

Chapter 4

Import Substitution and Export Promotion Policies¹

I. What is Import Substitution Policies and are these Policies Effective?

Governments around the world are actively engaged every day in designing, implementing, and evaluating economic policies focused on promoting economic development. Some of these policies involve choosing an industry and providing direct help to the industry to grow. These are called industrial policies or industrial planning. What this means is that government officials decide on a direction for the development for the economy.² It may be to develop a thriving consumer durable goods industry, producing and selling things such as washing machines, refrigerators, and gas stoves. It may instead be to develop an IT industry from scratch, or a solar power industry. Or, it may be to aid an existing domestic industry in replacing foreign competitors with domestic suppliers. This last method of support is called import substitution.

The degree of import substitution can be measured by taking a particular good, say X, and computing the following indicator

$$\Theta = (\text{imports of X})/(\text{imports of X} + \text{domestic production of X}).^3$$

If this measure is falling over time, we say that important substitution is taking place. It is obviously a very imperfect type of measure of policy-induced import substitution, since Θ may fall for a variety of reasons. Note that it does not consider that an industry leader may be owned entirely by residents of a country A and yet have its production facilities in country B. Thus, this measure above is concerned with where the production is taking place and not who owns the production facilities.

In the past, import substitution usually involved placing high tariffs on foreign suppliers currently providing inputs to an industry or selling consumer goods. In Taiwan, this was done with the textile, fabric, and clothing businesses. Taiwan policymakers chose to develop a textile industry in the 1950s and 1960s. Taiwan had previously imported cotton, fiber, and clothing, but later chose to substitute these textile imports with domestic production and sales.⁴ Its success led it to branch out into other fabrics, including wool. And, its growth encouraged the development of synthetic fibers that allowed it to become a global leader.⁵ More recently, NTMs have been used

¹ I will produce a separate handout on export promotion. For now we will only look at import substitution, which is currently considered an inferior policy when compared with export promotion.

² Some people call this choosing winners and losers in the economy. [The Economist](#) discusses a revival in industrial policy.

³ An alternative is to use net domestic production in the denominator, defined as domestic output minus exports of that production. In this case Θ is called an "availability ratio".

⁴ For a detailed study of the development of Taiwan's textile industry and the use of import substitution look [here](#).

⁵ Another important factor was the shift in Japan away from textiles to electronics. This let Taiwan acquire an industry essentially being cast-off by Japan. This casting-off of old industries to make way for new industries was dubbed the "flying geese" theory of development promoted by Professor Kojima in Japan. Geese fly in a triangle with a leader. Japan would be the leader and would cast off industries that would be picked up by the geese flying

to exclude imports from other countries, since tariffs are a much too visible means of protection to be used, safe from scrutiny. For example, countries wanting to promote their steel industry might place pressure on importers to buy a certain percentage of domestic steel for every ton of imported steel. This type of protection may be hidden by simply having government place pressure on importers to play along for reasons of patriotism and being a good corporate citizen. Indeed, government may feel this is not only a good policy from an economic sense, but it fulfills an important mission which is to unite the country and promote a spirit of patriotism. Which company would dare go against these wishes.⁶

Since any transaction that is forced and not voluntary makes people worse off, why support a policy of substitution? The reason is that a higher public good is being sought beyond current society and foreign business interests. The future of the country matters also. With import substitution, one is being encouraged to abandon imports and buy domestically (through either explicit or implicit incentives) for the greater good in the future. Note however, that this is actually a redistribution scheme, which may or may not raise social welfare, however defined.

II. Examples of Import Substitution

India - See the discussion below

While India's ISI is well intentioned, India would do well to learn from China and Taiwan. Though it's a close balancing act, it must choose between extreme and rational protectionism for a successful Make in India campaign. Without the right investments, the protectionist policies will fall flat.

The Oil consumption in India is estimated to expand at a CAGR of 3.3 per cent during FY-2008-16 to reach 4 million barrels per day. Due to the expected strong growth in demand, India's dependency on oil imports is likely to increase further. According to the analysis done, we can simply conclude by saying that with expanding economy comes an increasing demand for energy and, if current trends continue, India will be the world's third largest energy consumer by 2020. Due to the expected strong growth in demand, India's dependency on oil imports is likely to increase further. Rapid economic growth is leading to greater outputs, which in turn is increasing the demand of oil for production and transportation.

behind the leader, and so on. Taiwan would later refer to casting-off its "sunset industries" (e.g. furniture, toys, and other light manufacturing) to Mainland China during the 1990s.

