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The Long-term Strategist

Industrial policy, deglobalization and strategic asset allocation

Long-term Strategy
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- **Industrial policies have become more prevalent globally since the GFC, with particularly rapid growth since 2017 as governments seek to reduce dependence on foreign suppliers by boosting domestic production. This trend is likely to continue in an era of resurgent strategic competition.**
- **The most common forms of industrial policy are trade finance measures, state loans, and financial grants. Industrial policy is globally concentrated, and more prevalent in higher-income countries. Tariffs are no longer the principal instrument of industrial policy. Industrial policy is most commonly used in heavy and high-tech industries.**
- **Empirical evidence suggests that it will probably increase aggregate employment, investment, R&D, innovation, and output. There is no evidence of effects on margins, so increases in revenues translate into increases in earnings. Pecuniary benefits also directly raise profits.**
- **In an era of resurgent strategic competition, industrial policies are likely to be pursued competitively by countries. Thus, it is most likely to be effective in countries with large economic mass, fiscal capacity, and effective governance. Competitiveness will be harmed in countries without this capacity.**
- **Based on these criteria, the US, China, and the EU are most likely to effectively pursue industrial policy. However, industrial policy in China is pursued to a large degree through state-owned enterprises, with probable adverse impacts on private enterprise. EM ex-China is unlikely to be able to effectively marshal sufficient resources to compete.**
- **Any global resurgence in industrial policy has implications for strategic asset allocators in several dimensions. It should affect sector allocations, country allocations, and allocations to small versus large caps.**
- **Industrial policy is likely to benefit Information Technology, Industrials, Energy and Basic Materials. This is *one motivation* for a strategic equity overweight on these sectors in the US and the EU, but an underweight on these sectors in competing EM countries. This is also an argument for a strategic overweight on the US and the EU.**
- **The largest benefits of industrial policy should accrue to small-cap equities, since it can alleviate financial constraints, which more frequently affect smaller companies. Large caps are also more likely to incur costs associated with countervailing duties or market access restrictions.**

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In recent reports, we have argued that deglobalization is not yet a reality, but rather a risk grounded in growing government wariness of dependence upon other non-aligned countries for critical goods and services. This wariness is motivating governments to enact industrial policies aimed at stimulating the domestic innovation and production of these strategic goods and services. In the US, the recent passage of legislation that provides considerable support to sectors perceived to be of national strategic significance, such as the Inflation Reduction Act and the CHIPS and Science Act, suggests it is likely that there will be resurgence of industrial policy in an era of **intensifying strategic competition**. As the Inflation Reduction Act reveals, industrial policy is also motivated by a desire to support innovation to mitigate climate change.

Historically, industrial policy has primarily been used as a macroeconomic tool to promote development or to preserve economic activity in moribund industries. While there are notable instances of successful use as a development strategy, such as in South Korea, industrial policy came to be seen as an inefficient tool of supporting inviable industries. The renaissance of industrial policy, however, is not motivated by a desire to preserve declining industries.

In this paper, we consider the implications of a resurgence of industrial policy for a strategic asset allocator. Based on empirical evidence, industrial policy is likely to affect asset allocation decisions along several dimensions. Firstly, industrial policy is skewed towards certain industries, and thus influences sector selection. Secondly, industrial policy has demonstrable aggregate consequences, thereby influencing country selection. Thirdly, industrial policy likely has heterogeneous effects on firms of different size, with implications for allocations to small versus large caps.

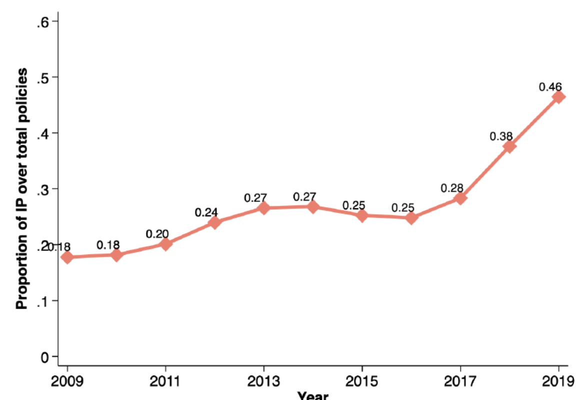
Landscape of industrial policy

While geostrategic competition is perceived to have intensified in recent years, there is evidence that industrial policy has been **globally resurgent since the Global Financial Crisis**. Juhász, et al. (2022) classify commercial policies recorded in a large global policy database using text analysis techniques and find that the share of commercial policies that constitute industrial policy increased from 18% in 2009 to 46% in 2019, with the most dramatic increases occurring since 2017.[1]

