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# Occasional Paper

CHUNG-HUA INSTITUTION FOR ECONOMIC RESEARCH

75 Chang-Hsing St., Taipei, Taiwan 106

Republic of China

This paper is intended to provide economic information and stimulate further research. Any opinions expressed within are solely those of the authors and not those of the Chung-Hua Institution for Economic Research.



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# The Price Paid for Accelerating Economic Growth

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No.9305

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# The Price Paid for Accelerating Economic Growth\*

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### Tzong-shian Yu\*

### I. Introduction

Knowledge is an accumulation of experience. The experience of human beings, however, is limited even though thousands upon thousands of years have passed. The past we can understand to some extent, but what we understand about the future is much more restricted. In China, there is an old saying which says, "The past, if we do not forget it, may be a lesson for the future." This can be applied not only to an individual's decision-making, but also to the government's policymaking.

Delivered at the International Symposium on the Theoretical and Practical Issue of the Transition Towards a Market Economy in China, June 1-3, 1993, Haikou, Hainan.

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Since World War II, nearly every independent country in the world has tried to undertake economic development. Once they reach the take-off stage, they use whatever policy measures are available to them to accelerate economic growth. Actually, many countries have achieved very high economic growth, and they have paid very dearly for it. This is not meant to validate the phrase "there is no such thing as a free lunch," but to emphasize that the approaches employed to achieve rapid economic growth must be carefully selected.

The main purpose of this paper is to use Taiwan as a case study to explain how Taiwan has achieved very rapid economic growth on the one hand and experienced a waste of resources and a heavy burden of social costs on the other. In discussing the problem, this paper will touch upon the goals of economic growth, a theoretical consideration of accelerating economic growth, the importance of the experience of other countries, the responsibility of the government in accelerating economic development, and finally offer some concluding remarks.

## II. The Goals of Economic Growth

Economic growth itself is not a goal but a means. In other words, through the achievement of economic growth, the living standard can be raised and the quality of life improved.<sup>1</sup> For any country in the early stages of economic development, raising

<sup>1</sup> Economic growth has long been mistaken as the goal of human beings' endeavor. Under the

the living standard of the people is of paramount importance. As to how to raise the living standard, the effective approach is to maintain sustained economic growth. Without economic growth, it is impossible to raise the living standard, including sufficiency of food and clothing, possession of housing, convenience of transportation, and establishment of elementary education and recreational outlets. Once the basic level of living is reached, the next goal of economic development is to upgrade the quality of life. Sustained economic growth is absolutely essential in upgrading the quality of life. In fact, without economic growth, the quality of life may actually deteriorate. This is why economic growth should be considered a means rather than a goal. In short, only when economic growth can be sustained are the two goals of economic development achieved.

In Taiwan before the 1980s, the goal of Taiwan's economic growth was to raise the living standard. People had no problem with sufficient food and clothing, households which owned their own housing amounted to 78% of total housing ownership, transportation was very convenient, and elementary education was extended from six to nine years. Moreover, many in the middle class began to have enough money to be able to make trips to foreign countries. From the 1980s onward, the goal of economic growth has been to upgrade the quality of life.<sup>2</sup>

erroneous doctrine "of achieving the goal without care in the selection of means" it is easy to make mistakes and waste resources.

<sup>&</sup>lt;sup>2</sup> Generally speaking, the 1980s was a very significant time for Taiwan. The economy evolved from the developing to the mature stage and Taiwan began to experience many social, economic and political movements.

# III. Theoretical Consideration of Accelerating Economic Growth

For any country, there are many approaches to accelerate economic growth. No one approach is perfect, but it mainly depends upon what policy measures the government takes. As for the approach to accelerate economic growth, the following should be taken into consideration:

For a country, its gross national product (GNP) consists of:

$$Y = C + G + I + V + (E - M)$$
 (1)

Where Y is GNP, C is private consumption expenditures, G is government consumption expenditures, I is fixed capital formation, V is increase in stock, E is the export of goods and services and M is the import of goods and services, respectively.

In equilibrium, a country's aggregate supply (Y + M) is equal to its aggregate demand (C + G + I + V + E), i.e.,

$$Y + M = C + G + I + V + E$$
 (2)

If its aggregate supply doesn't equal its aggregate demand, prices will fluctuate. From the production point of view, GNP is composed of gross agricultural product (Ya), gross industrial product (Yi) and gross services product (Ys), i.e.,

$$Y = Ya + Yi + Ys \tag{3}$$

The growth rate of GNP represents the economic growth rate. To raise the growth rate of GNP, either C, G, I, V, or E must be increased. However, constraints exist, i.e., domestic supply (Y) and foreign supply (M).

