

Industrial Policies and Firm Performance: A Nuanced Relationship



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Abstract

Our work studies the relationship between industrial policies (IPs) and firm performance, showing it varies by instrument, firm and industry characteristics, value chain position, and time horizon. Subsidies discriminating against foreign interests are linked to short-term improvements in key firm outcomes, which fade or turn negative in the medium term. Export incentives are linked to medium-term gains, after an adjustment period. These relationships are stronger for young and financially constrained firms and when IPs target highly distorted upstream sectors, and can be hampered when other countries also introduce IPs. Targeted policies fostering trade have uniformly positive medium-term effects on firm performance. Structural reforms generally yield greater gains and can amplify the effectiveness of IPs, underscoring the importance of broader reform agendas.

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Introduction and summary

After a decline following the liberalization wave of the 1990s, industrial policies (IPs) have been widely used in recent years, particularly since 2017 (see Evenett and others, 2024; Evenett and other, 2025). The current resurgence of IPs has reignited debates about their merits. Proponents of IPs argue that these policies can address market failures—such as economies of scale, knowledge spillovers, and coordination problems—while critics warn of the potential pitfalls, including high fiscal costs, misallocation of resources, unintended spillovers across sectors, and cross-country spillovers that can spark retaliation. Yet, while most of these arguments are based on historical case studies, a rigorous and data-oriented analysis of the potential impacts of IPs is often lacking, suggesting that a reassessment of IPs' economic effects is warranted.

In two recent pieces (Baquie et al., 2025 and Machado Parente et al., 2025), we provide new evidence of the link between industrial policies and the performance of firms in targeted sectors relative to non-targeted ones by leveraging various databases, spanning 38 countries from 2011 to 2018 countries and many sectors. Our work tackles three questions:

- *What instruments and product/sectoral characteristics make IPs most effective?*
- *How does the impact of IPs compare to that of structural policies?*
- *What country characteristics (in particular, which structural reforms) enable more impactful IPs?*

Our results show that IPs are on average associated with only moderate and uneven improvements in economic outcomes, although the association becomes stronger when the appropriate instruments are used and when IPs target highly distorted upstream sectors. Overall, structural reforms typically bring larger benefits than IPs and enhance the link between IPs and economic performance, pointing to the key role of a robust structural reform agenda. Moreover, while well-targeted IPs can address market failures and yield improvements in economic performance of targeted sectors, there are risks of pursuing them. Given their targeted nature, limited state capacity and capture by private and political actors can hamper their effectiveness. IPs can also result in large fiscal costs and unintended cross-industry and cross-country spillovers. All this means that they should be handled with care.

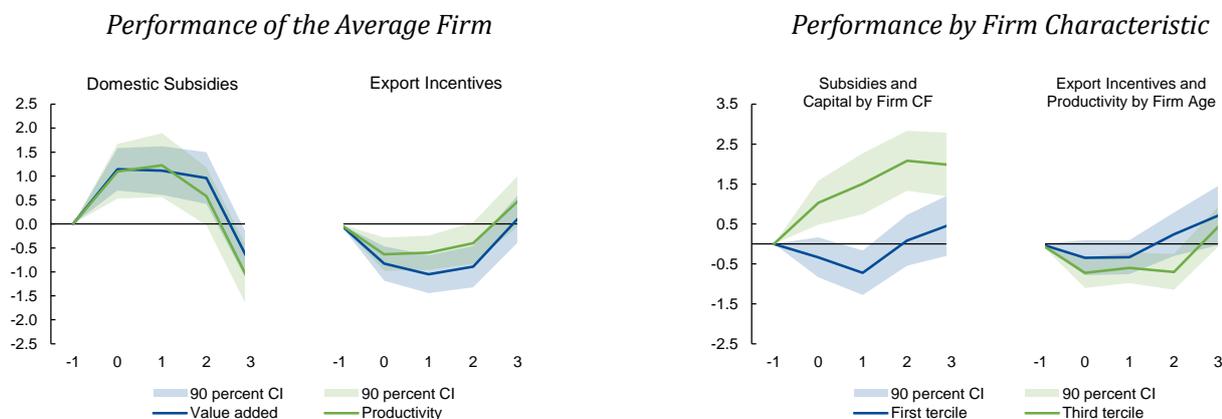
Our aim is not to assess the aggregate and welfare implications of industrial policies, a task that would require a structural framework that incorporates other dimensions (general equilibrium forces, political economy considerations, knowledge spillovers, and retaliatory actions), as well as reliable data on the size and fiscal cost of these policies. We view our results as a first-pass at estimating the economic impacts of IPs: if IPs do not improve the relative performance of firms in the industries they target, it is unlikely that they will deliver positive outcomes for the broader economy, once other considerations are taken into account.

