#### SPECIAL ISSUE ARTICLE

# Tariffs versus Subsidies: Protection versus Industrial Policy

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### Abstract

In 2025, the United States raised tariffs to rates not seen for more than a century. These tariffs were not part of a carefully designed industrial strategy. Instead, the second Trump administration distanced itself from existing industrial policy initiatives and indicated a desire to roll back government-funded subsidies for businesses. This article examines the rationale behind the United States' pivot from subsidies to tariffs and explores implications for trade partners and multilateral institutions.

Keywords: trade; tariffs; subsidies; industrial policy

#### 1. Introduction

In 2025, the United States raised tariffs to rates not seen in more than a century. These tariffs are best understood not as components of a coherent industrial strategy, but as a departure from recent efforts to bolster specific sectors of the US economy through a coordinated mix of policy instruments – notably, subsidies.¹ During the Biden administration, major legislative initiatives, including the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act and the Inflation Reduction Act (IRA), provided subsidies to incentivize the expansion of certain sectors of the US economy.

These government subsidies prioritized the acceleration of the green energy transition and the diversification of supply chains, with an emphasis on strategic industries such as semiconductors. This element of the Biden administration's economic agenda was, in part, a response to China's industrial strategy. In 2015, the Chinese government launched *Made in China 2025*, a ten-year, state-led initiative designed to modernize its manufacturing base and develop expertise in 10 advanced industries, including electric vehicles and artificial intelligence. To realize these objectives, China employed various policy tools, including government-funded subsidies.

The United States' response to China's industrial strategy catalysed a resurgence of interest in industrial policy, which rose to the forefront of economic policy debates within national governments and multilateral institutions, including the World Trade Organization (WTO). In September 2023, the WTO held an informal retreat focused on industrial policy, and in 2024, the WTO, led

<sup>&</sup>lt;sup>1</sup>Subsidies are a financial contribution by a government or public body that confers a benefit on its recipients (World Trade Organization, 2006). Subsidies can take many forms, including cash grants, tax breaks, loans at below-market interest rates, loan guarantees, capital injections, and below-cost or free inputs, such as land and power (Rickard, 2018).

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by Canada and supported by a diverse range of Members, launched an informal, ongoing industrial policy dialogue.<sup>2</sup> In May 2023, nearly three-quarters of chief economists from both the public and private sectors, including from various financial institutions, multinational corporations, and international organizations, said they expected industrial policy to become a 'widespread global approach to economic policy over the next three years.<sup>3</sup>

Today, however, the future of industrial policy is less certain. The second Trump administration's policies represent a sharp break with the Biden-era subsidies and industrial policies. Three observations support this interpretation. First, many of the 2025 tariffs, including the 10% 'baseline tariff' and many of the country-specific tariffs, apply across the board to nearly all imported goods. This blanket approach lacks the selectivity associated with industrial policies, which aim to prioritize certain economic activities over others (Juhász et al., 2023). Industrial policy provides support to select industries, firms, or types of economic activity in order to influence the structure of a country's economy (Agarwal, 2023). Yet, many (but not all) of the 2025 US tariffs lack such selectivity.

Second, many of the 2025 tariffs operate in isolation from other policies. Coherent industrial policy frameworks typically integrate multiple instruments, including subsidies. However, many of the 2025 tariffs are not embedded in a broader policy architecture. Furthermore, the second Trump administration has indicated a desire to roll back subsidies for businesses. Third, the stop–start announcement (and implementation) of the 2025 tariffs casts doubts on any strategic intention to induce long-term structural change in the US economy.

In sum, the 2025 tariffs reflect a pivot away from subsidies and industrial policy towards tariffs and protectionism. In response, some countries may reassess their own subsidies and industrial policy ambitious. Others may accelerate or expand their industrial policies in an effort to protect domestic producers from US tariffs. This article examines the potential rationales behind the US pivot and possible international responses.

# 2. Selective Tariffs as Industrial Policy

Tariffs can serve as a tool of industrial policy. Historically, some countries used tariffs to protect and develop infant industries, and in recent years, the European Union has proposed targeted tariffs to support the green energy transition. A key characteristic of these tariffs is their selectivity.

