

# Is Industrial Policy Still Applicable Today under Globalisation?

## An Analysis of the Main Issues in Developing Countries

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### ABSTRACT

Although some countries or regions in East Asia achieved rapid economic development through the use of industrial policies after the Second World War, other countries or regions followed rarely succeeded. The effectiveness of industrial policy has become an important topic in academic research, but the debate is more than consensus. Starting from the background and definition of industrial policy, this paper summarises and comments on the theoretical views on the "effectiveness" and "ineffectiveness" of industrial policy, and summarises the experience of some developing countries. This paper holds that the focus of future research should shift from "industrial policy effectiveness" to "boundaries of industrial policy effectiveness", not only to study whether industrial policy is effective, but also to study the conditions for the effectiveness of industrial policy.

**Keywords:** Industrial Policy, Globalisation, Effectiveness, Developing countries.

### 1. INTRODUCTION

"Whether industrial policy is effective or not" is a controversial topic today. The discussion on this issue is of great significance, because if the industrial policy is effective, for developing countries, the government can be used as the driving force of industrial development to promote rapid economic development. If industrial policy is ineffective, then countries should reduce the level of government intervention and rely on market mechanisms to develop economy. From this perspective, it is undoubtedly one-sided and inappropriate to discuss the impact of industrial policy alone while ignoring the background of the implementation of industrial policy and the effect of its application.

Since the Third Industrial Revolution, the world economy has entered a stage of rapid development, and fundamental changes have taken place in the industrial structure of both developed and developing countries. In today's globalised world, it is difficult to find a country that does not use industrial policy at all in its development process. In terms of tariff protection, tax incentives, subsidies and industrial access rules, each country uses industrial policies to promote economic development in some way [1]. Especially for many

developing countries, industrial policy is regarded as the key to their social development. Thus, industrial policy can be used as a way to promote economic development in developing countries. Therefore, this paper will introduce the conceptual definition of industrial policy in the second part and analyse the arguments for and against industrial policy in the third section. The fourth part will be further discussed in combination with the experience of some developing countries. Finally, the scope for future development of industrial policy will be further extended.

### 2. DEFINITION OF INDUSTRIAL POLICY

From the perspective of economic policy history, the idea of industrial policy can be traced back to the trade protection and industrial protection policy of Britain in the 17th century. Mercantilists advocated state intervention in economic life. At the end of the 18th century, US Treasury Secretary Alexander Hamilton proposed national measures to support the development of manufacturing industry. He believes that in developing countries, governments should protect domestic industries. His argument covered some of the basic theoretical elements of modern industrial policy and government intervention, which was groundbreaking at the time. In the early 19th century, in

his System of National Political Economy, Lister systematically argued that Germany should implement protectionist policies to promote national productivity. It was not until the Second World War that the term 'industrial policy' officially appeared. Later, in the mid-1960s, the term "industrial policy" was officially used in France and Japan. Japan's leap after World War II is considered to be the result of the positive effect of industrial policy. At this stage, most developed and developing countries were using industrial policy to explore the necessity of industrial policy, and try to formulate and implement industrial policy in line with their economic development [2].

In 1992, the world bank formulated a working definition of industrial policy: "Government efforts to change the structure of industry and promote productivity-based economic growth ". The purpose of this declaration is to illustrate that industrial policy focuses on achieving the broad economic goal of productivity growth, not just changing the system of industrial output or just changing a specific behaviour. Industrial policy is not limited to manufacturing; It is also applied to the processing of agricultural and mineral products and services, all of which create added value to manufacturing. In practice, however, industrial policy often has multiple objectives, including short-term employment, increasing output, and a more balanced income distribution. It may even include non-economic objectives, including multiple aspects, such as increasing national pride and honour. This multiplicity of objectives can may confuse developing countries and make them very concerned about foreign ownership and its impact on domestic productive capacity. Therefore, it is important to have a limited scope and clear industrial policy, because policy tools that can achieve multiple goals do not always exist, and different goals may be contradictory.

The definition of industrial policy in this paper draws on the view of Pack and Saggi's (2006), that is, industrial policy is any type of governmental attempt to intervene or change the production structure, and its policy mode is conducive to the development of sectors that are expected to provide better prospects for economic growth. Without such intervention, economic growth would not occur under the condition of market equilibrium[3].

