

# Information Society Industrial Policy

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## INTRODUCTION

In order to discuss e-government in the context of industrial policy, it is necessary to examine the industrial policy concept as such. Industrial policy is not a term often appearing in encyclopedias or handbooks of economics and there is no general understanding of the concept in the economics literature. Nevertheless, it is a concept which has played and continues to play an important role in discussions on the economic development of nations and regions.

## BACKGROUND

In some presentations on the issue of industrial policies, the concept is associated with policies to strengthen manufacturing industries as opposed to services. This was, for instance, a theme in the American discussions on deindustrialization in the 1980s and early 1990s, and it is also a theme in the presentations of the European Commission on industrial policy—for example, in the communications of the Commission on “Industrial Policy in an Enlarged Europe” (CEC, 2002, 2004). However, this is not the most common understanding of the term. Usually, the word “industrial” is not related to industry of the manufacturing kind alone but to business in general, encompassing manufacturing as well as services.

Another line of division in the different interpretations of the term relates to whether industrial policies are sector related or could be horizontal (cross-sector) as well. Laffont (1996), for instance, operates with a broad and horizontal understanding of the concept of industrial policy as does, for example, Cowling (1999) in *Industrial Policy in Europe*. In this perception of the term, industrial policies can very well be horizontal in the sense that public authorities of one country may want to promote all forms of enterprises in their own country. Industrial policies are thus considered as national policies to promote the industrial development of a country in the international setting (Cowling, 1999).

It has also been argued that there can be a close relationship between horizontal and sector related policies in the sense that the general goals can be of a horizontal character, while the means can include sector-oriented initiatives. In a paper on “Industrial Policy in the Economics Literature,” Navarro (2003), for instance, writes: “Policy has to be tailored to specific sectors and develop competencies that are specific to the local/regional context. Getting the horizontal policies right is essential, but a narrow focus on horizontal policies alone will only have a mild effect” (p. 14). A close relationship between horizontal and sector related initiatives can be seen in the case of policies to promote information and communication technologies (ICTs), as ICTs are seen as generic and pervasive with implications for almost all other industrial sectors. Support for the growth of use of ICTs and, consequently, for the growth of the ICT-producing industries may lead to a general promotion of all industries.

Generally, however, industrial policies are seen as sector related policies—that is, policies aiming at promoting specific sectors in the economy. This can be either sunset industries as shipyards in Europe, or sunrise industries as the ICT and biotechnology industries are normally considered to be.

The sector-oriented industrial policies can encompass all kinds of initiatives, which are intended to promote specific industrial sectors. Often, industrial policies have consisted of direct economic aid (subsidies or tax arrangements) or protection (tariffs), but they could also be research and development (R&D) policies or educational policies aiming at promoting specific industries, and they could be policies supporting demand for the products of certain sectors.

Industrial policies, however, do not include all kinds of economic policies. General macroeconomic stabilization policies (e.g., monetary or financial) and general competition policies are not included in the industrial policy category. It is only if sector-specific competition policies are implemented that competition policies are regarded as part of an industrial policy. To be characterized as an industrial policy, there must be something in

*Table 1. Scope of industrial policies*

	Sector oriented	Horizontal
Supply support	XXX	X
Demand stimulation	XX	
Regulatory framework	X	

addition to the creation of a favorable general economic framework, either directed at specific sectors in a national context or at specific sectors or the whole national industry in an international context.

Table 1 shows the scope of industrial policies. The core of industrial policies includes support for the supply and the demand side of specific sectors, but industrial policies may also encompass support for the supply side horizontally and/or sector-oriented framework regulations.

## **FOR AND AGAINST INDUSTRIAL POLICIES**

The basic argument in favor of industrial policies is that markets seldom function optimally and that different kinds of state interventions are called for. Conversely, the basic argument against industrial policies is that state interventions will seldom make things better—but probably worse. In the language related to neoclassical economics, market failures are the arguments for state interventions, while government failures are the arguments against. In the more heterodox evolutionary economics, which does not take its point of departure in any perfect market scenario, it is not necessary to make the case that there are market failures to correct. Arguments for industrial policies can be that there are functions in the totality of the politically influenced technoeconomic developments, which public authorities can effectively fulfill (Carlsson & Jacobsson, 2004).

The discussions on the merits of industrial policies are related to two (interconnected) spheres: the national sphere and the international sphere (Navarro, 2003). It is possible to argue for industrial policies in a purely national context. The argument is that there are market failures, which need to be rectified, or functions that need to be fulfilled. The kinds of market failures or functions in question will mostly relate to positive externalities in the economy, which are not sufficiently unfolded. This could apply to all sectors of the economy and, therefore, be initiatives of a horizontal character. But it could also be a more sector-oriented initiative, for instance, in relation to ICTs, the use of which in itself has externalities attached.

Most often the discussions on industrial policies are connected with the international dimensions of the economy. In this regard, the arguments in favor of industrial policies are primarily related to the goal of obtaining or retaining a specific position in the international division of labor, for example, in relation to so-called strategic trade policies, infant industry policies, or fears of deindustrialization.

The most powerful argument against the use of industrial policy to rectify market failures is that it is difficult to see why public authorities would have insights into the functions of the markets, which could do better than unregulated market mechanisms. Furthermore, it has been argued that it is difficult to document significant positive effects of industrial policies (Pack, 2000).

Moreover, there is a risk of capture of public authorities when supporting specific industrial sectors (Laffont, 1996). The specific public authorities in question and the industries being supported may become so dependent on each other that there will be a distortion of the economic decision processes.

The most often used arguments for and against industrial policies revolve around international relations. The heart of the matter is whether it is possible for nations to acquire better positions in the international division of labor and, consequently, a bigger wealth and higher welfare. This applies to the economically poorer nations, where the issue is to get started on building up a position and an industrial basis. But it also applies to the economically richer countries, where the issue is to retain or improve the economic and industrial strength vis-à-vis other countries.

In relation to the economically richer countries, there are defensive as well as offensive reasons for industrial policies. The defensive reasons are connected with the issue of de-industrialization and with supporting industries, which (may be) more profitably could be located in other countries—the so-called sunset industries. The policies flowing from this line of reasoning can be summarized under the heading of protectionism, and one of the arguments against such policies is that it is a kind of “beggar thy neighbor” policy and that it is likely that there will be retaliations from other countries. One of the major implicit arguments for industrial policies is that other countries are taking similar steps and that industrial policy initiatives are, therefore, necessary. The more offensive reasons are connected with the possibilities of conducting strategic trade policies, that is, to promote the industries in the home country, which have a strategic character because of a value-added above the average.

Strategic trade policies were especially discussed academically in the 1980s and early 1990s. An early introduction of the theme was a publication by Brander and

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