

Important Points to Take Away on Rodrik's Paper

(1) There is a traditional or an orthodox view of Taiwan's early development. It goes like this

--- 1950s Taiwan lacked foreign exchange and saving and therefore engaged in import substitution aided by a multiple exchange rate system, high tariffs on consumer goods, direct government controls on the financial sector, including the extension of credit and forex transactions. US aid helped to provide foreign exchange.

--- by the late 1950s import substitution had hit a limit and no more expansion of these industries was possible. Policies then turned to export promotion. These policies included substantial subsidies to firms that invested in exports, export processing zones, easy credit for exports, and administrative guidance.

--- by the mid 1960s exports had begun to grow quickly and this led to a huge expansion of both investment and economic growth. Exports changed from agriculture to light industry and then on to heavy industry.

--- the rise of exports allowed massive saving and investment which was channeled into a second phase of import substitution that was aimed at the producer sector rather than the consumer sector. This resulted in the rise of heavy industry in Taiwan.

(2) There has been an alternative view that greater government involvement and heavy reliance on "industrial policy" was the key to Taiwan's success compared with other countries that were at a similar level of development. This was a nod to the effectiveness of state planning. See a discussion of her work [here](#).

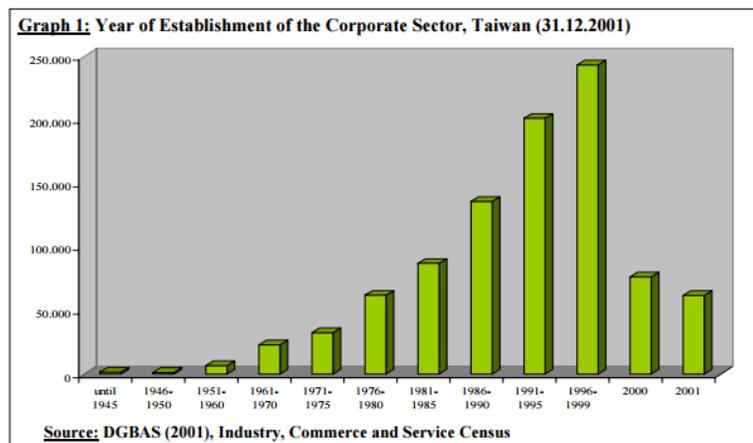
(3) Rodrik believed the traditional view was incomplete and certainly did not explain well why that exports began to expand in the mid-1960s. For example, the expansion of exports could not be explained by saying that the real exchange rate had somehow moved substantially in Taiwan's favor making exports extremely profitable compared to domestic sales. He claimed that exports were driven instead by the enormous investment growth that occurred in the 1960s and 1970s. Such heavy investment growth was encouraged by the government and this in turn drove real economic growth. The government eliminated impediments to raising and deploying capital and reduced barriers within the economy to investment. It made investment more profitable. This raised the rate of return on investment. Exports were a natural result of this investment and the drive for greater markets to justify the investment.

(4) In contrast to other countries that sought to expand investment, Taiwan was able to eliminate what he calls "coordination failure" of the markets, while being able to reduce corruption and rent seeking. This was possible because of a very highly educated population and by government actions aimed at reducing income and wealth inequality.

Some Comments

Rodrik seems to have only a passing familiarity with the details of Taiwan's growth over this important period. He knows that Taiwan's government was heavily involved in directing the economy during this period, but he cannot understand how it didn't foul things up and was in fact able to avoid the usual corruption and waste associated with government planning and administration. He hypothesizes the government was successful at intervention because it eliminated coordination failure, which apparently means the confusion of signals due to suspension of the price system, the usual bottlenecks of growth, and possibly the spread of risk in the economy. In addition, the government succeeded in its direction of the economy by mobilizing a labor force that was quickly gaining human capital and was ready to be deployed, as well as by enjoying the support of a public whose self-interest was directly tied to the success of the policies (i.e. they shared equitably in the resulting growth).

However, nowhere does Rodrik discuss the all-important rise of the small and medium sized enterprises. This is strange since everyone knows these firms drove Taiwan's early economy. These SMEs now number about 1 million firms in Taiwan and this rise of the entrepreneurial class in Taiwan had its origins in the 1960s with the development of an export sector. This is as we have previously discussed in class (and Professor Norman points out in the discussion section at the end of Rodrik's paper) was the direct result of Adam Smith's point that the division of labor and specialization of industry is limited by the size of the market. The expansion of exports and market scale was precisely why so many firms were created. These satellite firms grew around larger exporting firms, servicing them and growing with them in scale. See Figure below.



Nowhere does Rodrik discuss the impact of the US military in Japan and its direct involvement in creating an export market with Japan from 1950 - 1962. This one fact was crucial in bringing together Taiwan and Japan *prior to the breakout of the electronics market that later was dominated by Japan*. Throughout the 1970s and 1980s Taiwan would import components and electronic materials used to process its own exports destined for the US. It was perfectly positioned to take advantage of the Japanese takeover of the electronics market.

There is also the issue that the US military was working closely with the Taiwan military in monitoring mainland communications, using sophisticated electronics at the time. It was also servicing U2 spy planes. The US military maintained a garrison force in Taiwan until 1979. This means that it worked together closely with the ROC government during the Korean War and Vietnam War. The technical demands, the need for components and replacement parts, along with the language demands required that the US military work especially closely with the Taiwan forces. Little is known how this affected technical progress and human capital development in Taiwan. Many Taiwan servicemen were trained in the US during this period.