⁶ When I first arrived in Taiwan in 1987, a steel importer in the country told me that the Taiwan government had implicit rules requiring them to buy 25% of an import order of steel from the China Steel Corporation. For example, if they wanted to acquire 100 tons of steel, then they would import 100/1.25 tons and buy the residual 25/1.25 tons from China Steel. As another example, for years there was an unwritten rule that said anyone working for the Taiwan government that traveled abroad on government business was required to buy China Airlines tickets to get off and back on the island.

As for the gold sector, liquidity of gold needs to be increased and mobilisation encouraged by way of proper restructuring of GDS with a greater lock in period, along with increase investor education about alternative forms of investment- both in gold, and otherwise to shift the focus towards more productive investments. Such measures if followed would greatly help reduce India's gold imports and favourably impact rupee as well as our Balance of Payment

Electronics sector in India currently constitutes a small part in the core sectors of the Industrial Sector of India. But this can be translated into a huge opportunity because of the huge manpower that is available. Also, since the market demand has proliferated multiple times, it paves way for this sector to make up for the negative balance of payment. According to our research, market for electronics is expected to expand at a CAGR of 24.4 per cent during 2012–20. The demand for electronics hardware in India is projected to increase from an estimated USD 69.6 billion in 2012 to USD125 billion by 2014 and USD400 billion by 2020. Domestic electronic production accounts for around 45.0 per cent of the total market demand. Therefore, in order to reduce the import bill, the government plans to boost the domestic manufacturing capabilities and is considering a proposal to give preference to Indian electronic products in its purchases.

In respect of India's Balance of Payment in Machinery, Export of Machinery from India has increase by a considerable figure, but Import of the same cannot be ignored either since it accounts to as much as 6% of total imports over last 15 years. Manufacturing sector involves 5 million labour which is a staggering figure. To be able to capitalize on this sector of the Indian economy, it is imperative to give R&D considerable amount of weightage. The share of the Indian machine tools industry in total consumption is around 36%, pointing to an obvious need for the industry to further develop its products and volume to meet the requirements of the Indian user sectors. This can only be achieved by bridging the gap during the technology transfer and then adapting it to local conditions, tackling problems thrown up by local materials, labour, market and environment

See <https://www.slideshare.net/aakritigarwal330/import-substitution-in-india-issues-challenges-and-promotion>

