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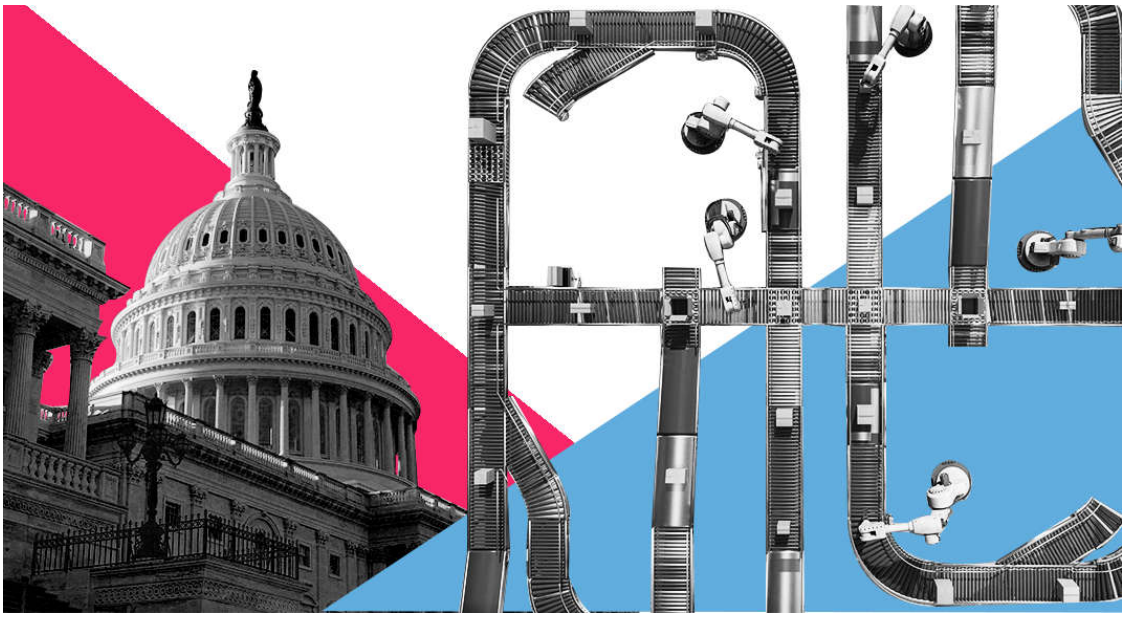
INDUSTRIAL POLICY NEWS

A New Framework for Better Industrial Policies

BY CHIARA CRISCUOLO and GUY LALANNE *January 17, 2023*



Naomi Koo

Industrial policy was once so out of fashion that it was jokingly called "the policy that shall not be named." Now it's back in a big way. On issues ranging from clean energy to semiconductors to Covid-19, governments are trying to improve the performance of key business sectors. Can they manage to do so without subverting competition and subsidizing special interests?

This article is the first in a *ProMarket* series about industrial policy. Stay tuned as we publish an article each week this quarter on the topic.

Industrial policy is back after having been considered a taboo since the 1970s. Until recently, government failures and industry capture were seen as worse enemies than market failures. But ever since the global financial crisis, governments have relied on industrial policy to stimulate growth and productivity, promote resilience, and address societal challenges. Now industrial policy is taking center stage as countries seek to ensure a green, digital, and inclusive recovery after the Covid-19 pandemic, and to reduce dependencies on critical inputs following recent shortages and Russia's invasion of Ukraine.

Virtually every government uses industrial policies, but do they really work? This question will not be answered satisfactorily anytime soon, but we aim to pave the way for better industrial policies by providing tools to address three issues. First, there is no agreement on which interventions are considered "industrial policy." Second, and related to the above, we do not really know how (and how much) governments are really spending on industrial policies. Third, the evidence on the effectiveness of single industrial policy tools, let alone entire industrial strategies, is mixed and not always convincing. Targeted policies that focus more narrowly on firms with certain features (e.g., size, age, location) or in specific industries continue to raise concerns related to anticompetitive effects, capture by vested interests, and the opportunity cost of public funds. And no consensus exists on the efficiency of more general industrial policies (known as horizontal or untargeted), and even less on their sufficiency to address global challenges like, for example, climate change.