If C is increased too much, savings (S) must be reduced correspondingly. If savings is reduced, this will affect the increase in investment (I + V). If G is increased too much and government revenue does not increase correspondingly, the government may issue bonds to the public to increase revenue. When E increases faster than M, a trade surplus will result which, in turn, causes the domestic currency to appreciate. For a trade-oriented economy, the most important means to accelerate economic growth is the expansion of exports. In order to support the expansion of exports, the acceleration of industrial production is required. To increase industrial production depends upon the increase in investment, which is dependent upon the accumulation of capital, including materials and money. Excess investment is also a source of inflation, while excess saving is the root of economic sluggishness.

## IV. The Importance of Other Countries' Experiences

There is an old Chinese saying which says, "A stone taken from another mountain can be used to sharpen tools." Its meaning is that the experience of others

is important. Good experience can serve as a useful lesson, and one need not pay tuition to learn it. Bad experience can serve as a mirror, and one need not follow the incorrect path and thus avoid sacrifice.

During the past four decades, many developing countries have attempted to achieve rapid economic growth by whatever means are available. Only a few of them have been successful. However, Taiwan is an example of a country which has achieved rapid economic growth with equitable income distribution, has experienced moderate inflation with low unemployment, and is characterized by sound public finance with insignificant public debt, high savings and huge foreign exchange reserves. This is not to say that no mistakes were made in the process of Taiwan's economic development. Actually, many lessons can be drawn from Taiwan's experiences.

#### 1. Excess investment may cause hyperinflation

Excess investment can accelerate economic growth on the one hand, and may induce hyperinflation on the other. When investment exceeds savings, interest rates may rise, thus increasing the cost of production. This is unfavorable to competitiveness. When excess investment takes place, raw materials may be insufficient to support production, so that the price of raw materials and machinery may rise correspondingly.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> This seems to be simply based on common sense or directly out of a textbook. However, in spite of its being so obvious, many governments have failed to learn this lesson.

#### 2. No selection of means for accelerating economic growth

With the sole objective of accelerating economic growth, the government has often not seemed to make a careful choice of policies for encouraging investment. Some forms of investment, although they produce serious pollution, have been encouraged nonetheless since they will increase exports or create jobs. The following cases should be noted.

#### (a) No choice of industries

"Nothing is wrong to a hungry man." When Taiwan was in its early stages of economic development, there really wasn't any choice about the type of industries to develop. So long as the industry could create jobs, the industry was welcomed and encouraged. An example is the ship-wrecking industry which is highly pollution-producing. Taiwan has been called the kingdom of ship-wrecking, but it has been achieved at the expense of air and water pollution.

#### (b) No choice of location of factories

The choice of location for factories is closely related to environmental protection and the living environment. Due to people's ignorance and the lack of long-term city planning, many factories located in urban areas produced not only commodities, but also air, water and noise pollution.

#### (c) The abuse of farmland

Priority for industrial development has been given to export-oriented industries.

Many factories which are located in rural areas have spoiled substantial amounts of

farmland through their pollution. In Taiwan, many rivers have already been seriously damaged, and fertile soil has deteriorated. Furthermore, many farmers made use of farmland for the raising of fish. They overused the underground water and the land began to sink below sea level. Land close to the sea has been covered with water and become obsolete.<sup>4</sup> Another case of poor planning is that veterans were encouraged to plant fruit trees on the slopes of hills. They made a great deal of money, but unfortunately the waste from the fruit trees has deteriorated the rivers and dams below, reducing their capacity for irrigation and electricity generation. Consequently, the life of some dams has been reduced from 100 years to 50 years.

# 3. The protection of infant industry<sup>5</sup>

Locomotive industries are considered powerful forces for pushing economic growth. The automobile industry has been regarded a locomotive industry and has been protected by high tariff and nontariff barriers for more than 35 years in Taiwan. Consequently, even though Taiwan is a small island, there are eight automobile companies. They produce various types of vehicles and so far not one of them has achieved economies of scale, the price of their products is high and the quality is low compared to foreign automobiles.

<sup>&</sup>lt;sup>4</sup> Especially in the southern part of Taiwan, farmland has been converted into fish-raising ponds. The fish are exported to Japan at very high profit. The result, however, is that seawater has covered the land

<sup>&</sup>lt;sup>5</sup> Many governments in the world believe that if an infant industry can be protected from foreign competition, it can grow up and will have the ability to compete with foreign products. This might have been effective in the 19th Century, but today no country can be closed. This is particularly so for a country like Taiwan where no opportunity exists to protect an infant industry from foreign competition.