### **3. ARGUMENTS ABOUT INDUSTRIAL POLICY**

Industrial policy has become a bone of contention precisely because it is inextricably linked with the economic development of countries after the Second World War. While liberalism prevailed, Japan and other countries in East Asia used industrial policy effectively to achieve economic growth. However, other countries that have adopt similar industrial policies have little

effect, and the industrial policies in East Asia are also evolving, which makes the effectiveness of industrial policies more confusing. With the outbreak of the global financial crisis in 2008, this debate has intensified.

#### ***3.1. Industrial Policy Effectiveness Theory***

The theoretical basis that supporting industrial policy mainly includes market inadequacy theory and economic development theory [4]. Scholars who advocate "market inadequacy theory" believe that the main purpose of industrial policy is to compensate for market failures, and government intervention give better play to the role of the market. Most of them emphasise that the private sector is dysfunctional, and that government can go beyond the private sector to correct distorted efficiency. "Economic development theorists" base their theories on the need to catch up with the economy, arguing that government intervention can accelerate the pace of domestic economic development by taking advantage of latecomers [5]. Due to information asymmetries and economic externalities, governments can play a role in correcting market failures. Governments can play a role in knowledge innovation and dissemination, while identifying market failures in industrial development and correcting them by administrative and other means. Rodrik (2004) claimed that one of the causes of market failures is information externalities [6]. A feasible option for the government to pay the research and development cost and encourage enterprises to innovate through subsidy policies is to compensate the upfront cost of enterprises or industries trying to innovate. The IT case in India provides an example in the earlier stages of development. It is unlikely that a private enterprise would have had the incentive to invest in computing in the absence of good information that the effort would have been profitable. Once the industry is established by the state, the number of private firms will surely take off if the early investments pay off. Another factor in market failure is related to coordination. The government can play a guiding and coordinating role in public areas such as education, finance, legal system and infrastructure, so as to create a favorable institutional environment for industrial development. In developing countries, industrial policy can guide economic development to a certain extent. Market failure in developing countries is mainly manifested in two ways: "coordination failure" and "information spillover". Appropriate government industrial policies can effectively promote the optimisation of industrial structure.

#### ***3.2. Industrial Policy Ineffectiveness Theory***

The proponents of the "ineffectiveness" theory of industrial policy are mainly neoclassical economists who believe that market competition is an intrinsic

driver of economic development. In neoclassical economics, "industrial policy" has never been a professional term and has not been used as the object of policy analysis. Therefore, conceptually, neoclassical economics does not recognise the effectiveness of industrial policy. Theoretically, under a series of strict assumptions, neoclassical economics proves that market mechanism is the most effective way to allocate resources, so it does not need any government intervention, including industrial policies that distort efficiency.

There are two factors affecting the failure of industrial policy: first, the existence of government failure makes it difficult for industrial policy to achieve the expected effect, that is, the government lacks the information and ability to formulate relevant industrial policies; Secondly, political factors affect industrial policies, because some industrial policies pursue social rather than economic goals, so they do not consider the issue of efficiency, and industrial policies pursuing economic goals may still be affected by political factors, thus affecting the realisation of efficiency [7]. According to Schumpeter's theory of innovation, entrepreneurs and entrepreneurship are not catalysed by government, but experienced under the background of market competition. Therefore, governments cannot guide innovation through industrial policy.

Misdirected industrial guidance is also one of the reasons why industrial policy has been criticised because government officials do not have the market sensitivity and purposeful behaviour of entrepreneurs [8]. In addition to the above theoretical reasons, another common problem is that industrial policy is easily manipulated by interest groups to serve specific purposes, thus losing the original significance of structural transformation [9]. At the practical level, the empirical evidence of whether industrial policy has practical effect is not very clear. The trend of globalisation and the continuous progress of technology have narrowed the scope of industrial policy, which has also become the practical basis of industrial policy ineffectiveness theory.