Some of the 2025 US tariffs target specific sectors. In February 2025, for example, President Trump announced plans to increase steel and aluminium tariffs by removing exemptions from the 2018 tariffs and raising aluminium tariffs from 10% to 25%. In April 2025, a 25% tariff on nearly all imported automobiles was implemented and in July Trump announced a 50% tariff on imported copper.<sup>5</sup> These selective tariffs more closely resemble traditional industrial policy than the across-the-board 10% 'baseline' tariff applied to virtually all foreign imports.

## 3. Selective Subsidies as Industrial Policy

Subsidies can also be used as tools of industrial policy, and selective subsidies featured prominently in the Biden administration's economic agenda.

<sup>&</sup>lt;sup>2</sup>This workstream is sometimes referred to as 'Member Conversations on Current Economic Issues'. The seventh session in this series was hosted by Ecuador and Korea in June 2025.

<sup>&</sup>lt;sup>3</sup>In a survey by the World Economic Forum fielded in May 2023, www.weforum.org/publications/chief-economists-outlook-may-2023/.

<sup>&</sup>lt;sup>4</sup>This goal is often pursued to advance certain public objectives, such as accelerating technological innovation or fostering regional development.

<sup>&</sup>lt;sup>5</sup>Even more sector-specific tariffs may be on the way.

## 3.1 Inflation Reduction Act

The Inflation Reduction Act (IRA) allocated approximately \$369 billion for subsidies over 10 years to accelerate the green energy transition by supporting renewable energy production (e.g., solar and wind), electric vehicles (EVs), and energy efficiency improvements for homes and businesses. Tax credits and rebates, two types of subsidies, were made available to encourage the adoption of clean technologies, benefiting both consumers and manufacturers, particularly in the EV sector.

The subsidies encouraged private investment in clean technologies (e.g. Willner et al., 2023; Corbyn, 2024).<sup>6</sup> Much of this investment, nearly 80%, went to Republican-held areas.<sup>7</sup> Despite this, President Trump and members of his administration criticised the Act and stated their intentions to modify its provisions. On 17 August 2023, in an interview with Larry Kudlow on Fox Business, Trump referred to the IRA as 'killing our country', and in September 2024, during a speech at the Economic Club of New York, Trump vowed to 'rescind all unspent funds under the misnamed Inflation Reduction Act', characterizing it as a 'Green New Scam'.

On his first day back in office in January 2025, Trump ordered a 90-day review of the IRA, effectively pausing disbursements of subsidies. Many court cases subsequently ensued, including private litigation by firms who had won contracts and expected to receive subsidies. In April 2025, a federal judge ordered the release of IRA subsidies. The Office of Management and Budget subsequently directed federal agencies to 'take immediate steps' to resume funding. Columbia's Sabin Center for Climate Change Law reported that disbursements resumed for some recipients, but others remained waiting.<sup>8</sup>

In May 2025, the Republican-controlled House of Representatives voted principally along party lines to cut many of the clean energy subsidies in the IRA. Key provisions of the legislation included a rapid phase-out of investment and production tax credits. Subsidies for electric vehicles, hydrogen energy, and residential solar were scheduled to expire at the end of 2025. While some sectors – such as nuclear energy and advanced manufacturing – were spared from cuts, the overall package represented a sharp policy shift with an aggressive rollback of climate-related subsidies. The news triggered an immediate fall in shares of clean energy companies.

### 3.2 The CHIPS and Science Act

President Trump and members of his administration also expressed critical views of the subsidies included in the CHIPS and Science Act, which was signed into law by President Biden in August 2022. The program was designed to boost domestic semiconductor manufacturing and strengthen American supply chains. It authorized roughly \$280 billion in funding, including subsidies for chip manufacturing, investment tax credits, and funding for semiconductor research and workforce training.

Although the CHIPS and Science Act aligns with some of Trump's stated policy goals, such as bringing jobs back to America and diversifying US supply chains, he nevertheless described it as 'horrible' during his address to Congress in March 2025. He argued that the funds allocated for CHIPS subsidies should instead be used to reduce the national debt. He also said

<sup>&</sup>lt;sup>6</sup>See also the Clean Investment Monitor by Rhodium Group, www.cleaninvestmentmonitor.org.

<sup>&</sup>lt;sup>7</sup>According to Atlas Public Policy, www.theguardian.com/us-news/2025/mar/31/clean-energy-spending-republicans-trump.

<sup>8</sup>https://climate.law.columbia.edu/.

<sup>&</sup>lt;sup>9</sup>Two Republicans voted against the bill; another fell asleep.