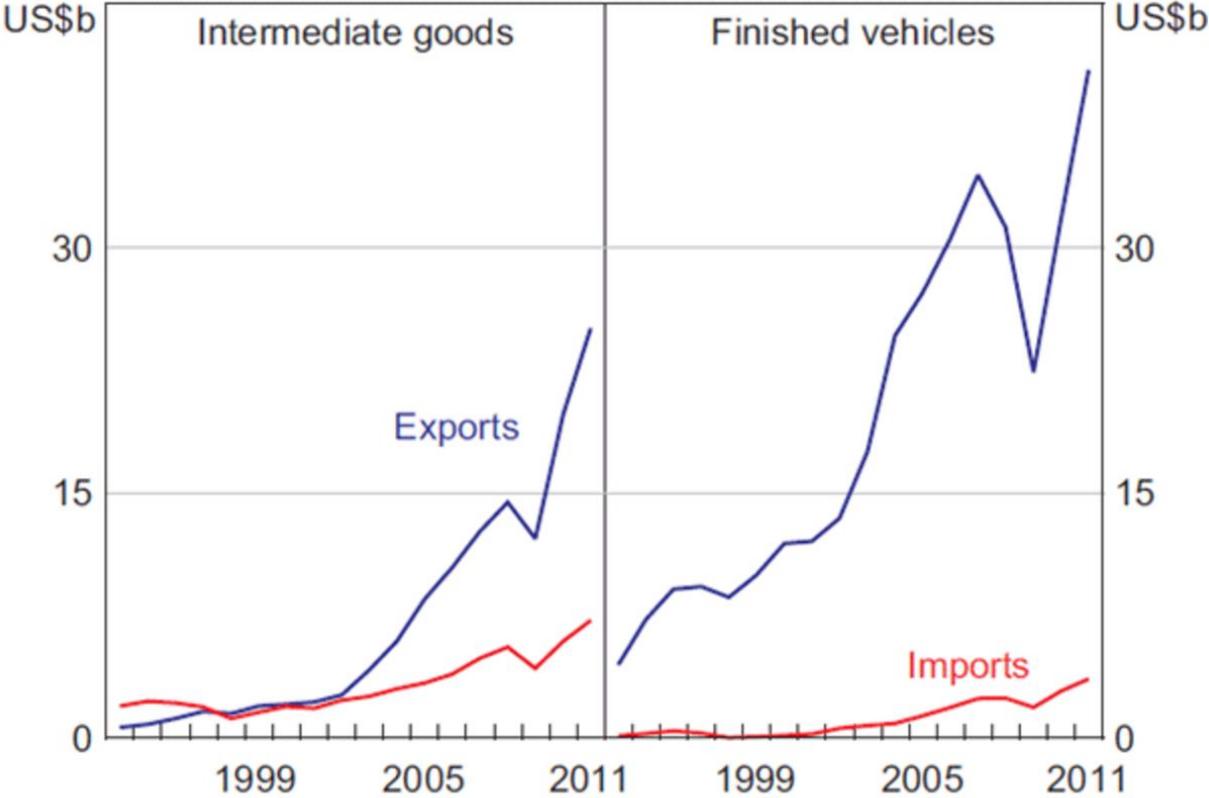
Korea

Automobile Industry

Korea's automobile industry is the fifth largest in the world, representing around 6 per cent of global production. The majority of vehicles produced in Korea are exported. The industry accounts for around one-tenth of Korea's manufacturing sector. Three big manufacturers, Hyundai, GM Korea (formerly Daewoo) and Kia, collectively account for roughly 90 per cent of automotive production. The industry has gone through a radical shift over the past five decades. In the early 1960s, there was no automobile parts industry in Korea, and production consisted of assembling automobile kits primarily imported from Japan and the United States. Over time, domestic machinery and automotive parts industries have emerged alongside automobile assembly, increasing the domestic value-added component of production. Domestic content in automobiles rose to around 60 per cent in 1972, and was over 90 per cent by the end of the 1970s. Today, the expansion down the automotive supply chain has

continued to the stage where some Korean automakers import raw materials and transform them into automobile components that are either exported or assembled into finished vehicles in Korea