#### 4. Negative effect of long-run subsidy policy

To stimulate the willingness of investors to undertake projects and thus accelerate economic growth, the government has adopted many encouragement measures, such as tax deductions, tax exemptions, loans with low interest rates, etc. These measures have positive effects in the short run, but in the long run the effects are negative. Unfortunately, many firms have taken advantage of subsidy measures though they have never made a contribution to economic development. For instance, many firms enjoy refunds of tax under the Statute for Encouragement of Investment by making false exports. This has resulted in big losses for the government.<sup>6</sup>

#### 5. By-product of rapid economic growth

Rapid economic growth provides many opportunities for speculative activities. When the poor suddenly become very rich through speculation, they don't know how to behave themselves properly. They want others to be recognize that they are now rich and so they engage in many unreasonable activities to flaunt their wealth. Their behavior has had a great influence on the younger generation in terms of their work ethic. The younger generation now tends to prefer pleasure to work and they hope to enjoy a "free lunch." When they have no money to satisfy their desires, they become robbers, murderers and rapists, deteriorating social security. In the late 1980s Taiwan suffered from just such a phenomenon.

<sup>&</sup>lt;sup>6</sup> According to the Statute, if the import of raw materials, parts and machinery is for the domestic production of exportable goods, the tariff paid for the imports will be refunded. If the domestic production is not for exports, the tariff will not be refunded.

# V. The Responsibility of the Government for Accelerating Economic Development

Though economic development for any country depends upon the endeavors of both the government and the people, the government should play a more dominant role in the process of economic development. Particularly for an underdeveloped country, the role of the government is closely related to its success and failure. From the above analysis, it can be seen that the government should play a key role. One might be tempted to ask why policymakers have made so many mistakes. Is it ignorance or is it intentional? My own view is that it should be attributed to both ignorance and a lack of careful consideration.

- 1. The government has overemphasized short-run effects regardless of the long-run impact. The government acts like a "fire brigade" in making policy to solve problems. They go wherever there's a fire. They don't take into consideration the long-term effects, but impose short-term solutions which are effective at first, but which in the long-run create bottlenecks.
- 2. The government has forgotten to consider the sequence of policy measures.

  Prerequisite conditions must be met, otherwise many policies simply won't work and may even cause more complicated problems to arise.
- 3. The government neglects to evaluate policy measures before they are undertaken. For most policies it is impractical to experiment ahead of time.

Therefore, before a policy is chosen, one must carefully consider alternatives. Though "there are many roads leading to Rome," among them is one which is most direct. Policymakers should choose the most effective in order to avoid wasting resources.

- 4. Information is insufficient, and the result is a "nest of bees." Ignorance largely results from inadequate information about supply and demand. Knowing little or nothing about the future, policymakers tend to grab onto whatever is the latest fashion. Loss is very often the result.
- 5. Dogmatism is a double-edged sword. In policymaking, dogmatism is related to the success or failure of the policy. If the policymaker can review all of the options and suggestions and then make a reasoned, dogmatic decision, the probability of success is very high. If policymakers believe, however, that they are gods rather than humans, or imagine that they are superhuman and can conquer evil, the probability of success is very low. Unfortunately, most average people once they become policymakers tend to believe in the infallibility of their own observations and judgment. The result is that many mistakes have been made.

## VI. Concluding Remarks

Even though "history cannot repeat," past experience can be invaluable for

reference. When dealing with economic development, the experience of developed countries can be a lesson for newly-developed countries, and experiences of newly-developed countries can be a mirror for developing countries. The behavior of human beings has a consistent pattern as they move from being poor to being rich. The great socioeconomic evolution in the United States in the 1960s is quite similar to Japan in the 1970s and Taiwan and Korea in the 1980s. If Taiwan can learn some lessons from the United States and Japan, it will help Taiwan solve many of the problems of social disorder, political chaos and financial speculation that these other countries have already faced.

Nevertheless, at each stage of economic development, the government should play a positive role in providing sufficient infrastructure, maintaining a favorable investment climate and facilitating the operation of a market economy. When the majority of the population is not well-educated, the government should educate them to build a base for industrializing the country. It should help businesspeople establish and abide by the rules of the game so as to maintain fair competition in the economy.

In sum, I would like to point out that it is impossible for a country to achieve rapid and sustained economic growth without sacrifice. We should, however, try wherever possible to reduce the cost. No doubt one way to do this is to learn the lessons which can be observed through the experience of other countries.

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