Rodrik does not consider the important growth of textile exports to the US. Here is what one researcher in Taiwan wrote much later in 2007.

<http://www.cier.edu.tw/public/Data/710161735171.pdf>

Export expansion and emerging product scope (1962 – 71)

The cotton yarn and cloth weaving industries continued growing. Weaving spindle production grew from 430 thousand items in 1962 to 1.25 millions in 1971. The export capability continued to strengthen, which steadily increased the export share of production and transform the cotton textile industry into export oriented sector by early 1970s.

US aid ceased in 1968. This significantly influenced the intra-industry structure of the textile industry. The supply of cotton and capital were suddenly suspended. To cope with this external impact, Taiwan textile manufacturers started to invest in artificial fibre plants so as to diversify resources of raw material. The product assortment diversified to Lai-Chu, nylon and polyester filaments. Various artificial fibre products grew rapidly, laying the foundation of artificial fibre processing industry in Taiwan. The diversification began from China Man-made Fibre Corporation which in 1964 set up a polyester fibre factory with the capacity of producing 250 thousands of polyester filaments daily. In the same year, CMFC proposed the second plant for producing polyester staple. Formosa Plastic entered the market and started to produce acrylic staple in 1967. Then many other artificial fibre companies were established. Up to 1970 there were 16 companies producing artificial fibres². Most of the companies were set up with a vision of developing technologies from fibre production backward linked to upper stream technologies such as dyeing, printing, finishing... etc. Such technology integration strategy had laid the foundation of further development of Taiwan's synthetic fibre industry in the 1980s.

On the other hand, because the US government inaugurated import quotas on cotton products, the national four-year development plan started to pursue adding value in industries linked to textiles, and the garment industry began to grow from this stage.

The achievement of textile technology upgrading can be examined by export statistics of artificial fibre and textile products. During this stage the product value of textile products' grew at an average annual rate of 22.7%. The added value share of

The US market was very important for Taiwan.

The first in the series of multilateral agreements regulating world trade in textiles, the Short-Term Arrangement on Cotton Textiles (STA), had been negotiated in July 1961 under the auspices of GATT. In October 1962, a more comprehensive regulation scheme, known as the Long-Term Arrangement on Cotton Textiles (LTA), went into effect and was later extended twice through 1973. Under the provisions of the LTA, the United States restricted imports of cotton textiles and apparel products from its major suppliers, including Taiwan. Despite the restrictions, Taiwan's exports of textile and apparel products to the United States increased from NT 249 million in 1961 to NT 6,536 million in 1970, with synthetic fibers accounting for most of the growth.⁹ The United

⁸ Virtually all banks are state owned and consistently favor state-owned enterprises in lending without special credit facilities. In contrast, it is difficult for small and medium-size firms to obtain loans from the formal financial sector. See Shea 1983.

⁹ Based on the U.S. ITC data, Taiwan's export of synthetic textiles and apparel increased from the equivalent of 14 million square yards in 1964 to 350 million in 1970, while the cotton products increased from 47 to 66 million in the same time span. See Yoffie 1989a, table 12.2.

12 Political Economy of U.S.-Taiwan Trade

States responded by pressuring Taiwan, along with Japan, Hong Kong, and Korea, to enter bilateral agreements in 1971 aimed at limiting the flow of woolen and synthetic textile and apparel products (Pelzman 1984, 112–13). This signaled the beginning of the period in which the international flow of textiles have become strictly regulated. Regulations in the following two decades sought to limit the growth rate of these exports. Interestingly, having established a large export base in the 1960s, Taiwan's market share to the United States was actually guaranteed by these regulations.

See https://www.press.umich.edu/13889/political_economy_of_us_taiwan_trade

Rodrik does not explain the creation of CETRA in 1970 (now called TAITRA) which was specifically designed to expand exports. It remains active today.

About TAITRA

About TAITRA & Organizational Chart

Founded in 1970 to help promote foreign trade, the Taiwan External Trade Development Council (TAITRA) is the foremost non-profit trade promotion organization in Taiwan. Jointly sponsored by the government, industry associations, and several commercial organizations, TAITRA assists Taiwan businesses and manufacturers with reinforcing their international competitiveness and in coping with the challenges they face in foreign markets.

TAITRA boasts a well-coordinated trade promotion and information network of over 1,200 trained specialists stationed throughout its Taipei headquarters, four local branch offices in Hsinchu, Taichung, Tainan and Kaohsiung, and 60 overseas branch offices worldwide. Together with its sister organizations, Far East Trade Services, Inc. (FETS) and Taipei World Trade Center (TWTC), TAITRA has created a wealth of trade opportunities through effective promotion strategies.

Core Missions

- ▶ To assist Taiwan businesses and manufacturers in developing the international market.
- ▶ To collaborate closely with the Taiwan government to promote international trade.
- ▶ To provide business alliance consultation and connect international firms with Taiwan partners.

Officially the Bureau of Foreign Trade (established in 1969) handles the regulation of trade and trade promotion.

In 1955, the **Foreign Exchange and Trade Review Commission** was established under the **Executive Yuan**. In 1968 and 1969, the Executive Yuan reorganized the commission by dividing the authority and operation of the commission among **Ministry of Finance**, **MOEA** and **Central Bank of China**. The **Bureau of Foreign Trade** was subsequently established on 1 January 1969 under the MOEA to administer trade in general commercial goods.^[1]

These comments indicate that one cannot understand the nature of the special economic development of Taiwan strictly in terms of a small number of highly aggregated time series such as investment and exports.