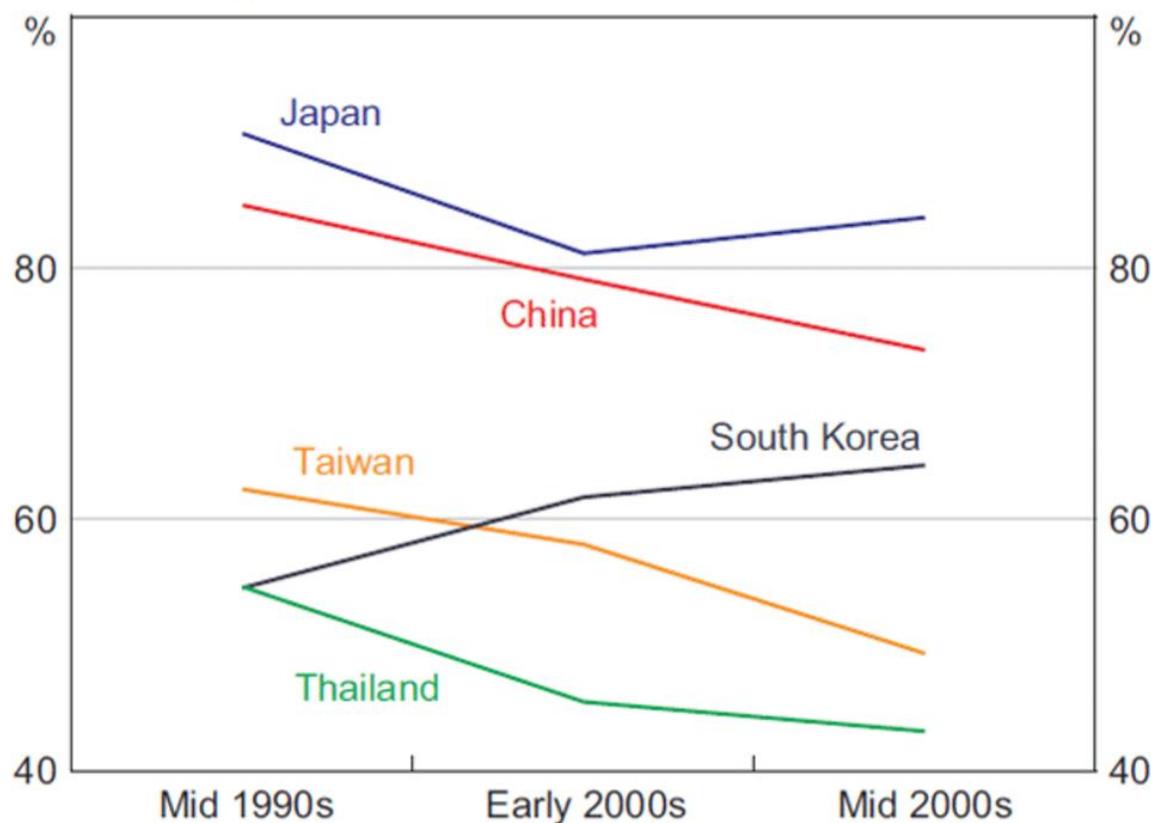
South Korea – Automobile Trade*



* Includes trailers and semitrailers

East Asia – Domestic Content of Production

Manufacturing, share of total domestic value added in final demand



Sources: Bank of Korea; IMF; National Economic and Social Development Board (Thailand); OECD; RBA

Brazil

A review of the evolution and structural changes of the industrial sector since the end of World War II reveals four broad periods. The postwar period to 1962 was a phase of intense import substitution, especially of consumer goods, with basic industries growing at significant but lower rates. The 1968 to 1973 period was one of very rapid industrial expansion and modernization (between 1962 and 1967, the industrial sector stagnated as a result of adverse macroeconomic conditions). The 1974 to 1985 phase was highlighted by import substitution of basic inputs and capital goods and by the expansion of manufactured goods exports. The period since 1987 has been a time of considerable difficulties.

At the end of World War II, political and economic liberalism were reintroduced in Brazil. Getúlio Dornelles Vargas (president, 1930-45, 1951-54) was overthrown, democratic rule was reestablished, and the foreign-exchange reserves accumulated during the war made possible a reduction of trade restrictions. However, trade liberalization was short-lived. The overvalued foreign-exchange rate, established in 1945, remained fixed until 1953. This, combined with

persistent inflation and a repressed demand, meant sharp increases in imports and a sluggish performance of exports, which soon led again to a balance of payments crisis.

Pessimistic about the future of Brazil's exports, the government feared that the crisis would have a negative impact on inflation. Consequently, instead of devaluing the cruzeiro, it decided to deal with the crisis through exchange controls. In 1951 the newly elected government of Getúlio Vargas enforced a recently established system of import licensing, giving priority to imports of essential goods and inputs (fuels and machinery) and discouraging imports of consumer goods. These policies had the unanticipated effect of providing protection to the consumer goods industry. Early in the 1950s, however, convinced that the only hope for rapid growth was to change the structure of the Brazilian economy, the government adopted an explicit policy of import-substitution industrialization. An important instrument of this policy was the use of foreign-exchange controls to protect selected segments of domestic industry and to facilitate the importation of equipment and inputs for them.

However, the move to fixed exchange rates together with import licensing drastically curtailed exports, and the balance of payments problem became acute. The system became nearly unmanageable, and in 1953 a more flexible, multiple-exchange-rate system was introduced. Under the latter, imports considered essential were brought in at a favored rate; imports of goods that could be supplied domestically faced high rates and were allotted small portions of the available foreign exchange. Similarly, some exports were stimulated with a higher exchange rate than those of traditional exports. This system continued to be the main instrument for the promotion of import-substitution industrialization, but the performance of the export sector improved only modestly.

