NEW INDUSTRIAL POLICY

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Only few areas of economics arouse such passion as industrial policy. Its opponents reject any interventions to the structure of the economy and argue that only free market can effectively allocate scarce resources. Proponents of industrial policy point to successful examples not only of Southeast Asia where industrial policy has supported productivity growth and contributed to GDP growth. The aim of this paper is to briefly summarize the theoretical debate on industrial policy and describe relationship between industrial policy and innovation process. The main goal is to free the debate on industrial policy from the doctrinal clichés and show the new industrial policy as an instrument of economic recovery.

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Theory of Industrial Policy

Before we start with the theoretical foundations of industrial policy (IP), let us first define what we understand under this term. Pack and Saggi (2006: 2) define industrial policy as: "Any type of selective government intervention or policy that attempts to alter the structure of production in favour of sectors that are expected to offer better prospects for economic growth that would not occur in the absence of such intervention." Other definition describes industrial policy as follows: "Stimulate specific economic activities and promote structural change," Rodrik (2008: 3). Industrial policy is therefore an targeted effort of the government to change the structure of the economy. Most often today, the term industrial policy means a mix of several arrangements targeted to: i) promote domestic exports, ii) attract foreign investments and iii) accelerate innovation processes in the economy (Harrison and Rodríguez-Clare, 2010).

Now let us look at two basic objections that has traditionally raised from the perspective of neoclassical economics against the implementation of industrial policy.

1) Asymmetric Information

Asymmetry of information particularly government’s imperfect information is a major critical comment from the opponents of the IP. Critics of industrial policy point out that the government does not possess relevant information and therefore is not qualified to decide which industrial sector to support within the implementation of industrial policy. Asymmetry of information also leads to two types of undesirable behavior: adverse selection and moral hazard. Opponents of IP therefore reject the whole idea of industrial policy because of this undesirable behavior threat and because the government is unable (due to asymmetric information) a priori select a proper recipient of industrial support.
However industrial policy is just one of many economic policies that governments routinely perform. Rodrik (2007, 2008), for instance, says that governments implement a great deal of regulatory policies that could be rejected exactly on the same grounds of inherent asymmetric information. For example monetary policy, fiscal policy, health policy, pension policy, education policy, trade and competition policy, and any other government policy also suffer from the inherent presence of asymmetric information, but those policies are not rejected. Thus neither industrial policy should be rejected.

2) Corruption

The risk of corruption and rent-seeking is the second major objection that is raised against the implementation of industrial policy. Industrial pressure groups can use corruption as a tool for obtaining government’s assistance or support. However, corruption is often present at all levels of government’s decision making process and it would be naive to reject the whole idea of industrial policy just due to the potential threat of bribery.

After we have introduced the main (theoretical) difficulties in the implementation of industrial policy, now we take a look at the theoretical case for industrial policy.

1) Technological Externalities

In the highly competitive global economy only dynamic and innovative company will succeed. Therefore investments in research and development constitute an integral part of the competitiveness strategy. R & D contributes to the creation of new knowledge and these can be characterized as positive externalities, or in terms of industrial policy as technological externalities (Cohen, 2006). Because the existence of positive (technological) externalities leads to the risk of free-riding behaviour, IP can be seen as a proper solution. Suitable design of IP can contribute to the internalisation of such externalities and encourage development of technological innovations and support performance of individual businesses.

2) Source of Growth

Exporting firms achieve higher productivity growth (Foster, 2006). The manufacturing sector is the most important source of growth in developing countries (Szirmay, 2009). "Now more than ever, Europe needs industry and industry needs Europe" (European Commission, 2010: 3). All these statements support the notion that industry and manufacturing sector are the main sources of economic development and that "without a big manufacturing base an economy can not succeed" (Economist, 2011). Also today during the economic downturn industrial policy can contribute to kick-start the economy and run improvement in living standards.

Industrial Policy and Innovations

In order to industrial policy could act as the engine of economic development, IP has to contribute to the increasing of national competitiveness. The national economy is competitive if and only if there are competitive enterprises. Innovations are the main source of increasing competitiveness on national and international level.

