>60</sup> The data used for the preceding paragraph is derived from Pang, p. 34.

assistance.<sup>61</sup> The main effects of U.S. aid were to cover deficits in the balance-of-payments, to relieve the national burden of military expenditures by one-half, and to facilitate the purchase capital goods and raw materials from foreign countries which were necessary for industry.<sup>62</sup> U.S. aid not only helped Taiwan to overcome inflation, which was reduced from a phenomenal 3400 percent in 1949 to only 9 percent in 1953, but also increased potential investors' confidence and sense of security, in turn fostering a willingness to invest in Taiwan (e.g., in a peak year 1955, over 50 percent of gross investment was accounted for by U.S. aid).<sup>63</sup> Thus, Taiwan's achievement would have been less spectacular if there had been no aid from the United States.

However, there is no compelling reason to believe that U.S. aid is the full explanation for Taiwan's accomplishments because many other countries received more economic aid per head than Taiwan (for example, South Vietnam, South Korean, and Turkey), but few were able to match Taiwan's record.<sup>64</sup> Although U.S. aid to

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<sup>61</sup> M. D. Litonjua, "Outside the Den of Dragons: The Philippines and the NICs of Asia," *Studies in Comparative International Development*, Vol. 28, No. 4 (Winter 1994), p. 9.

<sup>62</sup> Jan Lin, "Beyond Neoclassical Shibboleths: A Political-Economic Analysis of Taiwanese Economic Development," *Dialectical Anthropology* (1989), Vol. 14, No. 4, p. 289.

<sup>63</sup> Taiwanese government statistics.

<sup>64</sup> Pang, p. 34.



Taiwan ended in 1965, the economic development of Taiwan in fact did not slow down afterwards.

### Favorable Timing of the World Economy

Taiwan's economic development also took advantage of a favorable timing of the world economy: the global markets were booming, with little protectionism during 1963-73,<sup>65</sup> while Taiwan switched its developmental strategies from import substitution to export-oriented industrialization in the mid-1960s.

In fact, the market in the advanced industrial countries, especially in the United States and Japan, after having experienced high growth, increasing wage rates, and the loss of competitiveness in labor-intensive manufactured goods, was readily accessible to manufactured exports from the less developed countries (LDCs). Taiwan was lucky enough to become involved at such a favorable time; that is, Taiwan's success is to a certain degree merely a free ride on the prosperity of the world economic cycle.<sup>66</sup> Moreover, the increased U.S.

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<sup>65</sup> The world economy was extremely conducive to trade and exports, and the volume of world exports rose at an average annual rate of 8.5 percent. See Idriss Tazairi, et al., "From the Old to the New Development Paradigm," *The State of World Rural Poverty*, IFAD (International Fund for Agricultural Development) (1993), p. 8.

<sup>66</sup> Pang, p. 35.

and Japanese competition in the American market<sup>67</sup> especially brought about the unique advantage for Taiwan: both American and Japanese companies set up bonded export factories throughout Taiwan as well as plants in Kaohsiung Export Processing Zones,<sup>68</sup> which helped Taiwan to take full advantage of such timing because of "the active search for low-wage labour by foreign buyers and foreigners eager to escape rising labour costs at home and undercut low-wage competitors abroad."<sup>69</sup> As a result, there was an incalculable boost to Taiwan's economy. However, the favorable timing of the world economy also cannot fully explain Taiwan's success since the opportunity was fairly open to every developing country but only Taiwan, along with another three "Little Tigers"

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<sup>67</sup> American manufacturers scampering abroad in search of productive sites with costs so low that they could compete with the Japanese in the U.S. market, and the large Japanese companies also began to find somewhere to lower labour costs to recapture the American market shares lost to offshore U.S. manufacturers. Taiwan's competitive advantage with a very cheap, abundant, and educated labor force made Taiwan vital to the global production structures of companies from these two different core companies. See Gold, p. 79.

<sup>68</sup> The United States and Japan together were the biggest foreign investors prior to 1979. While the latter accounted for less than one-third, the former accounted for about one-third of total FDI (Foreign Direct Investment). For more information, see Gold, pp. 78-87; and Tzong-shain Yu, "Taiwan's Perspective on Sino American Economic Relations," Occasional Paper Series, No. 9502, July 1995 (Taipei: Chung-Hua Institution for Economic Research).

<sup>69</sup> Edwin A. Winckler and Susan Greenhalgh, *Contending Approaches to the Political Economy of Taiwan* (New York: M. E. Sharpe, 1988), p. 96.

including South Korea, Hong Kong and Singapore, have taken full advantage of such timing.

### Japanese Legacy

The legacy inherited from the Japanese colonial period is considered to be a special contribution to Taiwan's economic success. In fact, the period of Japanese occupation is mainly in terms of the so-called "initial conditions," especially in the agricultural sector, that assisted in the subsequent post-war transition towards rapid industrial development.<sup>70</sup> In general, Japanese colonization "was brutal, subjecting the indigenous populations to indignities and exploiting their natural resources and labor with the force of might and arms but Japanese, in fact, also had unintended consequences that would facilitate the subsequent growth and development of Taiwan."<sup>71</sup>

Over a period of fifty-one years (from 1895 to 1945), the Japanese brought about fundamental changes in Taiwanese society, politics and economy. The Japanese colonists undertook a variety of projects to develop the physical, institutional, and human infrastructure in Taiwan in order to make the island a source of foodstuffs (e.g., rice, bananas, sugar, etc.), raw materials (e.g., coal), and to provide more markets for Japanese

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<sup>70</sup> Lin, p. 287.

<sup>71</sup> Litonjua, p. 6.

industrial production. Thus, the Japanese removed bureaucratic, legal, and social impediments to develop the dependent capitalism, and demonstrated to Taiwanese people the potential of capitalist industrialization: Taiwan was organized to provide agricultural products to supply the needs of Japan's growing industrial sector. The economy was, therefore, skewed to concentrate on the production of two primary goods, rice and sugar, the bulk of that was exported to one market, Japan, by Japanese trading houses. On the other hand, Taiwan imported industrial consumer and producer goods from one source -- Japan. As a result, Taiwan's irrigation networks were expanded, and a Green Revolution was implemented (including the introduction of new farming techniques and distribution of chemical fertilizers). Some large cane sugar plantations were set up, and land reform was undertaken between 1898 and 1903. A new flat tax system replaced the proportional output tax system.<sup>72</sup>

In addition, a number of infrastructural projects were announced which included port expansion, creation of an island transportation system of roads and railways, rural electrification, and communications networks. The overall quality of life, as measured by a better standard

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<sup>72</sup> Gold, pp. 44-46.

of living, security, health and education, improved markedly.<sup>73</sup>

Although the Japanese colonial policies have created a good investment climate in Taiwan, and this was undeniably helpful to Taiwan's later development, undeniable it obviously was not a guarantee for Taiwan's later economic success, and it would be not correct to conclude that the Japanese colonialism was completely benevolent. Thus, it may be justifiable to say that the Japanese legacy is not a decisive factor, at least not a sufficient condition for Taiwan's successful experience of development. Other factors have also supported this legacy's contribution.<sup>74</sup>

Generally speaking, the conducive conditions analyzed above all contributed to Taiwan's success to a certain extent, but not all countries having similar conditions showed the same performance. Indeed, the Taiwanese government is the key variable for the puzzle; it is the Taiwanese government that brings all these conducive conditions together for Taiwan's economic development. Accordingly, "if the KMT government had not been able to succeed the Japanese legacy properly, utilize U.S and effectively make a timely shift of its

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<sup>73</sup> The major investment in education and technological upgrading, which brought about at least a minimal level of literacy skills to the majority of Taiwanese people. See Gold, p. 45.

<sup>74</sup> Pang, p. 34.

development strategy, adopt suitable socioeconomic institutions that mediate the relationship between Confucianism and economic growth . . . , the Taiwanese miracle would hardly have been possible."<sup>75</sup> Thus, it is necessary to further explore the role of Taiwanese government in order to better understand Taiwan's economic performance.

### 3.5. CONCLUSION

This chapter has established a better understanding of Taiwan's historical background for its later economic development. Part I provides a general picture of Taiwan whereas the analysis contained in Part II is intended to establish a firmer footing for understanding the role that the KMT government played and the policies the KMT government implemented after 1949 (which will be further discussed later in this thesis). Part III of this chapter presents the conducive conditions Taiwan enjoyed in its process of economic development, and points out that effective government intervention was crucial to effectively combine those conditions and thus bring about Taiwan's success. The role of the KMT government in Taiwan's economic development will be discussed in Chapter 4, but first it is necessary to examine the four periods of Taiwan's economic transition because this will

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<sup>75</sup> Pang, p. 36.

prove useful in acquiring a better understanding of the KMT government's role.

**CHAPTER FOUR:**  
**TAIWAN'S ECONOMIC DEVELOPMENT AND THE ROLE OF**  
**THE TAIWANESE GOVERNMENT**

**4.1. Introduction**

This chapter begins with an examination of the four periods of Taiwan's economic transition and the different economic strategies that the Taiwanese government implemented. Then the role played by the Taiwanese government in Taiwan's economic development will be addressed. Finally, Chapter 4 presents an analysis of Taiwan's economic development and role of the Taiwanese government with respect to modernization theory and the state-centered approach.

**4.2. Taiwan's Economic Development**

Generally, Taiwan's economic development is divided into four stages: land reform and import substitution (1950s to early 1960s), export-led industrialization and rapid overall growth (1963-73), second phase of import



substitution (1973-80), and the new era of export-led industrialization (1980-present). At each stage, the Taiwanese government undertook various strategies in order to meet different situations.

Land Reform and Import Substitution  
(1950s to early 1960s)

A. LAND REFORM

It is believed that land reform is one of the many strategies that Taiwan has successfully adopted, and it is also a part of that country's process of industrialization and modernization.