Different forms of industrial policy are likely to have different implications for an investor. For instance, **industry nationalization** almost certainly has adverse implications for private enterprise. This approach has fallen into relative disfavor in developed economies with waves of economic liberalization and privatization since the 1980s. More recently, industrial policy more commonly entails the provision of **R&D subsidies, investment grants, low interest loans, loan guarantees, tax exemptions or holidays, and trade protection**. Juhász et al. (2022) show that, in recent years, overwhelmingly the most common forms of industrial policy have been trade finance measures, state loans, and financial grants. While the US-China trade war has highlighted the possible role of **tariffs**, they no longer represent the principal instrument of industrial policy.

Figure 1: Proportion of commercial policies classified as industrial policy

Annual, 2009-2019.



Source: Juhász, Lane, Oehlsen and Pérez (2022).

Juhász et al. (2022) also find that the use of industrial policy is heavily concentrated across countries and is more common in more developed countries. This is consistent with an argument that "implementing many of the most common forms of IP will almost surely **require high levels of fiscal and administrative capacity**" (p. 23).

Industrial policy is also typically used in a relatively small number of sectors, mostly in **heavy and high-technology industries**. For example, Juhász et al. (2022) find that steel, electrical machinery and equipment, vehicles, chemicals, and raw materials are among the most commonly targeted sectors. If geostrategic competition drives the proliferation of industrial policies into the future, it is very likely that this sectoral bias will persist.

[1] Réka Juhász, Nathan Lane, Emily Oehlsen and Verónica Pérez, The Who, What, When, and How of Industrial Policy: A Text-Based Approach (2022) *Working Paper*.

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To whom industrial support is provided varies. Some industrial policies entail the provision of support to particular firms within industries, while others entail the wholesale support of entire industries regarded as strategically significant. In the former case, government support likely provides a competitive advantage to the detriment of competitors of the recipient, with the implication that investors may be compelled to "pick winners." To date, the majority of industrial policies have been **directed towards specific firms** (Juhász et al., 2022). However, since the probable resurgence in industrial policy is motivated first and foremost by national strategic priorities, it is more likely that forthcoming support will be **directed towards domestic industries broadly**, rather than specific companies within those industries. While specific firms may avail themselves of some benefits like R&D grants, it is reasonable to expect that all domestic producers in an industry would be eligible for such support. The structuring of recently adopted policies in the US appears broadly consistent with this argument.

Effects of industrial policy

The effects of these policies are debatable. However, we consider it a reasonable presumption that some forms of industrial support – including the most common instruments, such as grants and concessional loans – **ought to directly benefit a recipient**. For our purposes, we focus on the costs or benefits of industrial policy from the perspective of an investor, rather than the aggregate economic efficiency of these measures.

Here, we assess the **most recent empirical evidence** on the effects of various forms of industrial policy. To distinguish between barriers to trade and other instruments of industrial policy, we shall refer to industrial policy which specifically confers some pecuniary benefit as "*pecuniary industrial policy.*"

The balance of the evidence suggests that **direct or indirect subsidies can increase aggregate employment, investment, R&D, innovation, and output, though evidence is more mixed with respect to productivity**.[2] In some cases, these outcomes persist only for so long as policy support is maintained, but some targeted interventions can yield long-term effects if they allow the realization of a latent comparative advantage, as is argued with respect to South Korea's Heavy-Chemical Industry (HCI) Drive.[3]

While research establishes that pecuniary industrial policy can have aggregate effects, there is evidence that these **effects are strongest in smaller firms** with more binding financial constraints.[4] For example, research suggests that Small Business Innovation Research (SBIR) grants from the US Department of Energy have positive causal effects on small firm patenting, revenue, the likelihood of successful capital-raising, and survival rates, especially in emerging high-tech sectors.[5] Large firms appear less responsive to policy incentives as they are relatively less likely to be bound by financial constraints.