To help governments make sound decisions in the face of this uncertainty, we at the OECD are working to offer three things:

1. A sound and simple framework that helps design industrial strategies, described below.
2. A measure of industrial policies benchmarked across countries.
3. A wider and more solid evidence base on what works and what doesn't.

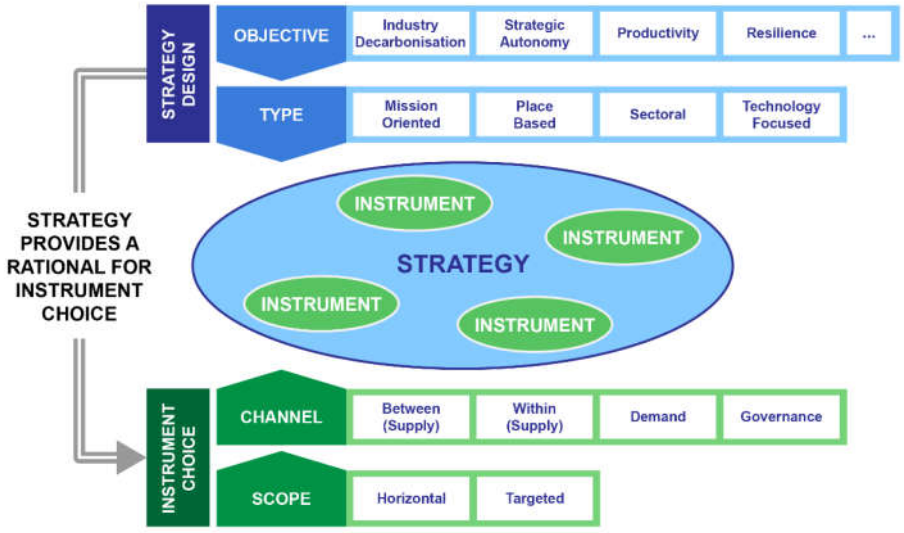
A conceptual framework for industrial policy

First, we provide a conceptual framework based on a purposefully broad definition of industrial policy, which enables us to consider simultaneously a vast set of policy instruments. We define industrial policy as the set of "interventions intended to improve structurally the performance of the domestic business sector" and thus cover instruments ranging from the design of intellectual property protection to public procurement, R&D incentives, or public support to improve workers' skills. It also encompasses much-studied realms such as science, technology, and innovation and entrepreneurship policies.

Our conceptual framework highlights two main dimensions of the formulation of industrial strategies, which are linked by the rationale underpinning policy intervention: designing an industrial strategy and selecting policy instruments to execute that strategy.

The design of industrial strategies: A strategy is a consistent and articulated group of measures aimed at achieving a given policy objective, which can go beyond productivity growth and innovation to include things like sustainability, resilience, and strategic autonomy. Beyond traditional sectoral or place-based orientations, "new" industrial strategies increasingly focus on specific technologies or "missions". For instance, mission-oriented industrial strategies are primarily motivated by the societal benefits they can provide and the need to coordinate multiple stakeholders around complex challenges, such as the green transition.