#### **4. NATIONAL EXPERIENCES**

Before independence, the economic development of African countries was slow. South Africa, for example, had a GDP growth rate of only 0.9% before independence. However, since independence, South Africa has been committed to formulating industrial policies to promote economic development. The implementation of the Reconstruction and Development Plan in 1994 has created a strong, dynamic and balanced economic structure. The South African Industrial Policy Framework document issued in 2007 focuses on protecting domestic industries, so as to promote export trade and increase domestic employment opportunities.

Under a series of government interventions, South Africa's economy grew steadily on the whole, with an annual GDP growth rate of 3.4% from 1994 to 2007.

Here, I would like to introduce an example of a developing country in Latin American. From the 1930s to 1970s, Latin American countries adopted the strategy of import rather than industrialisation, and governments intervened in their economies with powerful means. In the 1980s and 1990s, most Latin American countries abandoned industrial policies in order to reposition their economies as strategic development. However, they have provided specific public inputs for activities such as foreign direct investment and export processing zones. Specifically, they provided tax incentives to foreign investors, help them get familiar with the infrastructure of the host country, and provide subsidies for training workers. In addition, fast customs clearance procedures, good infrastructure and flexible labour practices have been established for companies in export processing zones. In both cases, the government adopted active industrial policies, which really boosted the economy. Among these, Uruguay is worth mentioning. The main reason for the country's rapid recovery from the crisis is that those interested in investing in various trade sectors (such as ports, tourism, software and business services) are keen to find the private sector. At the same time, the public sector provided support and input for each new economic activity. With these successful examples of public-private partnerships in new economic activities, countries can embark on the path of economic growth and achieve better results in the long term [10].

In the study of Asian developing countries, South Korea is a typical example. Holcombe (2013) argues that industrial policy is a result of economic development rather than a cause of it [11]. Although it has promoted the development of emerging industries, the cost of South Korea's industrial policy is greater than the benefit. Afterwards, it led to the mismatch between the expansion of key industries and the expansion of market demand, resulting in serious structural imbalance of economy, overcapacity in key industries and insufficient investment in non-key industries. Since the reform and opening up, China has also directly intervened in economic development and industrial structure through industrial policy. Although industrial policy has effectively reduced the time required to build a modern and effective system, it has also led to the unbalanced development of China's market mechanism and a strong dependence on the path of industrial development. In particular, since the outbreak of the global financial crisis in 2008, selective industrial policies (the government nurturing and support for selected industries) have generally been weak, resulting in repeated overcapacity such as in the steel and automotive industries, as well as inflation [12].

Moreover, in Tunisia, industries such as banking,

telecommunications and transportation, in which the family of former President Ben Ali participated, received additional protection from domestic and foreign competition. Companies related to Ben Ali's

family produced 1% of private sector output, provided 3% of domestic employment and obtained 21% of economic profits. Companies in these industries rely on their monopoly position to raise prices, but eventually make Tunisia's export sector lose competitiveness internationally. In fact, these problems of government captivity are common all over the world. One way to reduce this risk is to disclose the nepotism of government officials, so that policymakers can fulfill their commitments under public pressure [9].

## 5. CONCLUSION

Due to the success and failure of industrial policy, "whether industrial policy is effective" becomes a situational problem, which is no longer limited to a simple conclusion, that is, what is effective or ineffective. "When industrial policy is effective" becomes a question that people should ask, that is, to find the effective boundary of industrial policy [10].

From an economic perspective, economic analysis emphasises the trade-offs between various factors, making it difficult to reach an unconstrained and definitive conclusion. When discussing industrial policy disputes, it is necessary to clearly define the concept and form of industrial policy. Furthermore, it is necessary to analyse the specific industries targeted by industrial policies and determine the criteria for the effectiveness of industrial policies. Only based on the same premise can the debate on industrial policy be meaningful.

Government failure and market failure are both inevitable. Economic development, especially the transformation and upgrading of industrial structure, requires the joint collaboration of the government and the market to play their respective active roles. Currently, the focus of industrial policy research is the formulation and implementation of industrial policy. In the context of global economic integration and resource and environmental constraints, industrial policy has to be formulated according to the unique economic, social and technological realities of each country on the one hand and the characteristics of industry on the other. Finally, the shift from abstract empirical argumentation to concrete empirical analysis in research on the formulation and implementation of industrial policy will be an important direction for in-depth research in the future.

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