There is less evidence about the effect of industrial policy on **industry competitiveness and profit margins**. On one hand, if policies disproportionately benefit small enterprises, they may have pro-competitive effects, plausibly reducing margins for larger incumbents. On the other hand, if supportive policies were targeted towards large incumbents, their effect would likely be anti-competitive. Empirically, there is evidence that South Korea's HCI Drive had no statistical effect on margins (Choi and Levchenko, 2022). If margins are unaffected by broad industry-wide policy support, increases in revenue imply increases in corporate profits. Moreover, financial transfers, such as grants and targeted tax cuts, ought to have a direct positive effect on profitability, even if they are otherwise ineffective.

On the margin, the evidence surveyed above suggests that **pecuniary industrial policy is very likely to have a positive effect on recipient firms**. This does not necessarily imply that industrial policy has positive aggregate effects on an industry, or corporates at the economy more broadly, since industrial support may be wasteful or worsen distortions, leading to the misallocation of capital towards firms or industries

[2] See, for example, Chiara Criscuolo, Ralf Martin, Henry Overman and John Van Reenen, Some Causal Effects of an Industrial Policy (2019) 109(1) *American Economic Review* 48-85; Philippe Aghion, Jing Cai, Mathias Dewatripont, Luosha Du, Ann Harrison and Patrick Legros, Industrial Policy and Competition (2015) 7(4) *American Economic Journal: Macroeconomics* 1-32.

[3] See, for example, Jaedo Choi and Andrei Levchenko, The Long-Term Effects of Industrial Policy (2022) *NBER Working Paper #29263*; Minho Kim, Munseob Lee and Yeongseok Shin, The Plant-Level View of an Industrial Policy: The Korean Heavy Industry Drive of 1973 (2021) *NBER Working Paper #29252*.

[4] See, for example, Raffaello Bronzini and Eleonora Iachini, Are Incentives for R&D Effective? Evidence from a Regression Discontinuity Approach (2014) 6(4) *American Economic Journal: Economic Policy* 100-134.

[5] Sabrina Howell, Financing Innovation: Evidence from R&D Grants (2017) 107(4) *American Economic Review* 1136-1164.

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producing a low return to capital. However, it is likely that the most productive firms will retain a competitive advantage over unproductive firms, and therefore remain capable of maintaining or growing market share, when industrial support is broadly targeted at an industry. Thus, the weight of the evidence suggests, in our view, that **industrial policy is likely beneficial to both recipient firms and industries**.

Special consideration must be given to industrial policy implemented by raising barriers to trade, such as tariffs. While raising barriers to trade is typically regarded as beneficial for protected industries, empirical evidence indicates that it adversely affects other industries reliant upon inputs produced by the protected industry. There is no evidence to suggest this is the case with pecuniary industrial policy. Thus, in our view, **pecuniary industrial policy is more likely to be beneficial to corporates in general at the country level than trade protection**.

The discussion thus far has considered the first-order effects of more aggressive pursuit of domestic industrial policy. In practice, **other countries will likely feel compelled to pursue their own industrial policies in an attempt to preserve domestic competitiveness** – as is evidenced by recent US and Chinese actions in support of semiconductor development and manufacturing. To the extent that this intensifies foreign competition, this could partially or even wholly neutralize the presumptive positive effects of industrial policy for domestic producers.

Thus, industrial policies are most likely to be beneficial for industries in countries with the greatest absolute capacity to pursue those policies. In all likelihood, this capacity will be governed by economic mass and fiscal capacity. By these criteria, **industrial policy is most likely be effective in the US, China, and the European Union**. However, industrial policy in China is pursued to a large degree though state-owned enterprises, with the implication that intensification of industrial policy is more likely to adversely affect private enterprises, to the detriment of investors. While Japan is a large economy, it has diminished fiscal capacity due to the level of public debt. Outside of China, many EM countries are unlikely to be able to marshal sufficient resources to compete in this domain. Furthermore, effective implementation of industrial policy may depend on administrative capacity and effective governance. Based on the World Bank's *Worldwide Governance Indicators*, governance effectiveness, regulatory quality, the rule of law and control of corruption are weaker on average in EM countries.