Successful innovations give firms a competitive advantage in global markets and increase their market share and profitability (Yamin et al., 1999). Through the effect of the gradual diffusion of innovations, innovation clusters are formed, and entire national economy became more competitive. "Innovations are seen as one of the sources of economic growth" (Hollanders and Arundel, 2005: 19). In order to industrial policy can contributes to increasing the innovation performance of firms, first it is
necessary to identify the main determinants of successful innovations. The next section therefore seeks to identify the key factors supporting the fruitful innovation process.

Bhidé (2000) has examined the mechanisms for innovative start-ups and at the base of personal interviews with the founders of start-ups he has come to several conclusions on innovations:

- Companies that focus on innovations seek market niches characterized by high level of uncertainty stemming from technological, regulatory and other (exogenous) changes or these innovative companies focus on customers with vaguely defined needs (fuzzy wants). Innovations (especially technological) then create new markets because they meet new kinds of needs which did not exist before the invention of new technology.
- Emerging innovative companies often look for new markets because traditional markets (and standard needs of customers) are already occupied by large companies.
- Large (especially technological innovations) appear through gradualist path (not shock evolution) and small innovative companies play in this process of technological change very important role because they help to solve the problems associated with the initial introduction of new technologies on the market. Small businesses realize "experiments" (innovation marketing) which serve as an indicator for major technological giants whether a new product has any market potential and whether is it worthy for (mass) production.
- In the companies that do not have their own research department most of the innovations come as a reaction to the experience from previous staff employment and those innovations are not the result of systematic search.

Realization of successful innovation is not possible without specific characteristics that an entrepreneur should have. According to Bhidé (2000) these characteristics include: desire to succeed, willingness to take a risk, strong self-control, willingness to deal with complicated situations, flexibility, determination, sales skills, high ambitions and some others.

Also Read (2008) has identified the main determinants of successful innovations based on the study of empirical resources and numerous scientific papers. These determinants or factors of successful innovations are in the following order (line up according to the most frequent ones):

1. Management’s support for innovation culture
2. Focus on customers and market
3. Communication and social networking
4. Human resources strategy that supports innovations
5. Team spirit in business organization
6. Knowledge management
7. Leadership, development of creative and flexible structure that facilitate technological adaptation

According to Bhidé (2000) successful innovative company is focused on finding new markets and meeting new needs of customers (fuzzy wants). Large and small businesses often cooperate during technological innovation and create a symbiotic relationship of mutual complementarity. Therefore Schumpeter’s hypothesis: the larger the company, the more innovations generates (Schumpeter, 1942) must also reckon with the complementary role of small firms in the process of technological innovation. For successful implementation of a plan of innovations, skills and proper characteristics of entrepreneurs or company’s management are also important.

Read (2008) considered as the most important factor in successful innovation project role of the management of the companies the ability to encourage and create an innovative culture within the company and especially qualified corporate communication.
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(Technological) innovations are key for economic growth (Romer, 1990) and support for innovations should become a standard part of industrial policy. New IP tools that support innovations, investments in R&D and solve coordination problems are at the foundations of new industrial policy. New IP is not targeted to vertical industrial policies but to promote innovations and create an environment for their successful expansion within the economy. New industrial policy can contribute to the boost of economic growth and represents a useful tool (especially during nowadays economic downturn) to kick off growth trajectory. Figure 1 shows some countries with the highest innovation performance within the European Union. It is no coincidence that these „Innovation Leaders“ also have the best support for innovations through sophisticated national (new) industrial policies.

Source: European Innovation Scoreboard (2010: 12)

Figure 1. European Innovation Scoreboard (2010).

New industrial policy or innovations and industrial policy (IIP) is in its instruments targeted to foster innovations and facilitate innovations’ diffusion across the economy. New industrial policy is therefore a suitable governmental tool for increasing national competitiveness. Neither theoretical obstacles (asymmetric information and the risk of corruption) are not insurmountable problems for the IP. Especially today, when "America is engaged in what is perhaps the largest industrial policy effort in history, spending tens of billions of dollars to stimulate innovative green technologies ..." (Economist, 2010) it is necessary to "normalize" (Rodrik, 2007) the debate on industrial policy and return it to the factual and practical level. Despite all the objections related to the implementation of IP "Governments engage in industrial policy all the time even when they do not call it such." (Economist, 2010). New industrial policy therefore provides a suitable platform for new debate on the objectives and instruments of industrial policy in the third millennium.

References