Between 1957 and 1961, the government made several changes in the exchange-control system, most of which were attempts at reducing its awkwardness or at improving its performance with the advance of import-substitution industrialization. For this same purpose, the government also introduced several complementary measures, including enacting the Tariff Law of 1957, increasing and solidifying the protection extended to domestic industries, and offering strong inducements to direct foreign investment.

In the second half of the 1950s, the government enacted a series of special programs intended to better orient the industrialization process, to remove bottlenecks, and to promote vertical integration in certain industries. The government gave special attention to industries considered basic for growth, notably the automotive, cement, steel, aluminum, cellulose, heavy machinery, and chemical industries.

As a result of import-substitution industrialization, the Brazilian economy experienced rapid growth and considerable diversification. Between 1950 and 1961, the average annual rate of growth of the gross domestic product exceeded 7 percent. Industry was the engine of growth. It had an average annual growth rate of over 9 percent between 1950 and 1961, compared with 4.5 percent for agriculture. In addition, the structure of the manufacturing sector experienced considerable change. Traditional industries, such as textiles, food products, and clothing, declined, while the transport equipment, machinery, electric equipment and appliances, and chemical industries expanded.

However, the strategy also left a legacy of problems and distortions. The growth it promoted resulted in a substantial increase in imports, notably of inputs and machinery, and the foreign-exchange policies of the period meant inadequate export growth. Moreover, a large influx of foreign capital in the 1950s resulted in a large foreign debt.

Import-substitution industrialization can be assessed according to the contribution to value added by four main industrial subsectors: nondurable consumer goods, durable consumer goods, intermediate goods, and capital goods. Using data from the industrial censuses, the share of these groups in value added between 1949 and 1960 shows a considerable decline in the share of the nondurable goods industries, from nearly 60 percent to less than 43 percent, and a sharp increase in that of durable goods, from nearly 6 percent to more than 18 percent. The intermediate and capital goods groups experienced moderate increases, from 32 to 36 percent and from 2.2 to 3.2 percent, respectively.

A representative component of the nondurable group is the textile industry, the leading sector before World War II. Between 1949 and 1960, its share in the value added by industry as a whole experienced a sharp decline, from 20.1 percent to 11.6 percent. In the durable goods group, the component with the most significant change was the transport equipment sector (automobiles and trucks), which increased from 2.3 percent to 10.5 percent.

The lower increases in the shares of the intermediate and capital goods industries reflect the lesser priority attributed to them by the import-substitution industrialization strategy. In the early 1960s, Brazil already had a fairly diversified industrial structure, but one in which vertical integration was only beginning. Thus, instead of alleviating the balance of payments problems, import substitution increased them dramatically.

III. Common Problems Associated with Import Substitution

The disadvantages are that import substitution industries create inefficient and obsolete products as they are not exposed to international competition. Other disadvantages include unemployment increasing internationally as World GDP decreases through the promotion of inefficiency. Countries that adopted import substitution policies faced many undesirable effects such as chronic problems with the balance of trade and payments. Although import substitution was supposed to reduce reliance on world trade, there was a need to import raw materials, machinery and spare parts. The more a country industrialized the more it needed these imports and import substitution industrialization (ISI) was strongly biased against exports.

Trade protection and overvalued exchange rates raised domestic prices and made exports less competitive. Consequently, import substitution industrializing countries were unable to export enough to buy the imports they needed. The faster the economy grew, the more it needed imports; but exports could not keep up with the pace of imports and so countries ran out of foreign currency. In response, governments restricted imports to essentials. The currency was devalued to raise the price of imports and make exports more attractive. Government subsidized industrial investments. Such spending chronically outpaced government revenue and these

budget deficits were usually covered by printing more money. The result was inflation which made domestic goods more expensive which in turn reduced exports even further.

Discussion Questions:

1. What is meant by the term "import substitution"?
2. Why would a country's policymakers think import substitution would be a good policy?
3. What import substitution did India try?
4. What import substitution did South Korea try?
5. What import substitution did Brazil try?
6. What are some problems associated with import substitution?
7. Suppose that tariffs cannot be raised, can a country pursue import substitution?
8. Why is export promotion easier than import substitution?