Additionally, industrial policy is most likely to be vigorously pursued in countries or blocs with the strongest abiding interests in preserving strategic autonomy, such as the US, China, and the European Union. It is conceivable that this may be a weaker priority in non-aligned countries not directly involved in geostrategic competition. Finally, as recent consultation on the Inflation Reduction Act reveals, there is a prospect that the US and the EU may seek to reduce the degree to which their industrial policies adversely affect one another given perceived strategic alignment, reinforcing the argument that they may be best positioned to realize benefits from the perspective of an investor.

Implications for strategic asset allocation

Based on this empirical evidence, we now consider the likely effects of a resurgence of industrial policy on various strategic asset allocation decisions. We discuss overweights and underweights *motivated by industrial policy* from an international CAPM baseline in which an asset allocator invests in the whole market in all countries. As discussed above, countries have different capacities and inclinations to pursue competing industrial policies. Thus, as we discuss below, the effects of global industrial policy growth on asset allocation ought in general to differ across countries.

Sector allocations

Sectoral biases in industrial policy are likely to persist as countries seek to support industries perceived to be of strategic significance in light of renewed geostrategic competition. Based on the sectoral composition of industrial policy reported by Juhász et al. (2022) and revealed policy priorities, this is likely to include the Information Technology, Industrials, Energy, and Basic Materials sectors. All else being equal, intensifying industrial support within a country is more likely than not to support earnings growth and equity returns in these sectors, conditional upon that support being provided to private enterprise, which is less likely in China.

In some countries, this is one force motivating a strategic overweight of these sectors relative to an investor's benchmark. As discussed above, these effects are likely to be concentrated in economies with the greatest capacity and inclination to provide effective support – likely the US and the EU. In countries with less capacity, particularly in EM, any growth in industrial policy at a global level is likely to *adversely* affect returns in these sectors in particular, as domestic industries struggle to

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compete with international competitors receiving increasing support. Thus, the sectoral implications of industrial policy are likely to differ across countries, even if they share comparable objectives. These arguments are summarized in the first row of Table 1.

For the avoidance of doubt, note that this discussion relates to the effect of industrial policy on sector relative performance. These effects do not necessarily imply that portfolios should have strategic overweights on targeted sectors once all other considerations are taken into account. For example, we have argued in the past for a strategic overweight on Health Care on the basis of sustained outperformance of that sector. In our view, this overweight is warranted regardless of the prevalence or effects of industrial policy.

Country allocations

Industrial policy may plausibly affect local currency and USD returns on both equities and bonds. As was argued above, it is necessary to distinguish between various forms of industrial policy. Pecuniary industrial policy is likely to be beneficial for the equity market of a country since there are very likely positive effects on recipients, but adverse effects on non-recipient industries are likely to be limited. However, raising barriers to trade may adversely affect the equity market in general due to spillover effects of higher input prices. Broadly construed, industrial policy is more likely than not to benefit the equity markets of countries with the capacity and inclination to pursue these policies (ex-China) given the general policy bias towards pecuniary support measures. In our view, there is little reason to anticipate that industrial policy would affect local currency returns on bonds.

These benefits would likely come at the expense of competitiveness, and consequently equities, in countries with less fiscal and administrative capacity. Further, there is good reason to think that more aggressive pursuit of industrial policies in developed markets may adversely affect growth prospects in EM ex-China. Typically, heavy and high-tech industries grow as a share of economic activity up to relatively high levels of development, unlike lighter industries such as textiles or food processing (Wise, 2021).[6] Due to the relatively high rate of productivity growth in these higher-end industries, this hierarchical process of industrialization is an engine of growth for developing countries. An inability to effectively pursue industrial policy would likely weigh on this hierarchical industrialization in developing countries, plausibly aggravating the middle-income trap. As it stands, production in these high productivity growth industries is already globally concentrated in a small number of countries. To conclude, as summarized in Table 1, a global proliferation of industrial policy is likely to benefit equities as a whole in the US and the EU, with adverse effects in EM.