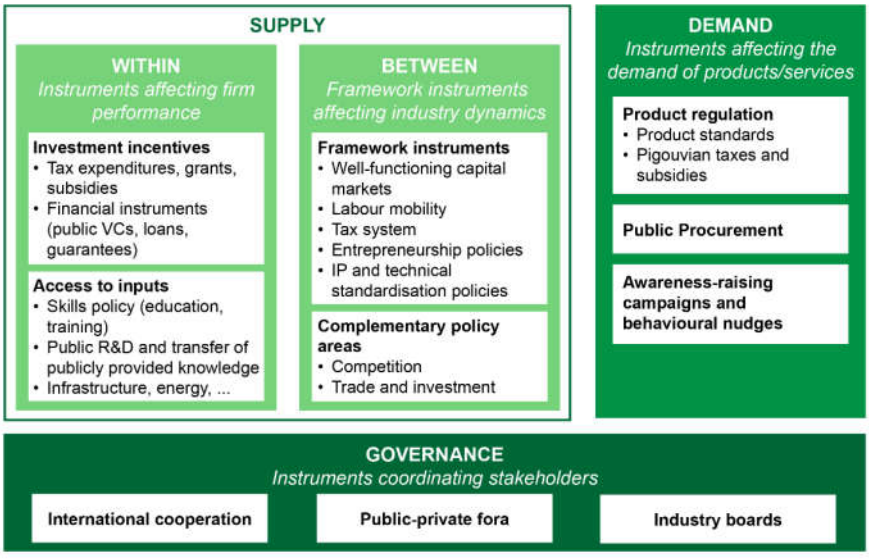
The formulation of industrial policy



Source: Authors.

The choice of industrial policy instruments: Our taxonomy identifies the channels through which policy instruments operate and potential complementarities. In addition to keeping with the traditional distinction between horizontal and targeted policies, the taxonomy distinguishes between demand-side instruments and two types of supply-side instruments: those that primarily improve firm performance (such as tax credits, grants, loans or loan guarantees, and public support for training within firms) and those that affect industry dynamics ("framework" instruments such as the tax system, capital and labor market policies, competition or trade policies).

Taxonomy of policy instruments



Note: Examples based on the main channel through which policy instruments work.

Source: Authors.

This framework can shed light on the design of industrial strategies for the green transition, for example, by helping understand the complementarities between innovation and technology adoption support on the one hand and demand-side instruments on the other hand. The latter can contribute to transformative industrial change by affecting the demand for products through either their price, availability, or public demand, and have become more and more common, in particular in transformative mission-oriented strategies. The underlying rationale is the creation of demand to support scaling-up and in turn lowering costs through learning by doing. In the context of targeted industrial strategies, demand side policies are particularly interesting as they may be less distortive than targeted supply-side policies.

This framework is already being put to use. By shedding light on the complementarities between these different policy instruments, it offers practical policy advice to help design effective industrial strategies. For instance, it has been used by the French administration in the development of the new Industrial Strategy 'France 2030', and by the OECD in recent reports on the net-zero transition of the Dutch manufacturing sector and the analysis of green hydrogen strategies.

Measuring and benchmarking industrial policies across countries

Sound policymaking requires having a helicopter view of industrial policy — policymakers need to know what their government is doing domestically as well as understand partner countries' policies.

Measuring industrial policy expenditures is a first step towards ensuring transparency and accountability and enabling policy evaluation. It also supports cross-country comparability of industrial policies, facilitating international coordination on global challenges.

However, amidst an increasing number of industrial strategies, and despite the availability of information across countries, there is no proper measurement or cross-country comparison of industrial strategies. For this reason, the OECD gathers harmonized data that allow benchmarking industrial strategies across countries in terms of industrial policy expenditures, policy priorities, policy instruments, and recipients through the new project "Quantifying Industrial Strategies" (QuIS). It measures industrial policy expenditures across 10 OECD members, initially for the period 2019-2021. As it focuses on 'expenditures', several industrial policy areas are not directly covered.