The link between industrial policies and firm performance depends on the instruments used...

We first explore how the choice of instruments affects the relationship between IPs and firm performance in targeted sectors and find a nuanced relationship that varies across instruments. We distinguish between protectionist domestic subsidies (which include, for example, subsidized loans and financial grants) and export incentives (such as trade finance and tax-based export incentives). On the one hand, domestic subsidies provide a short-term lift in firm-level value added and productivity (Figure 1, panel 1), yet these benefits fade and even turn negative over the medium term. This and other results are robust to alternative measures of industrial policies and estimation methods. The fading of benefits may reflect subsidies' short duration (about 3 years) or may indicate that domestic subsidies could be mistargeted. The relationship between domestic subsidies and firm-level capital appears to be more durable, as the latter remains above the levels observed prior to the introduction of IPs even in the medium term. In contrast, export incentives might initially depress productivity but tend to generate sustained improvements in the medium term, likely as firms adjust and scale up to compete globally (Bustos 2011, Bustos, Silva, and Verhoogen 2018). Further, export incentives are associated with improvements in the allocation of resources within sectors. This suggests that while in the short term the average firm in the sector loses, high-productivity exporters may be benefiting, resulting in sector-

level efficiency gains. However, most export subsidies are prohibited under international trade rules and can spark retaliatory measures by other countries, potentially diluting their medium-term benefits.

Figure 1. Industrial Policies and Firm Performance (Percent)



Sources: BvD Orbis database; and Juhász and others (2023). Note: All panels estimate the impact of IPs using the local projection method. The dependent variable is log difference of firm-level outcome over the specified horizon, while key independent variable is change in number of IPs in a sector and country. Panel 2 interacts change in IPs with dummies for whether the firm lies in the first, second, or third tertiles of age and cash flow to assets ratio distributions. CF = cash-flow to assets ratio; CI = confidence interval; TFP = total factor productivity; VA = value added.

...and on sectoral and firm characteristics

Beyond instruments, the link between IPs and economic outcomes is also shaped by the characteristics of the sectors they target. We find that IPs are more strongly associated with improvements in firm-level value added and capital accumulation when they are directed at highly distorted sectors — those exhibiting high markups and greater reliance on external finance — and at sectors that are upstream in the production network (Figure 2). Focusing support on such sectors may lead to greater efficiency gains by alleviating binding frictions. Sectoral distortions are particularly relevant for sectors associated with the green transition, making them more appealing targets of IPs. Similarly, targeting upstream sectors, which supply inputs to a broad set of downstream industries, can generate positive spillovers along the value chain and amplify the macroeconomic impact of IPs. These findings underscore the importance of strategic sectoral selection when deploying IPs and suggest that better outcomes could be achieved when interventions are guided by sound diagnostics of structural bottlenecks and intersectoral linkages.

Our results also highlight how the relationship between IPs and firm performance varies across different firms within targeted industries. While we cannot track which firms are targeted by policies, IPs often target specific firms, especially those perceived to face larger frictions (Juhász and others 2023). Motivated by this, we explore heterogeneity along two key dimensions: firm age and the cash-to-assets ratio, a proxy for credit constraints. We find that the positive link between domestic subsidies and firm-level outcomes is typically stronger for younger firms (Figure 1, panel 2). Specifically, younger (older) firms experience a 2 percent (0.5 percent) increase in value added in one year. Similarly, more credit constrained firms exhibit larger increases in capital after the introduction of a subsidy. In the case of export incentives, younger and more credit-constrained firms tend to experience smaller short-term declines in value added and TFP, as well as faster and stronger recoveries. These patterns suggest that protective IPs may generate heterogeneous effects across firms, creating potential winners and losers through shifts in market shares and the reallocation of factors of production. This is an important dimension that has to be factored in when assessing the welfare implications of industrial policies.