<sup>&</sup>lt;sup>10</sup>On July 4, 2025, Trump signed the One Big Beautiful Bill Act, which repeals many of the IRA subsidies including the \$7,500 tax credit for purchases of electric vehicles (EVs). The legislation also repeals subsidies for wind and solar projects that do not begin construction within a year of the bill's passage or become fully operational by 2028.

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imposing tariffs on imported semiconductors would be more effective than subsidies to encourage domestic production. These comments illustrate Trump's desire to pivot from subsidies to tariffs.

## 4. Tariffs versus Subsidies

What explains the shift in US policy away from subsidies towards tariffs? One straightforward explanation is fiscal: tariffs generate revenue, while subsidies require government financing. Concerns about the size of the federal budget may account, at least in part, for the administration's preference for tariffs over subsidies. A fixation on bilateral trade deficits is likely also part of the story. These two factors have been widely discussed. I explore four other potential explanations that may shed additional light on the rationale behind the United States' pivot.

# 4.1 Distributive Consequences: Who Pays?

Although both tariffs and subsidies have distributive consequences, their effects differ (Mayer and Riezman, 1990). Subsidies are financed through general taxation, meaning that all taxpayers contribute to them regardless of the goods a taxpayer consumes. In contrast, tariffs raise the price of imported goods, placing the burden of supporting domestic producers on people who consume the taxed product (Baldwin, 1989; Clausing and Lovely, 2024).

Tariffs also raise the production costs for firms that rely on imported inputs. A tariff on imported graphics processing units (GPUs), for example, increases costs for downstream producers who use these components in their products, such as manufacturers of gaming consoles, PCs, and smart phones. Subsidies for domestic GPU production, by contrast, do not raise input prices and in some cases, may even lower input costs.

In short, tariffs entail side effects (i.e. consumption costs) that subsidies do not. From an efficiency standpoint, subsidies funded by lump-sum taxes therefore dominate tariffs (Baldwin, 1989). Why, then, does the Trump administration favour tariffs over subsidies?

## 4.2 Electoral Politics: Taxing to Win

Electoral politics may offer one explanation for the administration's preference for tariffs. Voters living near industries protected by tariffs implemented by Trump in 2018 during his first term were more likely to vote to re-elect Trump in 2020, and more likely to elect Republicans to Congress (Autor et al., 2024). The introduction of new tariffs in 2025 may be an effort to reproduce these electoral effects – if not to benefit Trump himself, given the constitutional two-term limit, then perhaps as a strategy to bolster Republicans' prospects in Congress and secure long-term partisan success. However, it is unclear whether the new tariffs will generate similar electoral benefits. Because the new tariffs are different in both scale and scope, they may not produce the same political effects as the 2018 tariffs.

#### 4.3 Job Creation

One of the central justifications for the first Trump administration's 2018 tariffs was the promise to 'bring back jobs to America'. In theory, tariffs can support domestic employment by shielding US producers from foreign competition. Tariffs may generate returns above the normal rate by artificially restricting competition and supply. In this way, tariffs function as implicit subsidies for domestic production. However, they subsidize production, not employment. Given this, there are reasons to question the effectiveness of tariffs as a means of job creation.

Evaluations of the labor market impact of the 2018 steel and aluminium tariffs introduced by Trump during his first term reinforces this scepticism. Autor et al. (2024) find that these tariffs had

<sup>&</sup>lt;sup>11</sup>Foreign retaliatory tariffs only modestly weakened that support (Autor et al., 2024).

neither sizable nor statistically significant effects on employment in regions with a concentration of protected sectors. In fact, retaliatory tariffs imposed by trading partners in response to the 2018 tariffs appear to have reduced employment in regions with a concentration of protected sectors (Autor et al., 2024). And Flaaen and Pierce (2019) find that US industries more exposed to the 2018 tariffs experienced relative employment declines.

Although the 2018 tariffs did not increase employment, and may even have reduced it, voters nevertheless rewarded Trump and the Republican Party for providing protection to industries in their local area. Why? Some voters may have supported Trump's commitment to addressing Chinese import competition (Autor et al., 2024). Others may have been misled about the actual employment effects of the tariffs. During his first term, Trump frequently took credit for job growth in manufacturing sectors, even when the hiring decisions of these companies appeared to be unrelated to his trade policies (Jacobson, 2020).