Prior to the Second World War, Taiwan was occupied by Japan as a result of the defeat of China in the Sino-Japanese War in 1945. During the Japanese colonial period, most of the land in Taiwan was controlled by Japanese sugar companies, but traditional landowning patterns were maintained. Most landowners in colonial Taiwan owned only small plots of land, and the largest landlords were active Japanese collaborators in the sugar industry. These landlords retained ownership after the Japanese left. After the war, the population of farmers in Taiwan was more than half of the total population, but many farmers did not even own the small pieces of land they cultivated.

The landless farmers were mostly tenants who had to pay very high rents. This was the situation before 1949. After 1949, the Kuomintang (KMT, Nationalist Party)

government undertook a series of policies of land reform. The major reason for this reform was political in nature, stemming from the failure of the civil war for the KMT government in China in 1949, which was partly a result of its alienation of the farmers, who made up over 80 percent of the population in China. After the KMT regime moved to Taiwan in 1949, how to "secure the loyalty of the peasants and to combat the Chinese Communists' intrigue of using the weakness of the tenancy structure to instigate agrarian uprising,"<sup>76</sup> without any ties with the local population or gentry, became a particularly important issue for the KMT regime. Thus land reform was undertaken immediately.

Under the land reform program which the KMT government adopted in 1949, there were three phases: rent reduction, sale of public lands and the land-to-the-tiller program.

*1. Rent reduction phase:*

Rents were set at no more than 37.5 percent of the annual main yield; tenants did not have to pay their rent in advance; the lease tenure was extended from three to six years; the tenants had the first option to purchase land from the owner; and if crops failed because of natural conditions, tenants could apply to the local farm-tenancy committees for a further reduction. After

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<sup>76</sup> Pang, p. 176.

the implementation of the first phase, the income of tenant farmers increased by 81 percent between 1949 and 1952, thus enabling many tenants to purchase land from their landlords.<sup>77</sup>

### *2. Sale of public land phase:*

In 1951, the government decided to sell public lands to tenants. Current cultivators of these public lands were given the first priority; other tenant farmers had second priority. The price was set at two and a half times the annual yield of principal crops, such as rice, which made it affordable; limits were set on the amount that could be purchased to prevent new concentrations of landholding.<sup>78</sup>

### *3. Land-to-the-tiller phase:*

The final stage of the land reform program occurred in 1953. Under the policy of compulsory sale of land by landlords, every landowner had to sell all excess land they were holding to the government, whereupon the government would resell the land to the incumbent tillers. The price was also set at two and a half times the annual yield of the main crops, and the landlords were paid 70 percent of the land price with land bonds

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<sup>77</sup> Alvin Rabushka, *The New China* (San Francisco: Pacific Research Institute for Public Policy, 1987), p. 111.

<sup>78</sup> Clark, p. 160.

and 30 percent with shares of stock in government enterprises which were earmarked to be transferred to private ownership -- Taiwan Cement, Taiwan Industry and Mining.<sup>79</sup>

The selling prices and conditions were the same as for the sale of public land. According to one source, "This kind of payment method resulted in the landlords shifting their investment from land to industry."<sup>80</sup>

Indeed, land reform had rapidly transformed Taiwan's agrarian structure. The proportion of tenant farmers in farming families and the proportion of land cultivated by tenants declined. The ratio of owner-cultivators to total farming families increased. The number of families owning small and medium-sized plots of land increased. And the number of families owning large-sized plots of land decreased markedly.<sup>81</sup> (Tables 4.1, 4.2, and 4.3 will demonstrate this situation.)

Hence, land reform transformed Taiwan's agriculture into a smallholder economy, and small landlords became the dominant force in rural areas.

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<sup>79</sup> John F. Copper, *Taiwan: Nation-State or Province?* (London: Westview Press, 1990), p. 77.

<sup>80</sup> Institution of Strategic and International Studies, *Lessons from Taiwan: Pathways to Follow and Pitfalls to Avoid* (Malaysia: ISIS Malaysia, 1986), p. 72.

<sup>81</sup> Pang, p. 137.

Table 4.1  
Area and Households Affected by Land Reform  
(by Type of Reform)

Item	Type of Reform			
	Reduction of Farm Rents	Sale of Public Land	Land- to- the- tiller Program	Total Redistribution <sup>a</sup>
Area affected (chia) <sup>b</sup>	256,948	71,663	143,568	215,231
No. of farm households affected	302,277	139,688	194,823	334,511
Ratio of cultivated area affected to total area <sup>c</sup>	29.2%	8.1%	16.4%	24.6%
Ratio of farm house- holds affected to total farm households. <sup>d</sup>	43.3%	20.0%	27.9%	47.9%

<sup>a</sup> Comprises land distribution under the sale of public and the land- to- the- tiller program.

<sup>b</sup> 1 chia = 0.9699 hectare.

<sup>c</sup> Total cultivated area used in this calculation is the average of 1951- 55.

<sup>d</sup> Total number of farm households used in this calculation is the average of 1951- 55.

Sources: Samuel P. S. Ho, *Economic Development of Taiwan, 1860- 1970* (New Haven, CT: Yale University Press, 1978), p. 169.

Table 4.2  
Types of Farm Families Before and After  
Land Reform

Item	Before Land Reform (1949)		After Land Reform (1957)	
	No. of Families	%	No. of Families	%
Owner	224,378	36	455,357	60
Tenant	239,938	39	125,635	17
Part- owner	156,558	25	178,224	23
TOTAL	620,875	100	759,234	100

Sources: Shirley W. Y. Kuo, Gustav Rankis and John C. H. Fei, *The Taiwan Success Story: Rapid Growth with Improved Distribution in the Republic of China, 1952- 1979* (Boulder, CO: Westview Press, 1981), p. 53.

Table 4.3  
Changes in the Number of Landowners Before and After  
the Implementation of the Land- to- the- Tiller Program  
(by Size of Holding)

Holding Size	Before Implementation (1952)		After Implementation (1955)	
	No. of Families	%	No. of Families	%
hectares				
Below 0.5	288,955	47.3	378,923	48.0
0.5- 1.0	142,659	23.4	204,128	25.9
1.0- 3.0	138,178	22.6	176,669	22.4
3.0- 10.0	36,350	5.9	28,193	3.5
Over 10.0	5,051	0.8	1,516	0.2
TOTAL	611,193	100.0	789,429	100.0

Sources: Chien- kuo Pang, *The State and Economic Transformation - - The Taiwan Case* (New York: Garland Publishing, 1992), p. 141.

Due to the land ownership, higher income and greater security in leases, the farmers attained a higher social status and improved standard of living. On the other hand, the investment from land to industry by the landlords also helped the process of industrialization and modernization. As a result, the following agricultural policies and developmental strategies could be undertaken effectively by the government in the 1960s.

In sum, the landless farmers were the ones who benefitted from the land reform program because they acquired land to cultivate and became the main power in Taiwan's countryside. Landlords, on the other hand, became the losers under the land reform program because the substantial reduction in the size of their land and wealth made their future income much less. Although the government paid landlords for the land they were forced to give up, the compensation was much lower than the actual market value of the land, and the bonds they received were paid at an interest rate of only four percent,<sup>82</sup> which was much lower than the prevailing commercial interest rate. Also, many of them (especially smaller landlords)<sup>83</sup> were not experienced in running non-

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<sup>82</sup> Pang, p. 137.

<sup>83</sup> Since former largest landlords had cooperated closely with the Japanese government during the colonial period, and they were much wealthier than small and medium landlords, they were able to parlay bond compensation from the state into new wealth and economic power through investment in industry and finance. Due to the government's desire to privatize some major state

agricultural businesses or regarded the government commodity bonds with skepticism, and so resold their bonds immediately at prices far below their actual value to speculators or state enterprises, which they had been compensated for. Thus, they were missing out on the later boom and turned to either consumption or investment in small business. According to Pang, "Most of the landlords, particularly smaller landlords, thus ended up being not much better off than the new owner-cultivators."<sup>84</sup>

Nevertheless, Taiwan's land reform was believed to break up the great gentry estates that leading families had successfully owned for centuries and to redistribute the wealth, and so many other economic strategies could be carried out one after another thereafter.

#### B. IMPORT SUBSTITUTION

While land reform was being undertaken, the KMT government decided to adopt an import-substitution industrialization policy in the 1950s. From an inward-looking perspective, the size of the domestic market was

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industries left by the Japanese, such as cement, paper, etc., through the bonds they compensated to the landlords at that time, the largest property owners, who had much larger quantities of bonds than small and medium landlords, were able to turn their bond holdings into establishing conglomerates. Thus, they could continue to dominate much of the economic activity in Taiwan and to compete with other countries.

<sup>84</sup> Pang, p. 138.



clearly too small to be depended upon as a source of sustained growth; and from an outward-looking perspective, the ready markets of Japan and mainland China were no longer available. But numerous small enterprises had started up business right after the war, partly by acquiring old Japanese facilities and producing simple manufactures of poor quality but at a high cost. The small manufacturing sector was basically devoted to the production of consumer goods, for the domestic market, such as textiles, plywood and shoes. In order to protect the small domestic market and promote the production of light industrial goods that were being imported, the government had sealed off the domestic market by using high tariffs and import quotas for specific goods, especially luxury items. On the other hand, the government also encouraged the development of domestic industries, especially those related to national defence and supplying necessities to cover the people's basic needs, and their imports of plant equipment received the most favoured treatment. This policy was to intended offset the growing trade deficit and encourage domestic production of substitutes for imported goods.<sup>85</sup>

Afterwards, there were some impacts for using the import substitution strategy in Taiwan. First, Taiwan's light industries, such as textiles, plastics, cement, etc., had attained great growth. Second, Taiwan reached

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<sup>85</sup> Metraux, p. 125.

its pre-war levels of production and distribution by 1953. Third, "most of industry remained concentrated in labour intensive production, which was connected with Taiwan's comparative advantage."<sup>86</sup> Finally, the more employment in manufacturing attracted more young people, who left home and began to work in the cities.