Cross-country spillovers and retaliation may dilute IPs' potential benefits

Beyond domestic considerations, IPs can negatively affect trading partners by distorting relative competitiveness, which can fuel a tit-for-tat dynamic. In fact, evidence in Evennett et al. (2024) suggests that the recent wave of IPs has been characterized by a tit-for-tat dynamic, where countries are more likely to introduce IPs when other countries are conducting IPs. This pattern, in turn, can erode the benefits for countries implementing.

Indeed, we find that the association between protectionist IPs and firm-level performance is adversely affected by the intensity of IP activity in other countries. In particular, the estimated association between protectionist subsidies and firm value added in the targeted industry shrinks as other countries (specifically those that are distant from a geopolitical point of view) introduce protective IPs targeting the same industry. A similar finding, albeit less statistically robust, is found for export incentives.

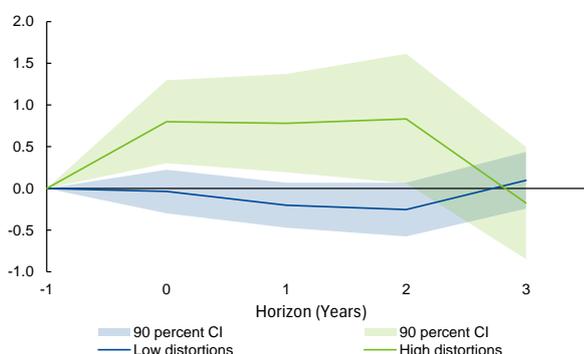
Trade-liberalizing IPs, a special case

In addition to identifying policies restricting trade flows, which are most commonly associated with IPs, the global trade alert (GTA data), from which our IP data is constructed, also records policies that are deemed to foster trade flows. This happens, for example, when countries remove trade barriers affecting a product.

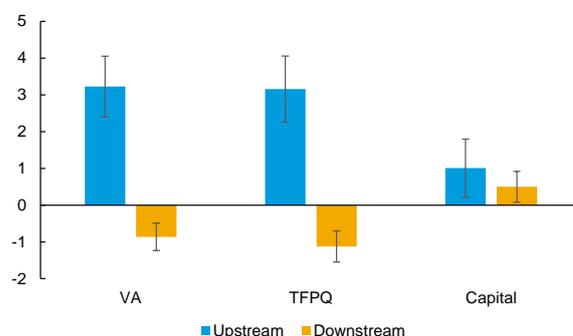
Our results show that trade-liberalizing IPs are associated with higher firm productivity and value added in the medium term, with a negligible change in the stock of capital. The positive association between liberalizing trade conditions and firm productivity and value added relates to a long-standing literature on how lower trade barriers can strengthen competition in the liberalized sectors, inducing firms to leverage economies of scale, improve efficiency, and innovate (Helpman and Krugman 1985; Melitz 2003, Aghion and et al., 2005). Differently from export incentives and domestic subsidies, which are targeted in nature, liberalizing trade barriers yield improvements in firm performance that are more widespread compared to those seen after the implementation of protective IPs. Indeed, liberalizing policies appear to have a more homogeneous effect across firms compared to protective IPs. This may reflect that these policies are less targeted, and their direct impact is more widespread.

Figure 2. Industrial Policies and Sector Characteristics
(Percent)

