

A Comeback for Industrial Policy?

Opinion piece

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Ever since the US administration under Joe Biden passed the CHIPS and Science Act and the Inflation Reduction Act, there has been talk of a renaissance in industrial policy. What are the objectives of industrial policy? And what are its pros and cons?

The global economy has been rocked by many crises in recent years. The coronavirus pandemic, Russia's invasion of Ukraine and other geopolitical conflicts, natural disasters, and China's growing geopolitical ambitions have led many companies to fundamentally rethink the structure of their international supply chains and their production locations. One much-discussed objective is to reduce dependence on specific markets, with the European debate focusing on China and Russia. Part of the strategy to reduce these dependencies is to try to influence the location decisions of companies in critical high-tech sectors by encouraging them to locate in Europe. Subsidies and other government financial incentives are used to this end.

For a long time, such industrial policy was frowned upon in many highly industrialized countries. But at least since the adoption of the CHIPS and Science Act and the Inflation Reduction Act (IRA) in August 2022 by the US administration, there has been talk of a comeback of industrial policy. After much political wrangling, the EU has also adopted industrial policy measures to counter the IRA, in particular the EU Chips Act.

But what are the aims of industrial policy? How does it work? What are its advantages and disadvantages? And has industrial policy really been forgotten for a long time?

WHAT IS INDUSTRIAL POLICY?

Industrial policy comprises economic policy measures that explicitly aim to change the structure of economic activities in order to achieve a specific public goal — a goal that cannot be achieved by the activities of firms and the market alone, or not quickly enough.¹

The reason for this is that private economic activities generate externalities that are not sufficiently taken into account by private companies. For example, an investment by a high-tech company not only creates new jobs in the investing company but may also lead to an increase in the number of highly skilled workers in the region, who can then be recruited by other companies.

It is also important to recognize that industrial policy is designed to bring

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about structural change in the economy: a particular part of the economy is subsidized — for example, semiconductor manufacturers through the EU and US Chip Acts — which at the same time means that other parts do not receive these incentives. Typically, the aim is to promote innovation and growth in certain sectors, such as high technology, to expand climate protection measures, or to maintain or create jobs in selected companies or industries.

This policy can be implemented through a variety of measures. Subsidies and tax incentives are the most widely recognized, partly because they are easy to measure and quantify. For example, when the IRA was passed in the US, it was stated that around USD 369 billion in financial incentives for investment in “green technologies” would be made available. But this is not the only way in which industrial policy is being pursued. Trade policy measures such as tariffs to protect domestic production or incentives to export in certain sectors are also used. For example, the EU has been discussing for several months whether to impose additional tariffs on Chinese car imports to protect the domestic car industry. Reducing bureaucratic hurdles or requirements for certain sectors can also pursue industrial policy objectives: both the EU Parliament’s decision to ban internal combustion engines in cars from 2035 and the German opposition to this law and the associated exemptions for so-called e-fuels can be seen as industrial policy measures.

CRITICAL OBJECTIONS

But why was and is this type of economic policy so frowned upon in parts of politics, academia, and society? Economic criticism

of industrial policy tends to focus on two aspects: the role of the state and the effectiveness of the measures.

If industrial policy is to promote certain sectors of the economy, then these should of course be particularly “worthy” sectors and companies. In most cases, these will be companies with particular growth opportunities in the future, i.e. “winners” in the economy. But they can also be companies in specific sectors that have been weakened by external influences and need to be stabilized in order to safeguard jobs. In either case, the state must be able to judge which sectors of the economy are worthy of support. This ability is often questioned on the grounds that the market is better placed to make such decisions because it generally has better information. In addition, there are potential conflicts of interest in the implementation of these policies and the potential for lobbying by companies to obtain government support.

Independently of this first aspect, the question arises as to whether industrial policy measures can achieve their objectives. For a long time, the prevailing view in economic research was that this was generally not the case. For example, studies in the 1990s and early 2000s showed that subsidies and protectionism in certain sectors were associated with declining productivity growth in the sectors concerned.