Export-led Industrialization and Rapid Overall Growth (1963-73)

This is a very important period for Taiwan's economic development because it was also a period of rapid growth. In the early 1960s, because the domestic market had become saturated and import-substitution had run out of steam, the KMT government decided to shift the emphasis of its economic policy to exports. However, at that time, Taiwan did not have the ability to establish an export-oriented economy on its own because it lacked capital, foreign exchange and technology. In order to create a business climate that could attract private local and foreign investment, the KMT government adopted a series of export promotion policies, as outlined below:

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<sup>86</sup> Clark, p. 170.

*1. Nineteen-point program of economic and financial reform:*

This policy included non-inflationary fiscal and monetary policy, tax reform, unification of foreign exchange, liberalized exchange controls, establishment of a utilities commission and of investment banking machinery, the sale of government enterprises to private owners, encouragement of savings and private investment, full utilization of government production facilities, liberalization of trade regulations, and other reforms,<sup>87</sup> which made foreign trade and exporting more profitable, and thus encouraged export expansion. For example, the dual exchange rate was replaced by a single unitary exchange rate that decreased administrative costs and burdens, and the overvalued New Taiwanese Dollar (NT\$ -- Taiwanese currency) was kept low (the selling rate stabilized at NT\$40 to US\$1), which could increase exports and decrease imports.

The execution of the nineteen-point program had considerable influence on Taiwan's consecutive development. However, according to Wang Tso-jung in his book, *Wo-men ju-ho ch'uang-chao-le ching-chi ch'i-chi* ("How we created the economic miracle"), the nineteen-point program was in effect the KMT government's endeavour to establish a self-sustained modern economy

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<sup>87</sup> Neil H. Jacoby, *U.S. Aid to Taiwan* (New York: Frederick A. Praeger, 1966), p. 135.

but did not succeed. He ascribed this relative lack of success to the economic policymakers failing to push the reforms hard enough and the program not being perceived as important law but an internal document for administration which could not be compulsorily executed. Nevertheless, the enactment of the *Statute for Encouragement of Investment*, a corollary of the nineteen-point program, was acknowledged as a successful state action.<sup>88</sup>

2. *Statute for the encouragement of investment:*

This policy offered tax and other incentives to investors: a five-year tax holiday from the starting date of operation, the exemption from import duties on equipment and machinery, cheap credit and rebates on imported raw materials, low interest on export loans and other export incentives. As a result of this policy, the commodities export cost was reduced and so the competitiveness in the international markets increased.

However, the response of local and foreign capitalists to the statute in the early 1960s was still hesitant. But when the development strategy was entirely changed to an export orientation in 1965 by incorporating more incentives into the statute as well as establishing

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<sup>88</sup> Pang, p. 187.

the Kaoshiung Export Processing Zone, the situation changed significantly.<sup>89</sup>

### *3. Export Processing Zones:*

The Taiwanese government established three export processing zones in Kaoshiung, Nantze and Taichung during 1966 and 1977, and offered tax exemptions and simplified administrative procedures in order to attract both foreign and local investment to the zones. Taiwan's comparative advantage in a very cheap, abundant and educated labour force was also an important factor for those zones to attract foreign investment. "Two industries, textiles, and electronics, flourished as the export processing zones system grew":<sup>90</sup> The following table (Table 4.4) shows the significant growth of the share of industrial products in total exports.

The response of transnational capitalists to the establishment of the Export Processing Zones was quite positive. Many Americans, and Japanese came to Taiwan to search for opportunities of investment. The local capitalists and overseas Chinese were also attracted by the investment climate in Taiwan, characterized by political stability and favourable tax incentives.

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<sup>89</sup> Pang, p. 191.

<sup>90</sup> Metraux, p. 127.

Table 4.4  
Structure of Exports (Unit = %)

	1952- 55	1961- 65	1971- 75
Crude agricultural products	19.6	16.7	5.9
Rice	14.6	5.8	0.1
Bananas	3.7	6.2	0.7
Processed agricultural products	71.1	39.3	10.3
Sugar	58.6	24.0	3.9
Canned Food	3.0	8.1	3.2
Tea	6.1	2.5	0.4
Industrial Products	9.3	44.1	83.8
Textile Produces	1.2	15.8	30.0
Electrical Machinery and Apparatus	0.1	1.5	16.4
Plastic Articles	0	0	5.1
Metal Manufactures	0.5	0.9	2.3
Machinery	0.2	0.9	3.3
Wood Products	0.7	1.8	3.7
Total Exports	100.0	100.0	100.0

Source: *Taiwan Statistical Data Book*, 1984.

Table 4.5 demonstrates the improvement of foreign investment in Taiwan.<sup>91</sup>

The leading industry, textiles, had experience in the local market and enough capacity, and produced goods under contract for foreign mass buyers, such as K-Mart. On the other hand, because the electronics industry had no base in Taiwan, technical agreements between Japanese transistor-radio and television manufacturers and Taiwanese assemblers were made to start this sector. This also suggested that local firms would gradually learn about Western technology and how to make various components through ties with the electronics industry, and so a large number of small Taiwanese companies were growing to produce a variety of domestically produced parts for foreign firms. Foreign investment by industry, as shown in Table 4.6, was concentrated in the electronics, textile, and chemical industries during the 1960s, which accounted for approximately two-thirds of all foreign capital.

Generally speaking, the Export Processing Zones system was very successful, not only because foreign companies provided the capital and technology and took all the risks, but also because the global markets were booming, with little protectionism during 1963-73.

In short, the export-led industrialization strategy implemented in this period was very successfully (see Table 4.7) in improving the whole socioeconomic situation and

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<sup>91</sup> Pang, p. 216.

Table 4.5  
Private Foreign and Overseas Chinese Investment  
in Approvals - - by year

Year	Overseas Chinese		U.S.A.		Japan	
	Case	Amount	Case	Amount	Case	Amount
1963	22	7,703	9	8,734	6	1,397
1964	28	8,007	7	10,196	2	728
1965	30	6,470	17	31,104	14	2,081
1966	51	8,377	15	17,711	35	2,447
1967	105	18,340	18	15,714	76	15,947
1968	203	36,449	20	34,555	96	14,855
1969	90	27,499	30	27,862	75	17,379
1970	80	29,731	16	67,816	51	28,530
1971	86	37,808	17	43,736	17	12,400
1972	114	26,466	17	37,307	26	7,728
1973	201	55,166	29	66,876	92	44,599
TOTAL	1,010	26,016	195	361,611	490	148,091

Source: *Taiwan Statistical Data Book*, 1986, p. 264.



Table 4.6  
Foreign Investment by Industry

	Percent of Total Foreign Investment 1962- 69	Percent Foreign Investment of All Investment 1962- 69
Electrical Machinery	33.6%	18.9%
Textiles	20.9%	4.3%
Chemicals	12.9%	4.5%
Machinery	6.8%	11.6%
Basic Metals	6.5%	5.5%
Footwear	5.5%	5.1%
Food Processing	4.7%	1.5%
Rubber and Petroleum	4.5%	14.5%
Nonmetallic Mines	2.0%	1.1%
Paper	1.6%	2.7%
Wood	0.9%	1.0%
Leather	0.1%	1.5%
All Manufacturing	100%	- - %

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Source: Kuo, Rains, and Fei, 1981, pp. 32- 33.

Table 4.7  
Socioeconomic Indicators During the Export-led Industrialization Period

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Real GNP Growth %	7.9	9.4	12.3	11.0	9.0	10.6	9.1	9.0	11.3	12.9	13.3
Real Ind. Growth %	7.9	9.1	21.2	16.2	15.6	16.7	22.3	19.8	20.1	23.6	21.2
Real Ag. Growth %	2.6	0.2	11.9	6.6	3.2	6.3	6.9	-2.0	5.4	0.5	2.2
Savings % GNP	12.4	17.1	19.6	19.6	21.5	22.5	22.1	23.8	25.5	28.8	32.1
Real Sav. Growth %	4.2	50.9	28.5	11.3	19.5	15.5	7.3	17.1	19.1	27.8	26.2
Unempl. Rate %	4.1	4.3	4.4	3.3	3.0	2.3	1.7	1.9	1.7	1.8	1.4
Export % GDP	11.4	15.3	17.1	16.1	17.1	17.7	18.7	21.4	26.3	31.4	38.0
Import % GDP	15.9	16.7	16.9	19.9	19.9	22.3	21.5	24.8	27.1	28.2	32.1
Trd Bal (mil US\$)	-86	-30	5	-106	-86	-165	-114	-164	-43	2116	474
Real Expt Growth %	9.5	47.0	25.4	4.3	16.0	14.3	15.3	24.9	36.5	34.9	37.0
Real Impt Growth %	-7.5	15.0	13.7	30.8	8.9	23.9	5.0	26.1	21.5	17.4	28.8
Foreign Inv (mil US\$)	5	18	20	42	9	57	90	109	139	163	127
Inflation Rate %	2.4	2.2	-0.2	-0.1	2.0	3.4	7.93	5.05	3.55	2.83	3.01

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Source: *Taiwan Statistical Data Book*, 1987 (Taipei: Council for Economic Planning and Development, 1987).

promoting export expansion which transferred Taiwan from a traditional rural society into a semi-modern society.

The Real GNP growth speeded to a very high average of 11 percent annually during 1963-73 period. The industrial production rose by 18 percent a year over 1967-73 period. Conversely, agriculture ceased to be the dominant economic sector during the 1960s. Industrial expansion also created a large number of jobs. The unemployment rate was cut by 60 percent between 1964 and 1968; and after 1968 to 1972 the unemployment rate has always been below 2 percent. In addition, Taiwan's saving rate was very tremendous. Saving as a proportion of GNP rose dramatically during export-led growth period, from 12.4 percent in 1962 to 17.1 percent in 1963 to 25.5 percent in 1970 and to 32.1 percent in 1972 -- perhaps the highest growth record in the world. Meanwhile, the foreign investment increased from 5 million US\$ in 1962 to 127 million US\$ in 1972.<sup>92</sup> Hence, the increasing saving rate and foreign investment also improved Taiwan's capital capacity in transferring economic structure to a modern society.

In conclusion, this stage of Taiwan's economic development was the base for Taiwan to become an important economic power in the world today.