### 4.4 Inward FDI

Trump's tariffs may be intended to encourage foreign firms to invest in key areas of the country's economy. He made this aim clear in an address to the World Economic Forum in January 2025 when he said: 'Come make your product in America and we will give you among the lowest taxes as any nation on earth. But if you don't make your product in America, which is your prerogative, then very simply, you will have to pay a tariff.'

Foreign firms may invest in a country to circumvent tariffs, essentially 'jumping over' the tariff by establishing local production in a country instead of exporting to it. Anecdotal evidence suggests some firms may be attempting to 'tariff jump' in response to the 2025 levies. TSMC, a Taiwanese multinational semiconductor manufacturer, announced that it would increase its planned investment in the US from 60 billion to 165 billion between 2020 and 2030 after Trump threatened to impose duties on semiconductors. Additionally, Honda and Mercedes-Benz said they plan to increase production in America following Trump's announcement of 25% tariffs on automobiles. In April 2025, pharmaceutical company Roche announced plans to invest \$50 billion in the US over the next five years in response to Trump's threat to impose tariffs on drug imports. <sup>12</sup>

Realistically, tariff jumping is only an option for large multinational firms. Multinational cooperations (MNCs) have the capital, scale, and technical expertise to establish complex production networks and joint ventures (Blonigen, 2002). Smaller firms lack the resources and know-how to set up US production systems or engage in joint ventures (Blonigen, 2002). However, evidence shows that even large MNCs' location decisions are not significantly influenced by subsidies, particularly non-financial subsidies, such as grants and tax breaks (Rickard, 2018; Ruta and Sztajerowska, 2025).

Two factors may limit the effectiveness of Trump's tariffs in attracting inward FDI. The first is time horizons. Building a new plant is a decades-long investment; facilities are often depreciated over 20 years or more. Firms may be reluctant to commit to an expensive long-term infrastructure based on trade policies that could vanish after a single presidential term – or even sooner. Second, the Trump administration's shifting rhetoric and abrupt policy changes regarding tariffs introduce significant investment risk that may deter inward FDI.

## 5. Global Response

The United States' sweeping new tariffs and the dismantling of Biden-era subsidies raise questions about the future of industrial policy. Will countries continue to invest in industrial strategies, or will they reconsider their ambitions in light of the US pivot? The coming months will decide whether

<sup>&</sup>lt;sup>12</sup>However, Roche indicated that it may reevaluate these investment plans after the Trump administration's executive order on drug pricing.

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industrial policy remains a durable feature of the global economy or a short-lived reaction to an exceptional moment.

# 5.1 Responses to the Biden Administration

Some governments rushed to develop their own industrial strategies in response to the United States' Inflation Reduction Act and the CHIPS and Science Act. In February 2023, the European Commission launched the Green Deal Industrial Plan and in the following month, the Commission introduced the Net Zero Industry Act (NZIA)¹³ and the Critical Raw Materials (CRM) act, aimed at boosting production of key technologies and ensuring that 40% of EU demand for certain clean tech is met domestically.¹⁴ The EU also rolled out the Temporary Crisis and Transition Framework, giving Member States greater flexibility in providing subsidies (i.e. state aid). Significant funding, including €510 billion from NextGenerationEU and the REPowerEU fund, was earmarked to support clean tech initiatives. The EU also passed the Chips Act in 2023, aiming to double domestic semiconductor production by 2030.

Like the EU, South Korea also responded to the United States' subsidies. The government implemented an electric vehicle (EV) purchase subsidy program, designed to increase the number of EVs on the road. Korea's consumer subsidies did not exclude purchase subsidies for EVs from any specific country or countries.

The United Kingdom also designed a new industrial strategy in response to the Biden administration's initiatives. As a medium-sized, open economy with limited fiscal space, the UK recognized that it could not match the scale of US subsidies. The government instead developed a sector-focused approach, targeting eight 'growth-driving' sectors, including advanced manufacturing and clean energy.