Another aspect related to the effectiveness of policies arises from the different objectives of industrial policy and the trade-offs involved. The aim of industrial policy may be to promote innovation and growth in certain promising sectors but also to maintain or create jobs — where maintaining employment often means

supporting companies and sectors that are exposed to either temporary or structural negative shocks. In this case, the trade-off boils down to the question of whether to revitalize aging industries in a downturn or to focus on new industries with uncertain prospects. Structural change is a necessary but also painful process for the long-term growth of the economy and is not always easy to implement politically.

GLOBAL INDUSTRIAL POLICY

Despite the criticisms, industrial policy has been pursued on a large scale in developing and emerging economies, as exemplified by the Southeast Asian tigers of South Korea, Taiwan, Singapore, and Hong Kong. Since the 1970s and 1980s, these countries have implemented industrial policies to transform their economies into high-tech industries. With success, as economists around the world attest.² Latin American countries also have a long tradition of industrial policy.³ The People’s Republic of China has also made a name for itself in recent years for implementing industrial policy measures, especially subsidies in selected sectors — often to a rather negative response in Western countries.⁴

Recently, a trend reversal has taken place in the major highly industrialized economies. In particular, in response to the rise of China as an international competitor, industrial policy has become increasingly important to counter the perceived risk of increased relocation of businesses or the takeover of domestic companies by foreign competitors. This importance has increased further in the wake of the crises mentioned above.

The large number of possible industrial policy measures makes it difficult to

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provide precise estimates of the monetary size of such interventions. However, the economic literature contains some attempts at measurement with very interesting results. For example, DiPippo et al. (2022) collected data on subsidies, tax incentives, and other financial support that can be considered industrial policy measures. This data was analyzed for the year 2019 for eight countries — China, Brazil, Germany, France, Japan, South Korea, Taiwan, and the US. In this group, China spent by far the most on industrial policy, at 1.5 percent of gross domestic product. The other countries ranged from 0.7 percent (Taiwan) to 0.3 percent (Brazil).⁵ It is reasonable to assume that this figure has risen since then as a result of responses to the crises mentioned.

Juhász et al. (2023) take a different approach to measuring the importance of industrial policy. The analysis uses a database that lists industrial policy measures implemented by countries worldwide since 2010. They count only the number of industrial policy measures, not the mone-

tary amounts involved. Analysis of this data shows a very clear trend (see the figure). The number of industrial policy measures has increased significantly since 2010 and has risen sharply again, particularly since 2019/20 — i.e. the start of the coronavirus pandemic. It is also clear that OECD countries are responsible for the majority of industrial policy measures.⁶

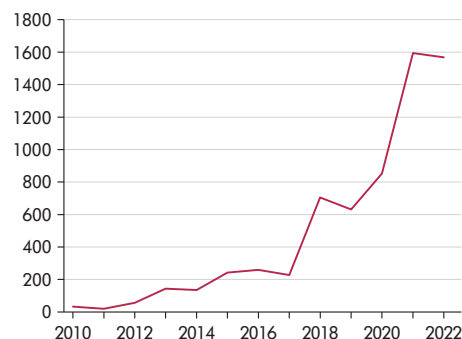


Figure: Number of industrial policy measures worldwide

Source: Juhász, R. and Lane, N. J. and Rodrik, D. (2023) 'The New Economics of Industrial Policy'. NBER Working Paper 31538/2023, National Bureau of Economic Research.

PICKING WINNERS

So industrial policy seems to be back in vogue in the developed world, including in the EU. But how does this fit in with the criticisms mentioned above?

It is often argued that empirical studies are methodologically incapable of convincingly demonstrating the effectiveness of policy measures. This is due to the nature of economic policy interventions. Economic policy picks firms or sectors for inter-

vention that it believes have high growth potential. The selection is therefore not random, but usually based on economic criteria. This means that firms or sectors are subsidized that have a different growth potential than other, non-subsidized firms. It is then not easy for researchers to prove whether the economic policy has had an impact. Is the difference in growth due to the fact that the firms were subsidized or simply because these sectors have different growth prospects per se?