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<sup>92</sup> The data presented in the preceding paragraph has been derived from Clark, pp. 175-83.

The Second Phase of Import Substitution and Oil Shock  
(1973-80)

It is true that Taiwan's growing export trade created an increasing demand for industrial raw materials and intermediates, and most of them had to be imported. However, due to the oil crisis in the mid-1970s, "there were some indicators that Taiwan's labour-intensive export-led development might be facing some problems from rising labour costs and growing international protectionism";<sup>93</sup> the increasing price for importing industrial raw materials and intermediates became unaffordable, and so many industries collapsed and many people lost jobs.

Nevertheless, the KMT government responded quickly and actively to solve this externally induced economic crisis. There are three major components of Taiwan's successful response: (1) using conservative fiscal measures to counter inflation, (2) using government spending and investment to re-stimulate the economy, (3) established the Council for Economic Planning and Development (CEPD) to shift the economic direction.

*1. Using conservative fiscal measures to overcome inflation:*

The KMT government has been highly sensitive to inflation, because inflation is one of the major reasons

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<sup>93</sup> Clark, p. 9.

that the KMT government was defeated in mainland China. Therefore, the first reaction that the KMT government made to the oil price explosion was to create stabilization measures designed to control inflation. First, the KMT government increased the interest rate, a move that proved successful in its deflationary aim of discouraging spending and promoting saving. Second, the government also used fiscal policies to diminish the inflationary pressures exerted by OPEC countries. Government expenditures were reduced, which in turn created a meaningful surplus in the government budget, which increased as a proportion of total revenues from 4 percent in 1972 to 22 percent in 1974.<sup>94</sup> Third, the government also used the monopolies which were exercised by state's corporations to control inflation. The China Petroleum Corporation and the Taiwan Power Company provided cheap and high-quality petrochemical material and electrical power to absorb the escalating oil prices.<sup>95</sup>

By using these measures, inflation had been successfully controlled in Taiwan by the end of 1974.

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<sup>94</sup> Pang, p. 192.

<sup>95</sup> Metraux, p. 141.

*2. Using government spending and investment to re-stimulate the economy:*

The government increased public investment in large-scale domestic major construction projects. The Ten Major Construction Projects were announced as a package for accelerating Taiwan's economic transformation in November 1973. The projects included seven transportation projects, one nuclear power plant, an integrated steel mill, and a petrochemical complex. The implement of the projects had slowed down the impact that the oil shock brought about and built up the self-confidence of the people and stimulated Taiwan's continued growth through the hard times.

*3. Council for Economic Planning and Development (CEPD):*

In 1977, the government established the Council of Economic Planning and Development (CEPD). It recentralized power, taking responsibility for macroplanning, setting priorities, coordination and evaluation.

The goal of the CEPD was to utilize export demand to guide production, rather than relying on the product life cycle or technology transferred from foreign companies, and to nourish Taiwan's own research and development (R&D) capacity to develop new products.<sup>96</sup>

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<sup>96</sup> Gold, p. 103.

Although the oil shock struck Taiwan's economy very deeply, Taiwan's economy recovered very quickly, within 2-3 years, from negative growth to positive growth (see Table 4.8). It is attributed to the government to implement the accurate strategy to overcome the difficulties.

Table 4.8  
Socioeconomic Indicators During the Oil Shock

	1973	1974	1975	1976	1977	1978	1979	1980
Real GNP Growth %	12.8	1.1	4.3	13.9	10.1	13.9	8.5	7.1
Real Ind Growth %	16.2	-4.5	9.5	23.3	13.3	22.5	6.4	6.8
Real Ag Growth %	2.7	1.9	-1.2	10.0	4.1	-1.8	5.2	0.0
Savings % GNP	34.6	31.7	26.9	32.5	32.9	34.9	34.5	33.0
Real Sav Growth %	21.7	-7.5	-11.4	37.2	11.3	20.8	7.2	2.4
Unemployment Rate %	1.3	1.5	2.4	1.7	1.9	1.7	1.2	1.2
Foreign Inv (mil US\$)	249	189	118	142	164	213	329	466
Real Export Growth %	24.3	-5.3	-7.8	45.7	7.7	25.2	11.0	6.0
Real Import Growth %	25.3	38.3	-16.6	21.0	5.2	19.8	17.2	15.0
Trade Bal (US\$)	691	-1321	-643	567	850	1660	1329	78
Trade Bal % GDP	6.3	-9.5	-4.3	3.0	3.9	6.1	3.9	0.1
Inflation Rate	8.19	47.47	5.22	2.50	7.04	5.76	9.76	19.00

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Source: *Taiwan Statistical Data Book*, 1987 (Taipei: Council for Economic Planning and Development, 1987).

This period represents an important transformation stage in Taiwan's economic structure. The government began to guide the direction of economic development toward a new transformation to more capital-intensive industries and various types of high-technology industry. The Taiwanese government tried to establish a new international comparative advantage in more technology in order to improve the declining competitiveness in labour intensive production.

Therefore, this transformation made a very good basis -- such as the Ten Major Construction Projects improving the transportation systems and a good direction of economic development -- toward the high-technology industry, for Taiwan's further development in next period.

#### The New Era of Export-led Industrialization (1980-present)

During the 1960s and 1970s, Taiwan's economic development strategy can be described as promoting exports and protecting the domestic market to nurture the development of labour-intensive industries such as textiles, shoes, and electrical machinery industries. The protective measures included high tariff rate, import restrictions, local content restrictions, and prohibition of new plant entry. Therefore, Taiwan enjoyed a great deal of profit during this period. However, by the early 1980s, Taiwan's economic development faced many problems



that forced the Taiwanese government to shift its economic structure. These problems included: a shortage of labour and subsequent high cost of labour, the environmental protection movement, outflow of capital, and globalization and regionalization.

*1. Labour shortage and high labour cost:*

After the export expansion in the 1960s and 1970s, more and more export-oriented labour-intensive factories were established, and also the demand for labour was very high. Although Taiwan has a huge population, the labour shortage is still an inevitable consequence. According to an annual survey conducted by the Directorate-General of Budget, Accounting and Statistics, in 1981, 19.25% of surveyed manufacturing firms with vacant positions could not be filled, and the percentage increased to 55.53% in 1987.<sup>97</sup> Meanwhile, after the announcement of the Labour Standard Laws in 1984, which protected the welfare of workers, the cost of labour skyrocketed. The average monthly salary increased only 6.51% annually in real terms between 1981-86, but it increased by 11.36% between 1986-90.<sup>98</sup>

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<sup>97</sup> Li-Min Hsueh, *Taiwan's Industrial Development and Industrial Policies in the 1980s* (Taipei: Chung-Hua Institution for Economic Research, 1992), p. 5.

<sup>98</sup> Hsueh, p. 5.

## *2. Environmental Protection Movement:*

When rapid economic development was the major concern for the Taiwanese government and society, environmental protection was not an important issue. However, eventually people would not tolerate pollution of the environment created by factories, and a widespread environmental protection movement arose in the early 1980s. In order to meet the increasingly rigid pollution control standards, the existing factories were forced to spend tremendous amounts of money on improving or implementing pollution control measures. Moreover, any attempt to establish a new factory with a potential pollution problem, such as a chemical factory, must now face challenges from environmentalists and local residents.

## *3. Outflow of capital:*

Outflow of capital is the unavoidable consequence of increasing labour shortage, labour cost and the environmental protection movement in Taiwan. It is reflected in the decreased willingness of Taiwanese businessmen to invest in the economy. Hence, the outflow of capital from Taiwan skyrocketed from less than \$1 billion in 1981 to \$15.6 billion in 1986.<sup>99</sup> Most of this capital has been directed toward Third World countries, such as mainland China and ASEAN countries, because

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<sup>99</sup> Clark, p. 24.

Taiwanese businessmen can take advantage of low-cost labour to replace their successful ventures at home.

#### *4. Globalization and Regionalization:*

The trend of globalization of multinational firms and regionalization of the world economy has exerted pressure on Taiwan's economy. Because Taiwan's enterprises are mostly small and medium-size firms, they have no marketing channels of their own, and they are weak in areas of research and development (R&D). They are hardly able to compete with big multinational and transnational corporations. Furthermore, the emerging regionalization of markets in the world, such as is represented in the North American Free Trade Agreement, the single European market and ASEAN, also creates worries of regional protectionism.

Because of the above problems, the Taiwanese government was forced to shift its strategy to meet this situation. During the 1980s, the Taiwanese government launched many measures in an effort to resolve these problems.

##### *1. The Ten Year Economic Development Plan:*

The Ten Year Economic Development Plan for 1989-89 echoed Taiwan's changing comparative advantage in the international community and marked the latest change in its economic strategy. This strategy attempted to shift

Taiwan's economy from the labour-intensive industry to a more energy-efficient and technology-intensive industrial structure. This plan emphasized the intensified public and private research and development (R&D) initiatives. Most of Taiwan's businesses were small and could not spend a great deal of money on R&D projects. The large companies preferred to buy technology or enter licensing agreements with foreign firms rather than devote resources to R&D. Therefore, the government invested tremendous amounts of money in R&D and shifted R&D from the public to the private sector.

Besides R&D, private venture capital was another important component in this plan. The government tried to promote strategic industrial development by using this private venture capital. Under regulation announced in late 1983, venture capital investment could participate in the Taiwan market, but only in high-technology areas.<sup>100</sup> The government has deemed the information, computers, electronics, and telecommunications, and machinery industries as strategic due to their skill intensity, relatively low capital cost and energy savings.