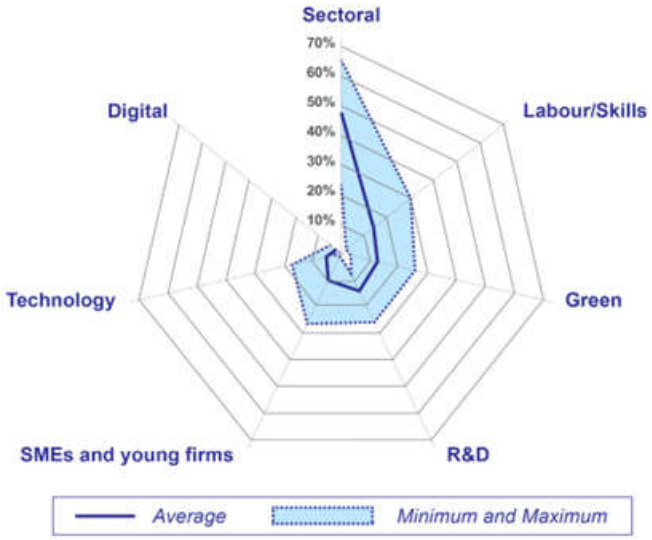
The first milestone for the project has been the development of a new methodology to gather comparable information on expenditures from publicly available information.

With the support of an advisory group of academics and industrial policy practitioners the methodology provides guidance on which spendings to include and which not. For example, not all skill policies can be considered industrial policies but at least those programs that provide financial support to firms to finance training should be considered industrial policy.

The second milestone will be the forthcoming release of this benchmarking exercise's first results. Preliminary estimates shown below indicate that, although green industrial policies are not negligible, comprising on average 13% of industrial policy expenditures, countries' priorities are still dominated by a sectoral approach. Policy instruments for specific industries still represent half of the expenditures on average, often in sectors such as agriculture, manufacturing, energy, or transportation. Country profiles are nevertheless diverse, with, for instance, green expenditures as high as 25% in some countries and non-existent for some others (the categories are not mutually exclusive).

Industrial policy priorities across 6 selected OECD countries

Industrial policy expenditures by eligibility criteria in 2021, % of total industrial policy subsidies and tax expenditures



Note: Structural policies (i.e. excluding Covid). Categories are not mutually exclusive, as policies can be tagged in several categories. Additionally, some policies do not fulfill any of these eligibility criteria. Hence, the numbers in this figure do not add up to 100%.

Source: OECD calculations based on QuIS database.

Taking stock of existing evidence on industrial policy

Beyond a conceptual framework to help design and measure industrial strategies, sound policy making requires a clear view on what works and what does not. Leveraging our framework, we also provide a synopsis of the available empirical evidence on industrial

policy instruments and their complementarities and trade-offs. Despite a growing body of evidence, a strong push on policy evaluation is urgently required.

The review of existing empirical evidence clearly supports the premise that well-designed economic incentives for firms and good framework conditions are effective. First, among the different types of economic incentives, the most studied by far are R&D tax credits and subsidies. While it has long been recognised that they stimulate R&D expenditures, recent studies also show that they tend to increase innovation. Second, policies leveling the playing field and ensuring an efficient allocation of resources, such as sound competition and trade policies, lowering barriers to entry, and cutting red tape, are key complements to industrial policy in enabling the most productive firms to grow and an important channel for structural change.

At the same time, there is still limited and inconclusive evidence for many other questions, including the effectiveness of the targeted and demand-side instruments, the complementarities between policy instruments, which are often bundled together in industrial strategies, and the effects of industrial policy on resilience, inclusiveness, and the environmental and social performance of firms.

For instance, available evidence shows that demand-side instruments can effectively complement or accelerate the effects of supply-side instruments to foster innovation. For instance, carbon pricing and environmental regulation are effective in encouraging the green transition of firms, with only limited negative impacts on competitiveness. Nevertheless, open questions remain, such as the optimal combination of supply- and demand-side instruments or the effectiveness of public procurement policies in accelerating the green transition.

As a result, governments need to put a strong emphasis on evaluation and the regular re-assessment of industrial policies. While the evidence is limited so far, and sometimes inconclusive, recent advances in data collection, storage, and analytics (notably machine learning) have the potential to make evaluation richer, cheaper, and timelier.

Several countries already benefited from the use of our framework to define and design their industrial strategy. They stand to benefit further from the data we have gathered to benchmark their strategies and assess their effectiveness. We hope this will lead to a more deliberate approach to evidence-based industrial policy making and encourage other countries to follow suit.

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