A number of recent empirical studies have addressed this issue using theoretical models and newly developed empirical methods. They provide methodologically credible evidence for the hypothesis that industrial policy measures can be effective.⁷ For example, the analysis of an industrial policy intervention in South Korea in the 1970s, targeting the heavy and chemical industries, shows that this policy measure had a positive impact on the comparative advantage of the selected industry and thus boosted the growth of exporting firms and their suppliers in these sectors.⁸

But even if the evidence now suggests that individual industrial policies can be effective, does the fundamental criticism not remain that the governments should not intervene in the economic process by picking winners? Are markets not better at obtaining and evaluating information about the future prospects of industries, companies, or products? Against the backdrop of the crises of recent years, this argument appears no longer tenable. The production and supply shortfalls during the coronavirus pandemic or the reactions of companies to rising energy prices as a result of Russia's war of aggression against

Ukraine have soberingly demonstrated that the market is also limited in its ability to assess correctly future developments and their impact on the economy.

However, even independent of such crises, it cannot necessarily be assumed that firms have a fundamental information advantage over state actors. This may be the case for existing goods and products. On the basis of available information, growth opportunities can be assessed under uncertainty as long as no unexpected crises occur. The situation is different when it comes to completely new industries and their growth prospects — i.e. future industries on which industrial policy focuses. Here it is not clear that the market can gather better information than the government.⁹ Both government and market actors face great uncertainty. Even private companies do not have all the information and the state may well have a role to play.

Another important aspect is that a successful industrial policy is not just about choosing the "right" industries to support — i.e. supporting industries that promise growth opportunities as "winners". It is also about letting "losers" go.¹⁰ This means that policymakers should stop supporting companies or sectors that have already received support and are not achieving the expected potential.

CONCLUSION

The economic debate today is less about whether industrial policy can be effective and more about what policies need to be in place for it to be successful. At least three things are important here:

First, clear targets need to be set for companies receiving support. These need

to be monitored and, if necessary, support withdrawn if targets are not met.

Second, it is important to take into account potential trade-offs in support. For example, support for companies in certain high-tech sectors where production is predominantly carried out by robots may achieve the goal of making a location attractive to this industry and also send technological impulses through the new settlements to the rest of the economy. However, the use of robots would create relatively few jobs. If industrial policy also aims at creating new jobs, this could lead to a conflict of objectives. Accompanying policy measures should be considered.

Third, policymakers should be aware of the potential negative effects of subsidies, even if they believe that they are effective. On the one hand, such negative externalities result from the comparison between subsidized and non-subsidized firms. If the subsidy is effective, the former will develop better than without it. However, the subsidy can also have a potentially negative effect on the non-subsidized firms.¹¹

Another possible negative effect of subsidies is the risk of subsidy competition. Subsidizing a particular industry in one country can lead to companies from other countries relocating to take advantage of the subsidies. To prevent this, other countries could also offer subsidies, which would be economically inefficient. A recent example of the danger of such a subsidy race is the US IRA and EU Commission's reaction to respond with the same means.¹² In such a subsidy race, only one side wins the companies, who can negotiate with different governments to choose the location that offers the best financial incentives.

To avoid such wasteful subsidy races, international coordination is desirable. Like-minded countries could agree on which industries should be promoted. Within the bloc, companies should then be free to choose where to locate. There should then be a mechanism for compensating countries that did not attract the firm to ensure that the benefits are shared across the bloc.

In summary, industrial policy is back. It is now important to consider how policies can be designed to maximize their effectiveness while minimizing trade-offs and other possible negative effects.

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- ⁶ Ibid. 1. [page reference to footnote 1]
- ⁷ Ibid. 3. [reference to footnote 6]
- ⁸ Lane, N. (2022) 'Manufacturing Revolutions: Industrial Policy and Industrialization in South Korea'. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3890311.
- ⁹ Ibid. 3. [page reference to footnote 3]
- ¹⁰ Ibid.
- ¹¹ Ibid. 3. [page number reference to footnote 5].
- ¹² Moens, B., Posaner, J., Stolton, J., and Mathiesen, K. (2023) 'The great EU subsidy shakedown'. 16 March. <https://www.politico.eu/article/the-great-eu-subsidy-shakedown-us-eu-biden-vw-volvo-brussels-eu-summit-tesla-niklas-wahlberg-chinese-firms-thomas-schmall-geert-bourgeois-european-peoples-party/>.