Furthermore, this plan also included other methods such as financial incentives, expansion of overseas economic and technical cooperation agreements, promotion of foreign investment, and encouragement of small and

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<sup>100</sup> Metraux, p. 129.

medium-size enterprises to merge into larger manufacturing and trading units.<sup>101</sup>

## *2. The Establishment of a New Science-based Industrial Park:*

The Hsinchu science-based industrial park began operation in September, 1981. This was an important step by the government to lead industry into the domain of high technology. Investors are provided with land and low-cost construction, a tax holiday guaranteed for five consecutive years with the first nine years of operation, import duty exemption, and freedom to structure capital and repatriate profits.<sup>102</sup>

The reason why the government established this park is that they hoped that the small, innovative companies which were led by dynamic Chinese entrepreneurs with experience abroad, sustained by government's technical and financial support, and with a linkage with TNC, would create a new demand for Taiwan's merchandise in a global market. Actually, this science-based industrial park has been performing well from its establishment. Over the past decade, the park has experienced a remarkable growth in both number of companies being set up and the combined

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<sup>101</sup> Kuo-shu Liang and Ching-ing Hou Liang, "Development Policy and Future Policy Priorities in the Republic of China," *Economic Development and Cultural Change*, p. 81.

<sup>102</sup> Liang, p. 81.

sales they have achieved. In 1995, aggregate sales of the 180 firms in the park topped U.S.\$11.3 billion, a 68 percent increase over the preceding year.<sup>103</sup> The important American firms, such as Wang Laboratories and Rume, also set up operations in this park. Meanwhile, the electronics sector was being upgraded domestically, and some of the firms obtained sufficient capital and technology and subsequently set up operations abroad in order to overcome tariff barriers and to create new markets. Finally, these companies became the world's new transnational corporations, including such companies as Acer Computer Company.

### *3. Liberalization of Trade and Inward Foreign Investment:*

The liberalization policy was announced in 1984. This is due to the globalization and regionalization which caused the protective measures to become ineffective, such as high tariff rates, import restrictions, and local content restrictions. Because Taiwan is a small market it was losing its comparative advantage in labour-intensive industry. Taiwan's merchandise was not strong enough to compete in the world's markets. Meanwhile under the pressure of excess foreign exchange reserves and the threat of the United States' 301 retaliatory action, Taiwan's process of

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<sup>103</sup> *The Republic of China Yearbook 1997*, p. 316.

liberalization moved faster and faster. Until 1984, 97% of items were admissible as imports, but only 11% of items were free from import licenses. In 1985, items free from import licenses increased to 31.43% and reached 65.73% in 1991. The restrictions on origin of imported goods reduced from 1610 items to 46 items in 1991 and even less at present. The reduction of tariff rates was also speeded up after 1985. The average nominal tariff rate was reduced from 30.81% to 8.9% between 1985-90. Today, the tariff burden of industrial products is very close to that of developed countries.<sup>104</sup>

Moreover, most restrictions of inward foreign investment have also been removed since 1986. Within the manufacturing industries, only those industries that are defence-related, highly polluting or currently under government monopoly are on the restrictive list for inward foreign investment.

Many restrictions in financial market were also liberalized such as interest rate liberalization, opening the market for new stock brokerage firms, and allowing the establishment of new private banks. Furthermore, the liberalization of government monopolized industries, e.g., petroleum, telecommunications, highway transportation, and wines and tobacco, are also in process.

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<sup>104</sup> The data presented in the previous paragraph is derived from Hsueh, pp. 8-10.

This latest stage of Taiwan's economic development was characterized by the following facts:

1. The economic structure was being transformed from labour-intensive to high-technology-intensive. The traditional industries, such as textiles and footwear, have had to move to the ASEAN countries and mainland China in order to survive.

2. Taiwan started to make direct investment in foreign countries in order to stretch the limited local market and to utilize the cheap labour and land in developing countries.

3. The service sector started to have the largest share of GDP, its importance is more than before. In 1995, the service sector accounted for 60.2% of GDP.<sup>105</sup>

4. Due to the problem of labour shortage, the government liberalized its foreign labour policy in 1990 to overcome this problem, over 200,000 foreign workers have been involved in Taiwan's industries, mostly from Thailand.<sup>106</sup>

By the end of the 1980s, Taiwan's industrialization reached its mature age, and Taiwan's economy had been transformed from a developing stage to a mature stage.

In 1995, Taiwan's economy grew by a moderate 6.06 percent, down from 6.5 percent in 1994. This decline was attributed to increasingly high expenditure on social

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<sup>105</sup> *The Republic of China Yearbook 1997*, p. 161.

<sup>106</sup> *The Republic of China Year Book 1997*, p. 349.



welfare. In the 1970s and 1980s, social costs took only a small percentage of all government expenditures, because the focus was on rapid economic development. Once economic development had progressed to a certain level, people began to consider the improvement of social welfare and services. In 1996, social expenditures accounted for 26.7% of total government expenditures.<sup>107</sup> Therefore, social welfare has become the main focus instead of economic growth in recent years.

Nevertheless, Taiwan's economic growth is still in process. Taiwan's GNP reached U.S\$263.6 billion in 1995, ranking 20th in the world. Income per capita also reached the highest level at US\$12,439 during the same year. Exports topped US\$111.7 billion in 1995, up 20 percent over 1994.<sup>108</sup> According to a recent report, some economists suggest that Taiwan should be included in the group of developed countries. However, being a developed country means losing much of the favourable treatment that Taiwan enjoys at present, and thus the Taiwanese government has avoided being classified as a developed country until the 21st century.

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<sup>107</sup> *The Republic of China Year Book 1997*, p. 325.

<sup>108</sup> The date presented in the preceding paragraph is derived from *The Republic of China Year Book 1997*, pp. 155-56.

#### 4.3. THE ROLE OF THE TAIWANESE GOVERNMENT IN ECONOMIC DEVELOPMENT

The remarkable record of Taiwan's economic development was discussed earlier in this chapter. From the discussion, one thing is also obvious: the Taiwanese government seemed to play an important role in supporting its economic development at every stage. In fact, many people have wondered how Taiwan could achieve such remarkable success while lacking some of the necessities, like natural resources, capital and technology, in addition to be small in economic scale and experiencing serious inflation during the earlier period of development. The Taiwanese government was truly the key to solving this puzzle.

Taiwan was under the so-called soft-authoritarian regime and so the state's power was immense in Taiwanese society. The Taiwanese government has used its authoritarian power to foster economic development. This is especially true in economic planning, where the Taiwanese government has used this absolute power to guide and determine economic direction.

Thus, the following will analyze the role the Taiwanese government has played in the successful story of Taiwan's economic development.

##### *1. Financial Control of the Taiwanese Government:*

The Taiwanese government used its control of the financial system to tighten the flow of finance in and

out of Taiwan, and to reduce financial instability and assist government's policies when needed.

### BANKING

Before the new Banking Law was implemented in 1989, the Taiwanese government had owned 13 of the 24 Taiwanese commercial banks and most of them were the major banks of Taiwan. Even though there were approximately twenty branches of foreign banks in the 1980s, the extent of these foreign banks was strictly limited by the government. According to Metraux, "because alternative funding sources in the form of venture capital and equity markets were still relatively underdeveloped, private industry in Taiwan relied heavily on the public banking system for most of its funds, although many small and medium-sized firms depended on retained earnings and family savings."<sup>109</sup>

The government kept these government-owned banks for reasons of stability and equity, because government-owned banks were more willing to cooperate with the government's monetary policies and provide loans to private firms. The government regulated the objects for the government-owned banks in order to finance the particular industries for the government-owned banks. In the 1970s, the government-owned banks extended some 75 percent of loans to industries which targeted by

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<sup>109</sup> Metraux, p. 141.

government planners.<sup>110</sup> In order to control hyperinflation, the real rates of interest on both savings and loans were set high. "The central bank tried to pursue a monetary policy to maintain steady expansion of the money supply and to keep interest rates as high as possible in order to encourage high savings."<sup>111</sup> And government controlling these major banks directly could keep them from being part of any concentration of private economic power.<sup>112</sup>

### TAXING

The tax reform program was mainly to improve Taiwan's tax system and to raise more revenue for a series of development projects. This program was based on the suggestion of neo-classical economists, and it emphasizes individual savings. Interest income from savings accounts had largely been tax-free. And the income tax on large firms and persons with high income have been increased. The consumption taxes were also set very high. Therefore, these changes shifted people's income toward savings or more productive activities.

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<sup>110</sup> Deborah A. Brautigam, "What Can Africa Learn from Taiwan? Political Economy, Industry Policy, and Adjustment," *Journal of Modern African Studies*, Vol. 32, No. 1 (1994), p. 121.

<sup>111</sup> Metraux, p. 140.

<sup>112</sup> Hugh T. Patrick and Yung Chul Park, *The Financial Development of Japan, Korea and Taiwan* (New York: Oxford University Press, 1994), p. 249.

Meanwhile, because of the improved tax system, the revenues from customs duties and commodity taxes were increasing. The total tax revenue increased rapidly from NT\$10,142 million in 1962 to NT\$394,846 million in 1985.<sup>113</sup> The rising revenue strengthened the capacity on a series of development projects. This clearly demonstrated the Taiwanese government can cast off the restraint of the dominant classes and conversely to control them.

In fact, the government tried to maintain control of financial system in order to guard against internal and external threats, partly because of the KMT government's historical experience -- they had experienced hyperinflation and economic recession in Mainland China, and this was one of the reasons for the KMT government's loss in Mainland China.

## *2. Using public sector to foster private sector:*

In order to achieve the goal of economic development, the Taiwanese government has been very active in assisting the development of private business and promoting their ability of competition in world market.

The government started to privatize some public enterprises, and this was done both to help finance the "land-to-the-tiller" program and to channel private

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<sup>113</sup> Pang, p. 227.

capital into industry. Many former landowners received preferential treatment from government-owned banks (i.e., low interest loans). Some industries were first promoted by the government and then managed by private enterprises (many of them are large former landlords), with full government sanction and also assistance in raising the required investment capital.<sup>114</sup> The government adopted some policies, like the Nineteen-point Financial and Economic Reform Program, to encourage the channelling of private savings into investment of productive firms or into establishing new companies. The government also provided guidance and assistance to those new firms (i.e., based on financial need).