The other relevant consideration for country selection is the effect of industrial policy on currencies. In our judgment, industrial policy is unlikely to have first-order effects on exchange rates. As we have previously observed, the most reliable predictive signal for long-run changes in exchange rates is the real exchange rate.[7] While there may be growth effects of industrial policy, as discussed above, differences in economic growth do not generally help predicting exchange rate changes over a long horizon. Thus, any resurgence of industrial policy does not warrant adjustment of our exchange rate predictions recently published (see Long-term forecasts: Update January 2023, Alexander Wise and Jan Loeys, January 6, 2023).

Style allocations

Based on empirical evidence presented above, it is likely that broadly targeted industrial policy is relatively more advantageous for small caps than large caps. While firms of all sizes may avail themselves of benefits, these benefits are more likely to alleviate financing constraints that likely particularly limit the growth of smaller firms.[8] Moreover, more trade-exposed large caps are more likely to incur costs associated with countervailing duties or market access restrictions. Along this dimension, the qualitative effect of industrial policy is likely to be uniform across countries, even in EM countries with less capacity to effectively implement industrial policy. The magnitude of those effects, however, will vary in accordance with that capacity.

[6] Alexander Wise, Manufacturing Hierarchies and the Concentration of Industrial Activity (2021) *Working Paper*.

[7] See Alexander Wise and Jan Loeys, Long-Term FX Forecasts, December 14, 2021.

[8] See, for example, Raffaello Bronzini and Eleonora Iachini, Are Incentives for R&D Effective? Evidence from a Regression Discontinuity Approach (2014) 6(4) *American Economic Journal: Economic Policy* 100-134; Chiara Criscuolo, Ralf Martin, Henry Overman and John Van Reenen, Some Causal Effects of an Industrial Policy (2019) 109(1) *American Economic Review* 48-85.

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Figure 2: Effects of global resurgence in industrial policy on strategic portfolios
Overweights and underweights are based only on the effects of resurgence in industrial policy, without regard to other considerations.

Allocation decision	Overweight	Underweight
Sector allocations	Information Technology, Industrials, Energy, Basic Materials equities in US and Europe	Information Technology, Industrials, Energy, Basic Materials equities in EM
Country allocations	US and Europe	EM
Style allocations	Small-cap equities	Large-cap equities

Sources: J.P. Morgan.

Since there is a sectoral bias in industrial policy, it is important to consider whether there are differences in the sectoral composition of small versus large caps. For example, if the targeted sectors constituted a larger capitalization share of large caps than of small caps, this could implicitly reverse the relative benefit accruing to small caps. To that end, we assess the sector market capitalization shares of the S&P 500 and the Russell 2000 indices. Summing across the Information Technology, Industrials, Energy, and Basic Materials sectors, the market capitalization share is 43% in the S&P 500 and 39% in the Russell 2000. Given these shares can vary materially even on a daily basis, we regard these shares as comparable. Consequently, it remains likely that benefits of industrial policy will accrue disproportionately to small caps.

Conclusion

Industrial policies have become more prevalent globally since the GFC, with particularly rapid growth since 2017. This trend is likely to continue in an era of resurgent strategic competition. The most common forms of industrial policy are trade finance measures, state loans, and financial grants, while tariffs are no longer the principal instrument of industrial policy. Industrial policy of this form is globally concentrated, more prevalent in higher-income countries, and most commonly used in heavy and high-tech industries.

Any global resurgence in industrial policy is likely to affect strategic asset allocation along several dimensions – sector allocations, country allocations, and small-cap allocations. Since industrial policy is globally competitive, the effects are likely to vary across countries based upon differences in their fiscal and administrative capacity to effectively implement such policies. Based on these criteria, the US, China, and the EU are most likely to effectively pursue industrial policy. However, industrial policy in China is pursued to a large degree through state-owned enterprises, with probable adverse impacts on private enterprise. EM ex-China is unlikely to be able to effectively marshal sufficient resources to compete.

Industrial policy is likely to benefit the Information Technology, Industrials, Energy and Basic Materials sectors. This is one motivation for a strategic equity overweight on these sectors in the US and the EU, but an underweight on these sectors in competing EM countries. This is also an argument for a strategic overweight on the US and the EU. The largest benefits of industrial policy should accrue to small-cap equities, since it can alleviate financial constraints, which more frequently affect smaller companies. Large caps are also more likely to incur costs associated with countervailing duties or market access restrictions.

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