# 5.2 Responses to the Second Trump Administration

In response to the 2025 US tariffs, some countries accelerated their implementation of industrial policies to protect domestic industries. The UK's new industrial strategy was originally scheduled for release alongside the multi-year spending review in summer 2025. However, the government indicated that key parts of the industrial strategy would be implemented early in response to Trump's tariff announcement. On 6 April, just four days after the White House announced 'reciprocal' tariffs, the UK Prime Minister pledged to 'use industrial policy to help shelter British business from the storm', signalling a more assertive role for the state in shaping the national economy. The Prime Minister wrote: 'Some people may feel uncomfortable about this – the idea the state should intervene directly to shape the market has often been derided. But we simply cannot cling on to old sentiments when the world is turning this fast.'<sup>15</sup>

The UK government also relaxed its subsidy control regulations. In April 2025, it raised the threshold above which subsidies must be referred to and reviewed by the Competition and Markets Authority (CMA), from £10 million to £25 million. This change reduces the number of subsidies subject to mandatory review, thereby limiting regulatory scrutiny of government-funded support to businesses. Additionally, the government streamlined the process of granting subsidies for community regeneration, further easing the provision of targeted subsidies.

In an effort to support domestic automakers after the US announcement of 25% tariffs on automobiles, the UK government softened mandates on electric vehicles and reduced associated fines. The

<sup>&</sup>lt;sup>13</sup>While the NZIA sets production targets for clean technologies, it lacks the large subsidies and financing provisions found in the US Inflation Reduction Act (IRA), highlighting a key difference in approach between the two regions.

<sup>&</sup>lt;sup>14</sup>There were also some efforts to coordinate industrial policy regarding critical minerals.

<sup>15</sup>www.bbc.co.uk/news/articles/c89g7g5lx2ko.

Prime Minister framed this as a necessary response to the ways 'global trade is being transformed' by Trump's new tariff regime.

South Korea also doubled down on industrial policy following Trump's tariff announcements. In April 2025, the government unveiled a set of emergency support initiatives aimed at cushioning its automotive industry from the impact of US tariffs. The government's response included financial aid for automakers, along with tax incentives and subsidies designed to stimulate local demand. Additionally, the government announced an expansion of its support for the domestic semiconductor industry, raising the total package to 33 trillion won (approximately \$23.25 billion) – a 25% increase from previous levels. This announcement came shortly after Trump indicated that he would reveal new tariffs on imported semiconductors. <sup>16</sup>

# 5.3 Looking Forward

Governments may augment their use of industrial policy, deploying it as a defensive tool to protect domestic producers from US tariffs, as in the UK and South Korea. This strategy is most feasible for states with sufficient fiscal capacity to finance such measures. If more countries adopt industrial policy in response to US protectionism, the American pivot toward tariffs may accelerate a global shift toward industrial strategy.

States may also pursue greater coordination of their industrial strategies in response to the US tariffs. Forms of 'joint industrial policy', in which countries coordinate their industrial strategies across borders and build supply chains collaboratively, may become increasingly valuable if US tariffs engender export restrictions. China, for example, imposed licensing requirements on the export of seven rare earth elements in an apparent retaliation against the 2025 tariffs. These restrictions included certain finished products manufactured by a limited number of Chinese firms using rare earth elements for which few substitutes exist. Such export restrictions could create incentives for collaborative industrial policy.

While some governments may respond to the US pivot with more assertive industrial policies, others may scale back their ambitions in this area. Generous US subsidies may have pressured states to offer their own support in order to retain businesses. However, the cost–benefit calculus for some governments, particularly those with limited fiscal capacity, may have changed following the US pivot away from subsidies. Government spending on subsidies diverts resources from other government programs, such as social welfare (Rickard, 2012). As one government official noted, 'every subsidy I am giving is the money that the government could have spent elsewhere. Every subsidy means a primary healthcare centre I cannot build' (Debroy, cited in Rickard, 2018). Governments facing tight budget constraints may use the US pivot as a justification to shift their own fiscal resources away from subsidies towards other programs.

A pause in countries' use of subsidies may offer states an opportunity to recalibrate their industrial strategies to better reflect long-term economic developments. Currently, many industrial policies emphasize manufacturing, even as most job growth in advanced economies is concentrated in services. A forward-looking industrial strategy might shift focus to service sector subsidies, aligning policy with areas where future employment and productivity gains are most likely to emerge.

A pause in the accelerated use of industrial policy could also create space for multilateral institutions, including the WTO, to revisit and modernize international subsidy rules, ensuring they remain relevant and effective in a rapidly evolving global economic landscape.

<sup>&</sup>lt;sup>16</sup>Canada also took steps to diversify away from the US in key sectors such as energy.

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