In addition, the government owned a considerable portion of Taiwan's financial institutions and heavy industry. Companies and enterprises which are monopolistic, risk prone, or considered strategically important are reserved for the government. This idea derived from Dr. Sun Yat-sen's ideological program for economic development and social welfare -- "Principles of People's Livelihood" (*Minsheng Zhuhui*). Dr. Sun Yat-sen formed a developmental vision for China that called for a *mixed economy* in which the state should own and operate those enterprises of a monopolistic nature, those beyond the financial or technological means of private

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<sup>114</sup> Institution of Strategic and International Studies, p. 115.

investors, and those with low returns or other risks discouraging private investors.<sup>115</sup>

The purpose of the government-owned (or public) enterprises was to facilitate and expedite the work of small private firms. These public enterprises<sup>116</sup> included the Taiwan Power Company, Chinese Petroleum Corporation, Chinese Petrochemicals Development Corporation, Taiwan Metal Mining Corporation, Taiwan Aluminum Corporation, BES Engineering Corporation, Tan Eng Metal Works, Taiwan Navigation Corporation, Chung Hsing Paper Corporation, Taiwan Sugar Corporation, Taiwan Fertilizer Company, Taiwan Machinery Manufacturing Corporation, China Steel Corporation, and China Shipbuilding Corporation.<sup>117</sup> These public enterprises were supposed to be self-supporting, but could charge their customers lower prices because they did not seek profits besides basic costs and capital for amplification. For example, the public enterprises such as Taiwan Power Company provided private firms and Taiwanese people with the cheapest and most efficient forms of electric power available. Other public enterprises such as China Steel Corporation and China

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<sup>115</sup> Karl J. Fields, *Enterprise and the State in Korea and Taiwan* (Ithaca and London: Cornell University Press, 1995), p. 84.

<sup>116</sup> By law, a firm is considered to be public enterprise if the government holds more than 50 percent of the company's stock.

<sup>117</sup> Metraux, p. 141.

Petroleum Corporation are upstream industries which provide downstream private enterprises such as those in shipbuilding, machinery, and construction, and the automobile and chemical industries with industrial inputs at reasonable prices.<sup>118</sup> Moreover, these large public enterprises also provided many job opportunities for the citizens of Taiwan. The profits of public enterprises was an important source of income for the government. For example, between 1960 and 1980, the revenue from public enterprises contributed 24.7 percent of the government's income, and 18.8 percent between 1980 and 1989.<sup>119</sup>

The importance of public enterprises in Taiwan's economic development can be seen from Table 4.9.

In 1952, public enterprise's production accounted for 56.6 percent of the total industrial production, while the public sector accounted for 56.2 of the total manufacturing production. However, by 1992, public enterprise's production decreased to only 18.0 percent of the total. Nevertheless, it is important to note that the decline of the importance of public enterprise is not because its numbers declined but because of the extension of private enterprise.<sup>120</sup>

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<sup>118</sup> Joseph S. Lee, "The role of the State in Economic Restructuring and Development: The Case of Taiwan," *Occasional Paper Series*, No. 9403, April 1994 (Taipei: Chung-Hua Institution for Economic Research), p. 7.

<sup>119</sup> Lee, p. 8.

<sup>120</sup> Lee, p. 7.



Table 4.9  
Distribution of Industrial Production by Ownership  
(based on value-added at 1981 prices)

Period	Total			Manu- facturing		
	Total	Private	Public	Total	Private	Public
1952	100.0	43.4	56.6	100.0	43.8	56.2
1960	100.0	52.1	47.9	100.0	56.2	43.8
1970	100.0	72.3	27.7	100.0	79.4	20.6
1980	100.0	79.1	20.9	100.0	85.5	14.5
1985	100.0	81.2	18.8	100.0	88.0	12.0
1990	100.0	81.3	18.7	100.0	89.3	10.7
1991	100.0	81.9	18.1	100.0	90.0	10.0
1992	100.0	82.0	18.0	100.0	90.0	10.0

Source: *Taiwan Statistics Data Book*, 1993.

The growing number of small private enterprises in Taiwan provided evidence of the Taiwanese government's efforts. In fact, small private enterprises were the main base for Taiwan's economic development. Thus, it is true that the Taiwanese government used these public enterprises to facilitate and expedite economic development.

### *3. Adoption of various economic strategies when necessary:*

The government undertook various strategies at different stages in order to meet different situations.

For example, when the strategy of import-substitution had run out of steam, the government shifted the emphasis of economic strategy to exports in the 1960s. Then the government created out the "Ten Major Construction Projects" to overcome the difficulties inherent in the oil shock of the 1970s, and since the 1980s the government has been trying to advance its technology because of Taiwan's comparative advantage in its cheap labour force has disappeared due to rising wages. It is true that today traditional labour-intensive industries in Taiwan, like textiles, are steadily being replaced with more capital- and high-technology-intensive industries, like computers. In order to promote the development of science and technology, in 1981 the government established the Science-based Industrial Park in Hsih-chu. And since 1982, the government has implemented three specific programs -- namely, the Science and Technology Development Program, the Program for Strengthening the Education, Training and Recruitment of High-level Science and Technology Personnel, and the Program for Defence Science and Technology - in order to raise the level of science and technology.<sup>121</sup>

Thus, there is no doubt that under the guidance of the government, many strategies have been adopted properly when necessary.

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<sup>121</sup> Kwoh-ting Li, *Economic Transformation of Taiwan, R.O.C.* (London: Shephard-Walwyn Limited, 1988), p. 237.

#### *4. The Control of Union Organization:*

It is believed that a cheap, abundant, educated, skilled and compliant labour force is one of the main components to economic development in the developing countries, particularly in the countries with lack of natural resources and high population density. Therefore, the Taiwanese government has been trying to invest in educating its people and, most importantly, in preventing autonomous and radical work class action in order to create a very sound and stable investment environment to attract foreign and local investment.

In fact, throughout the 1980s, strikes and collective bargaining actions were prohibited under martial law (1949-87), and the unions that did exist were under close government supervision that included party controls over the selection of union leaders and all union activities.<sup>122</sup> Because of the high degree of control over union organization, there were very few strikes and very little labour unrest through the late 1980s. This stable investment climate, therefore, did attract many foreign investors, mainly the American and Japanese, to invest heavily in Taiwan's Export Processing Zones, since the 1960s.

According to the discussion above, the Taiwanese government has obviously played a leading role in directing Taiwan's economic development. The Taiwanese

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<sup>122</sup> Metraux, p. 139.

government did not only control the financial system and union to prevent the internal and external threat and to create a favourable and stable investment climate, but also used public enterprise to assist the private sector. In addition, a series of economic structural transformations were also the direct result of the Taiwanese government's accurate decisions and strategies.

Hence, it is fair to conclude that, without the Taiwanese government's guidance, Taiwan might not have been able to achieve the remarkable development it has demonstrated.

#### **4.4. ANALYSIS OF TAIWAN'S ECONOMIC DEVELOPMENT AND THE ROLE OF THE GOVERNMENT WITH RESPECT TO MODERNIZATION THEORY AND THE STATE-Centered approach**

Modernization theory and the state-centered approach explain economic development in the contemporary world with different basic assumptions. The modernization theory assumes that economic development and industrial transformation result from the imitation of the Western economic lifestyle, and *laissez-faire* economics. On the other hand, the state-centered approach assumes that the state is the key factor to determine the direction of development and that the development policies and strategies are influenced by the relationship between the state and the various socioeconomic classes and groups.

This section will attempt to analyze Taiwan's economic development and the role of government with

respect to the basic assumptions of modernization theory and the state-centered approach, even though Taiwan's history of economic development is more complex than modernization theory and the state-centered approach would predict. Many economists have argued that Taiwan's economic development presents a very good model of capitalist industrialization which confirms the modernization theory. Taiwan's rapid economic development mainly resulted in a free-market economy that was highly integrated with the global market. According to John C. H. Fei, the international environment has contributed to Taiwan's modernization through methods of production and technology.<sup>123</sup> A series of developments from agriculture to light industry to more high-technology industrial production also followed this model. Moreover, the export-led industrialization strategy also demonstrated that a developing country obtains benefits from international trade, and the export-led industrialization strategy also can increase the speed of development (in Taiwan's case, development occurred from agricultural goods to high-technology production in less than thirty years). Finally, Taiwan became an incredible competitor in global markets.

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<sup>123</sup> John. C. H. Fei, "Taiwan's Economic Development and its Relationship to the International Environment," *Asian Affairs: An American Review*, Vol. 18, No. 2 (Summer 1991), p. 63.

It is clear from Taiwan's export-led strategy that suggests that other developing countries should pursue a development strategy that relies on integration with the world's economy.<sup>124</sup>

Hence, the history of Taiwan's economic development seems to conform well to some of the basic assumptions of modernization theory. Taiwan has followed the logic of the international market and upgraded its position in terms of "comparative advantage." Taiwan's rapid economic development also benefitted from liberal global economic order that is derived from the free market perspective of modernization theory in the global context.

However, even though Taiwan's economic development seems to confirm well to some of the basic assumptions of modernization theory, Taiwan's economic development is more complex than one would predict. Besides the appearance of modernization, the Taiwanese government has obviously been a pivotal component in Taiwan's economic achievement. Taiwan's economic success is mainly due to the efficient policies and strategies which the government has implemented. These efficient policies and strategies of government have led Taiwan through a series of structural transformations that created and retained Taiwan's ability to compete successfully internationally.

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<sup>124</sup> Reuven Glick and Ramon Moreno, "The East Asian Miracle: Growth Because of Government Intervention and Protectionism or in Spite of it?" *Business Economics*, Vol. 32, No. 1 (April 1997), p. 24.

The basic object of these policies and strategies was to promote Taiwan's capacity to benefit from "comparative advantage" in the global markets rather than to protect Taiwan from other competitors. Thus, Taiwan's development is an excellent example to demonstrate that the state and market can interact effectively to promote development.<sup>125</sup>

Moreover, Taiwan's experience also demonstrates that a state which is autonomous and capable enough to formulate and execute transformative policy effectively is needed. Because the autonomous and capable state can overcome the obstruction of the vested interests in the development process and can establish an orderly market in the economic system.<sup>126</sup>

After analyzing Taiwan's economic development and the role of the Taiwanese government in its economic development, it is clear that neither modernization theory nor the state-centered approach alone can fully explain the success of Taiwan, since both modernization theory and the state-centered approach can only explain part of Taiwan's economic success. Nevertheless, it should use a mixed framework of these two to analyze Taiwan's economic development and the role of the Taiwanese government in its economic development in order

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<sup>125</sup> Clark, p. 232.