IPs and Firm VA: The Role of Sectoral Distortions



IPs along the Value Chain and Firm Performance



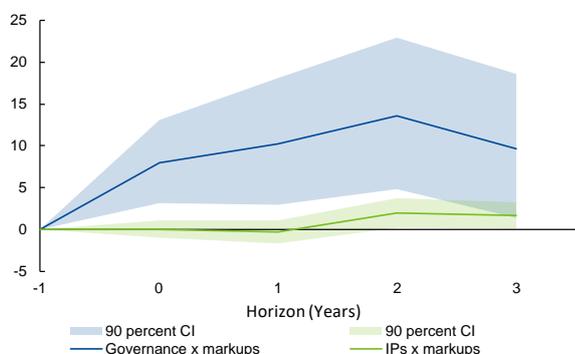
Sources: BvD Orbis database; and Juhász and others (2023). Notes: Panel 1 shows results of a local projection estimation where the dependent variable is the log difference in firm-level VA. IPs coefficient is interacted with both sector-level markups and external financial dependence. The figure plots the interactions evaluated at the 75th percentile of each distortion (high distortion) and at the 25th percentile (low distortion). Panel 2 shows estimates of IPs impact along the value chain following the local projection method, where the dependent variable is the log difference in the outcome variable three years after policy change. CI = confidence interval; TFPQ = total factor productivity quantity; VA = value added.

Beyond targeted interventions: The case for structural reforms

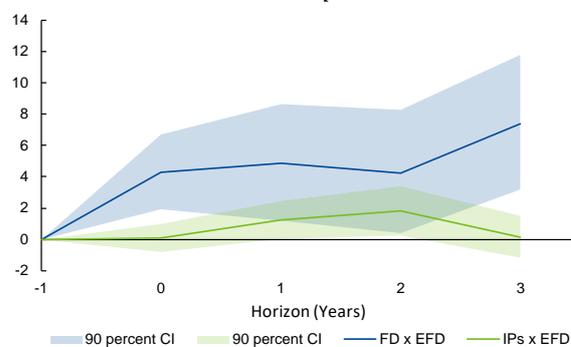
In Baquie and others (2025) we highlight how structural policies expanding access to credit and improving governance by tackling corruption are, on average, more effective at addressing distortions than IPs (Figure 3). Further, structural policies typically apply to all sectors, generating large positive effects that are shared across sectors, without the risks of misallocation and capture associated with IPs. Structural reforms are also generally less fiscally burdensome, making them an attractive option for countries with limited budgetary space. Moreover, in the case of emerging markets and developing economies (EMDEs), structural factors, especially good governance and high levels of education, are found to enhance the effectiveness of IPs by fostering the institutional and market conditions needed for targeted support to translate into sustained productivity gains. These findings underscore that while IPs may be warranted in some cases, structural reforms remain foundational.

Figure 3. Industrial Policies and Structural Reforms
(Percent)

Comparing the Impact of IPs and Improvements in Governance on VA



Comparing the Impact of IPs and Improvements in the Financial Development on VA



Sources: BvD Orbis database; Juhász and others (2022).

Note: The dependent variable is the log difference of the sectoral-level value added over the horizon considered and the variables of interest are the interaction between the change in industrial policies (IPs) and sectoral characteristic (markups or external financial dependence) and the interaction between the same sectoral characteristics and the structural variables (business environment or financial development). See Baquie and others (2025) for details. CI = confidence interval; EFD = external financial dependence; FD = financial development; IPs=industrial policies; and VA = value added.

Handle with care

Our analysis underscores that while IPs can improve competitiveness, their economic benefits are typically moderate and uneven, and depend critically on the design, targeting, and implementation of the intervention. Moreover, IPs require good governance and implementation capacity to mitigate the risks of mis-targeting and of capture by private or political interests. Thus, the appropriate use of IPs hinges on a careful assessment of their benefits, costs, and risks, and should include a clear justification of IPs’ objectives and use case and compatibility with macroeconomic stability (debt sustainability as well as balance of payments and domestic stability) and with the country’s legal commitments (for example, WTO commitments) (see IMF, 2024). Further, they should be well-targeted and temporary (with appropriate sunset clauses), and their desirability should be assessed against alternative policies (for example, structural “horizontal” policies) that could achieve a similar outcome.

Indeed, our results highlight that structural reforms generally yield larger and more consistent gains than IPs, with likely lower fiscal and allocative costs. As such, they should serve as the foundation of any pro-growth strategy. Even when desirable, IPs are more effective when implemented in conjunction with structural reforms — such as measures that improve institutional quality, access to credit, and business conditions — which both amplify their impact and address economy-wide frictions. A balanced approach — anchored in strong horizontal reforms and complemented, where appropriate, by well-calibrated IPs targeting sectors with clear distortions and potential positive spillovers— offers the greatest promise for achieving sustained, inclusive growth.

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