<sup>126</sup> Pang, p. 274.

to gain a complete understanding of Taiwan's economic success.



CHAPTER FIVE  
SOME CONCLUSIONS: TAIWANESE "MIRACLE"  
OR EFFICIENT STRATEGIES?

Taiwan's remarkable economic and social development over the last four decades was not a divine miracle, but indeed a result of harnessing both the strengths and overcoming the weaknesses of the states and the market. It was thus the result of well-guided policies for rapid transformation in Taiwan. This means that Taiwan's economic development is no longer regarded as a miracle; rather, it may now be used as a model for other developing countries to follow. According to Thomas B. Gold in his book *State and Society in the Taiwan Miracle*, the author states, "Too many unique elements shaped Taiwan's experience to make it a viable model, but it offers several lessons worth considering by other LDCs."<sup>127</sup> Another economist, Hal Myint, also makes a

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<sup>127</sup> Gold, p. 132.

comment on the lessons of Taiwan's experience in relation to other LDCs, stating: "I think perhaps that it is more fruitful to concentrate on the conjuncture of economic and political circumstances, including the overcoming of the vested interests, which enabled Taiwan to switch over effectively from the import-substitution to expansion policies rather than try to construct an elaborate sequence of phases or subphases of economic development from her experience."<sup>128</sup> And the main point of these lessons is an autonomous and capable government and organized popular support and cooperation among enterprises and people. Taiwan's experience demonstrates one thing: that is, in order to promote economic development, it needs a government which is autonomous and efficient enough to formulate and execute transformative strategies with people's cooperation. These policies were based on an effective mixture of the roles of the state and market for achieving sustainable development. This is the key to solving the puzzle of Taiwan's success in implementing development policies and switching development strategies as times changed.

These lessons stress the importance of an autonomous and capable government guiding the market. According to Yu,<sup>129</sup> these lessons can be summarized as follows:

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<sup>128</sup> Pang, p. 274.

<sup>129</sup> Tzong-shian Yu, "The Role of Government in Economic Planning and Development: The Case of the ROC on Taiwan," Occasional Paper Series, No. 9503 (Taipei:

### *1. Strong but efficient government*

In the early stage of economic development, a strong government is required. However, the government must also have the ability to carry out its economic plans successfully. A strong government does not mean an autocratic government, in which policymaking depends on only one man. Policymaking is best carried out by a group of experts and administrators. After the policy is formulated, it should be implemented immediately and completely.

### *2. Reasonable economic strategy*

Before an economic strategy is adopted, the historical and cultural background of the country should be considered. In a country which is characterized as an agricultural country, agricultural development should be a priority. If the country has a very high density of population, labour-intensive industry should be considered. If a country adopts the wrong economic strategy, it will not only be delayed in development, but more seriously, it will probably harm the entire economic system.

### *3. Attracting foreign investment*

It is true that without investment, no production is possible. To begin economic development, foreign

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Chung-Hua Institution for Economic Research), pp. 11-13.

investment is very helpful, especially for poor countries. In order to attract foreign investment, creating a favourable investment climate is crucial. A favourable investment climate includes adequate and sound infrastructure, clear and effective laws and regulations, efficient public administration, and adequate manpower.

#### *4. Export-led development strategy*

Achieving economic development has been the goal of many developing countries, but not many of them have reached this goal successfully. In many developing countries, the domestic market is too small to absorb the domestic products. Therefore, effectively producing exportable items can supply in part the domestic needs, and in part export them to other countries and earn much needed foreign exchange. This export-led development strategy has been adopted by many countries and has proved sound. However, it is impossible to export manufactured goods without first producing them, and it is also important that the industrial strategy of producing goods could compete in world markets.<sup>130</sup>

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<sup>130</sup> Patel, p. 264.

*5. Using the public sector to foster the private sector*

In order to achieve economic development, the public sector has responsibility to provide the private sector with the basic needs for development and to improve the competitiveness of the private sector in the world market, because sustained development depends on the development of the private sector, not on the public sector.

However, the model of Taiwanese experience is the combination of modernization theory and the state-centered approach. By using the concepts of sustained economic growth and the free market of modernization theory and guided by an efficient government, Taiwan's economic development has set a spectacular example in the history of economic development. Taiwan's development experience is thus worthy of serving as a possible guide for other developing countries aiming at a rapid transformation of their countries.

## BIBLIOGRAPHY

- Alam, M. Shahid. *Governments and Markets in Economic Development Strategies*. New York: Praeger Publisher, 1989.
- Attir, Mustafa O., Burkart Holzner, and Zdenek Suda. *Direction of Change: Modernization Theory, Research, and Realities*. Boulder, CO: Westview Press, 1981.
- Bell, Daniel. "Will the Twenty-First Be the Pacific Century?" *Dissent*, Vol. 42, No. 2 (Spring 1995), pp. 195-201.
- Billet, Bret L., ed. *Modernization Theory and Economic Development: Discontent in the Developing World*. Westport: Praeger Publisher, 1993.
- Blomstrom, Magnus. *Development Theory in Transition*. London: Zed Books, 1984.
- Brautigam, Deborah A. "What Can Africa Learn From Taiwan? Political Economy, Industry Policy, and Adjustment." *Journal of Modern African Studies*, Vol. 32, No. 1 (1994), pp. 111-138.
- Broad, R., and Cavanaugh-O'Keefe, J. "No More NICs." *Foreign Policy*, Fall 1988, pp. 81-102.
- Chaudhuri, Parmit. *Economic Theory of Growth*. Iowa: Iowa State University Press, 1989.
- Cheng, Li-ping Alfred. "Ownership, Control, and Privatization of Public Enterprises." Occasional Paper Series No. 9602, August 1996. Taipei: Chung-Hua Institution for Economic Research.
- Chou, Ji. "The Taiwan Economy in the Year 2000." Occasional Paper Series No. 9309, December 1993. Taipei: Chung-Hua Institution for Economic Research.
- Clark, Cal. "Economic Development in Taiwan: A Model of a Political Economy." *Journal of Asian and African Studies*, Vol. 12, No. 1-2 (Jan./Apr. 1987), pp. 1-16.
- Clark, Cal. *Taiwan's Development -- Implications for Contending Political Economy Paradigms*. New York: Greenwood Press, 1989.
- Cohen, Marc J. *Taiwan at the Crossroads*. Washington, DC: Asia Resource Center, 1988.

- Copper, John F. *Taiwan: Nation-State or Province?* London: Westview Press, 1990.
- Dutt, Amitava Krishna, Kwan S. Kim and Ajit Singh. *The State, Markets and Development*. Hants, England: Edward Elgar, 1994.
- Educational Statistics of the Republic of China*. Taipei, ROC: Ministry of Education, 1987.
- Fei, John C. H. "Taiwan's Economic Development and its Relationship to the International Environment." *Asia Affairs: An American Review*, Vol. 18, No. 2 (Summer 1991), pp. 63-77.
- Feldman, Harvey, and Ilpyong J. Kim, eds. *Taiwan in a Time of Transition*. New York: Paragon House, 1988.
- Fields Karl J. *Enterprise and the State in Korea and Taiwan*. Ithaca and London: Cornell University Press, 1995.
- Glick, Reuven, and Ramon Moreno. "The East Asian Miracle: Growth Because of Government Intervention and Protectionism or in Spite of it?" *Business Economics*, Vol. 32, No. 1 (April 1997), pp. 20-25.
- Gold, Thomas B. *State and Society in the Taiwan Miracle*. New York: M. E. Sharpe, 1985.
- Great Taiwan -- Land of Prosperity, Affluence, and Contentment*. Taichung, Taiwan, ROC: Department of Information, Taiwan Provincial Government, ROC, 1995.
- Harland-Thunberg, Penelope. *China, Hong Kong, Taiwan and the World Trade System*. New York: St. Martin's Press / Center for Strategic and International Studies, 1990.
- Henderson, Jeffery, and Richard P. Appelbaum. "Situating the State in the East Asian Development Process." In Jeffery Henderson and Richard P. Appelbaum, eds. *State and Development in the Asian Pacific Rim*. Newbury Park, CA: Sage Publications, 1992.
- Ho, Samuel P. S. *Economic Development of Taiwan, 1860-1970*. New Haven, CT: Yale University Press, 1978.
- Hobday, Mike. "Export-led Technology Development in the Four Dragons, the Case of Electronics." *Development and Change*, Vol. 25, No. 2 (April 1994).
- Hoogvelt, Ankie M. M. *The Third World in Global Development*. London: Macmillan, 1982.

- Hsueh, Li-Min. *Taiwan's Industrial Development and Industrial Policies in the 1980s*. Taipei: Chung-Hua Institution for Economic Research, 1992.
- Hughes, Helen ed. *Achieving Industrialization in East Asia*. New York: Cambridge University Press, 1988.
- Hunt, D. *Economic Theories of Development: An Analysis of Competing Paradigms*. Toronto: Harvester Wheatsheaf, 1989.
- Institution of Strategic and International Studies. *Lessons from Taiwan: Pathways to Follow and Pitfalls to Avoid*. Malaysia: ISIS Malaysia, 1986.
- Ito, Takatoshi, and Anne O. Krueger. *Growth Theories in Light of the East Asian Experience*. Chicago: The University of Chicago Press, 1995.
- Jacoby, Neil H. *U.S. Aid to Taiwan*. New York: Frederick A. Praeger, 1966.
- Jao, Y. C., Victor Mok and Lok-sang Ho, eds. *Economic Development in Chinese Societies: Models and Experiences*. Hong Kong: Hong Kong University Press, 1989.
- Jeffrey, Robin. *Asia -- the Winning of Independence*. New York: St. Martin's Press, 1981.
- Jenkins, Rhys. "The Political Economy of Industrialization: A Comparison of Latin American and East Asian Newly Industrializing Countries." *Development and Change*, Vol. 22, No. 2 (April 1991), pp. 197-231.
- Jeon, Jei Guk. "Exploring the Three Varieties of East Asia's State-Guided Development Model: Korea, Singapore, and Taiwan." *Studies in Comparative International Development*, Vol. 30, No. 3 (Fall 1995), pp. 70-88.
- Ka, Chien-Kuo. "Agrarian Development, Family Farms and Sugar Capital in Colonial Taiwan." *Journal of Peasant Studies*, Vol. 18, No. 2 (January 1991), pp. 206-240.
- Kennedy, Paul. "Preparing for the 21st Century: Winners and Losers." *New York Review of Books*, Vol. 40, No. 4 (1993), pp. 32-43.
- Kuo, Shirley W. Y., Gustav Rankis and John C. H. Fei. *The Taiwan Success Story: Rapid Growth with Improved Distribution in the Republic of China, 1952-1979*. Boulder, CO: Westview Press, 1981.



- Larrain, Jorge. *Theories of Development: Capitalism, Colonialism and Dependency*. Cambridge: Polity Press, 1989.
- Larrain, Jorge. *Theories of Development: Capitalism, Colonialism and Dependency*. Cambridge: Polity Press, 1989.
- Lee, Joseph S. "The Role of State in Economic Restructuring and Development: The Case of Taiwan." Occasional Paper Series, No. 9403, April 1994. Taipei: Chung-Hua Institution for Economic Research.
- Lee, Keun, and Hong-Yong Lee. "States, Markets and Economic Development in East Asian Capitalism and Socialism." *Development Policy Review*, Vol. 10, No. 2 (June 1992), pp. 107-130.
- Li, Kwoh-ting. *Economic Transformation of Taiwan, R.O.C.* London: Shepherd-Walwyn, 1988.
- Liang, Kuo-shu, and Ching-ing Hou Liang. "Development Policy and Future Policy Priorities in the Republic of China." *Economic Development and Cultural Change*, Vol. 36, No. 3 (Supplement) (April 1988), pp. S67-S101.
- Lim, Linda Y. C., and Pang Eng Fong. *Foreign Direct Investment and Industrialization in Malaysia, Singapore, Taiwan and Thailand*. France: Development Centre of the Organization for Economic Co-operation and Development, 1991.
- Lin, Jan. "Beyond Neoclassical Shibboleths: A Political-Economic Analysis of Taiwanese Economic Development." *Dialectical Anthropology*, Vol. 14, No. 4 (1989), pp. 283-298.
- Litonjua, M. D. "Outside the Den of Dragons: The Philippines and the NICs of Asia." *Studies in Comparative International Development*, Vol. 28, No. 4 (Winter 1994), pp. 3-27.
- Marglin, F. Apffel, and Stephen A. Marglin. *Dominating Knowledge: Development, Culture, and Resistance*. New York: Oxford University Press, 1990.
- Meier, Gerald M., and Dudley Seers. *Pioneers in Development*. Washington, DC: The International Bank for Reconstruction and Development / The World Bank, 1984.
- Metraux, Daniel. *Taiwan's Political and Economic Growth in the Late Twentieth Century*. Lewiston: The Edwin Mellen Press, 1991.

- Milner, Chris. *Export Promotion Strategies: Theory and Evidence from Developing Countries*. New York: New York University Press, 1990.
- Negandhi, Anant R. *Management and Economic Development: The Case of Taiwan*. Netherlands: Martinus Nijhoff-The Hague, 1973.
- Pang, Chien-kuo. *The State and Economic Transformation -- the Taiwanese Case*. New York and London: Garland Publishing, 1992.
- Patel, Surendra J. *Technological Transformation Volume V: The Historic Process*. Aldershot, England: Avebury, 1995.
- Patrick, Hugh T., and Yung Chul Park. *The Financial Development of Japan, Korea and Taiwan*. New York: Oxford University Press, 1994.
- Pempel, T. J. "Of Dragons and Development." *Journal of Public Policy*, Vol. 12, No. 1 (Jan.-Mar. 1992), pp. 79-95.
- Petras, James, and Po-keung Hui. "State and Development in Korea and Taiwan." *Studies in Political Economy*, Vol. 34 (Spring 1991), pp. 178-198.
- Rabushka, Alvin. *The New China*. San Francisco: Pacific Research Institute for Public Policy, 1987.
- Ranis, Gustav, and T. Paul Schultz. *The State of Development Economics: Progress and Perspectives*. New York / London: Basil Blackwell, 1988.
- Richburg, Keith B. "Why is Africa Eating Asia's Dust?" *Washington Post National Weekly Edition* (July 20-26, 1992) pp. 11-12.
- Roemer, Michael, and Chou Ji. "The Economic Development of Taiwan, 1980 to 1993 Macroeconomic Policy: Overzealous or Inflexible?" Occasional Paper Series No. 9603, August 1996. Taipei: Chung-Hua Institution for Economic Research.
- Rostow, Walt W. *The Stages of Economic Growth: A Non-communist Manifesto*, 3rd ed. Cambridge: Cambridge University Press, 1990.
- Rostow, W. W. *The Process of Economic Growth*, 2nd ed. New York: W. W. Norton & Company, 1962.
- Schive, Chi. *Taiwan's Economic Role in East Asia*. Washington, DC: The Center for Strategic and International Studies, 1995.

Schuurman, Frans J. *Beyond the Impasse: New Directions in Development Theory*. London: Zed Books, 1993.

Seligson, Mitchell A., and John T. Passe-Smith. *Development and Underdevelopment: The Political Economy of Inequality*. Boulder, CO: Lynne Reinner, 1993.

Sharma, Basu, and Peter Sephton. "The Determinants of Union Membership Growth in Taiwan." *Journal of Labour Research*, Vol. 12, No. 4 (Fall 1991), pp. 429-437.

Shoesmith, Dennis. *Export Processing Zones in Five Countries: The Economic and Human Consequences*. Hong Kong: Asia Partnership for Human Development, 1986.

So, Alvin Y., and Stephen W. K. Chiu. *East Asian and the World Economy*. Thousand Oaks, CA: Sage Publications, 1995.

*Taiwan Statistical Data Book 1987*. Taipei, ROC: Council for Economic Planning and Development, 1987.

*Taiwan Statistical Data Book 1984*. Taipei, ROC: Council for Economic Planning and Development, 1984.

*Taiwan Statistical Data Book 1986*. Taipei, ROC: Council for Economic Planning and Development, 1986.

Tazairy, Idriss, et al. "From the Old to the New Development Paradigm." *The State of World Rural Poverty*. International Fund for Agricultural Development, 1993.

Tazairy, Idriss, et al. "From the Old to the New Development Paradigm." *The State of World Rural Poverty*. International Fund for Agricultural Development, 1993.

*The Republic of China Yearbook 1997*. Taipei, ROC: The Government Information Office, 1997.

Thompson, Mark R. "Late Industrialisers, Late Democratisers: Developmental States in the Asia-Pacific." *Third World Quarterly*, Vol. 17, No. 4 (1996), pp. 625-647.

Tien, Hung-Mao. *The Great Transition -- Political and Social Changes in the Republic of China*. Stanford: Hoover Institution Press, 1989.

Tsai, Wen-hui. "Social Changes Under the Impacts of Economic Transformation in Taiwan: From Industrialization to Modernization during the Post-

World War II Era." *Studies in Comparative International Development*, Vol. 24, No. 2 (Summer 1989), pp. 24-41.

UNDP. *Human Development Report 1993*. New York: Oxford University Press, 1993.

Wade, Robert. "Review Article: East Asian Economic Success: Conflicting Perspectives, Partial Insights, Shaky Evidence." *World Politics*, Vol. 44 (1992), pp. 270-320.

Wade, Robert. *Governing the Market: Economic Theory and the Role of Government in East Asia Industrialization*. Princeton, NJ: Princeton University Press, 1990.

Watt, Tan Kock, and K. S. Jomo. "Economic Theory and Industrial Policy in East Asia." In Robert Fitzgerald, ed. *The State and Economic Development: Lessons from the Far East*. London: Frank Cass, 1995.

Weiss, Linda. "Government-business Relations in East Asia: The Changing Basis of State Capacity." Occasional Paper Series No. 9407, October 1994. Taipei: Chung-Hua Institution for Economic Research.

White, Gordon. *Developmental States in East Asia*. New York: St. Martin's Press, 1988.

Winckler, Edwin A., and Susan Greenhalgh. *Contending Approaches to the Political Economy of Taiwan*. New York: M. E. Sharpe, 1988.

World Bank. *Trends in Developing Economies*. Washington, DC: The International Bank for Reconstruction and Development / The World Bank, 1994.

Yang, Ya-hwei. "The Financial System and Financial Policy in Taiwan - Lesson for Developing Countries." Occasional Paper Series No. 9410, December 1994. Taipei: Chung-Hua Institution for Economic Research.

Yu, Tzong-shian. "Current Economic Conditions of Taiwan." Occasional Paper Series No. 9302, April 1993. Taipei: Chung-Hua Institution for Economic Research.

Yu, Tzong-shian. "The Role of Government in Economic Planning and Development: The Case of the R.O.C. on Taiwan." Occasional Paper Series, No. 9503, December 1995. Taipei: Chung-Hua Institution for Economic Research.

Yu, Tzong-shian. "Taiwan's Foreign Direct Investment and Economic Development." Occasional Paper Series No.

9402, April 1994. Taipei: Chung-Hua Institution for Economic Research.

Yu, Tzong-shain. "Taiwan's Perspective on Sino-American Economic Relations." Occasional Paper Series No. 9502, July 1995. Taipei: Chung-Hua Institution for Economic Research.

Yu, Tzong-shain. "Does Taiwan's Industrialization Have its Own Paradigm?" Occasional Paper Series No. 9404, June 1994. Taipei: Chung-Hua Institution for Economic Research.