Global Policy, October 2023

The new Great Game: big-power politics behind the come-back of industrial strategy and managed trade

Robert H. Wade
London School of Economics and Political Science

Abstract

The government of President Biden has rolled out a "modern American industrial strategy", dramatically qualifying the 40-year western consensus on free markets, globalization and China. The spearhead of the new approach is not the Treasury or Commerce Department but the national security establishment, and the main objective is to "contain China" in sectors where its rise poses a threat to US primacy in the world-system. This gives US economic engagement with allies and the world-economy-at-large a more geopolitical and techno-nationalist cast than since the Second World War. The government is boosting investment in certain high-tech sectors in America, while it chokes China's access to crucial technologies and limits the reach of Chinese tech and telecommunications companies abroad. It is pressuring allies to comply with its restrictions, lest their firms benefit from US firms' absence. This essay describes the complicated responses within the US and within European allies. It concludes that high-level geopolitics will continue to shape international and national economic policy for long into the future, much more pervasively than in the decades since the Second World War. A possible upside is that the American embrace of a modern industrial strategy opens the door to a more dispassionate consideration of industrial policy possibilities for developing countries than in the past.

Policy Recommendations

- President Biden's "modern American industrial strategy" poses acute trade-offs between the US national interest and the interests of American commercial actors. Global and regional forums should focus on how to manage these trade-offs, alongside bilateral Beijing-Washington working groups.
- Western policymakers must tread a fine line between making their military priorities "China-safe" and cooperating with China to achieve their climate and economic goals.
- The US, EU, and Japan must find a way to avoid a subsidy "race to the bottom" in high tech, which may benefit subsidized corporations but hurt countries.
- The come-back of industrial strategy in the US paves the way for a less ideological consideration of the appropriate role of the state in economic development than has been possible during the heyday of neoliberalism. This entails a revamp of the Bretton Woods framework, including the World Trade Organization (WTO).
- The design of policy has to be shaped by the two-by-two matrix of less-risky "government followership" and more risky "government leadership"; and less risky "horizontal policies" and more risky "sectoral or vertical policies".

"*This has been the year of industrial policy*" (Adam Tooze, December 2022)

"*It is going to be hard to persuade China that this is not the beginning of an economic war upon it*" (Wolf 2023)

"*It's like a declaration of war* [by the US on Europe]" (Robert Habeck, Germany's vice-chancellor, and economics minister, complaining about the raft of subsidies and tax breaks available for manufacturers in the US, Germany's most important ally, Chazan et al. 2023)

When the United States government speaks the world listens. Since coming into office in 2021 the government of President Biden has substantially repudiated decades of past economic policy – building on the historic but unsystematic shifts in US domestic and foreign policy made by his predecessor Donald Trump. Pre-Trump governments back to Reagan, and the Anglo economics profession, have excoriated the phrase "industrial strategy" (or equivalently "industrial policy"), barely allowing it on the discussion agenda, let alone the decision agenda. Now Biden's top officials are speaking of a "modern American industrial strategy" as "the new Washington Consensus".

In 2021 Congress approved the Infrastructure Investment and Jobs Act, which authorised $550 billion in spending for federal highways, rail programs, hazardous materials, broadband access, clean water, and electric grid renewal on top of what Congress was already planning to authorise.

In the summer of 2022 Congress approved two industrial strategy Acts. One was called the CHIPS and Science Act, targeted at boosting production of advanced semiconductors in America. The other was misleadingly called the Inflation Reduction Act (IRA), targeted at boosting production and consumption of green technologies in America, including renewable energy, batteries and electric vehicles (EVs). Both acts make huge amounts of subsidies and tax credits available; and both aim to choke China's access to crucial technologies while limiting the reach of Chinese tech and telecommunications companies in foreign markets.

In the year following the passage of the CHIPS and IRA Acts, senior officials have spelt out the justification for what amounts to a serious qualification to long-standing US support for an open, rules-based multilateral system, towards more of a "techno-nationalist" system – not across the board but in high tech sectors.

This essay elaborates on the content of the new approach; then its causes, especially US worries about China; then reactions of other players, including in Europe. It gives a short assessment of the government's favoured new trade principle, "friendshoring"; and draws conclusions.

The US government leads the market

One can distinguish two levels of "sectorally-selective government intervention" in markets. One is "government followership", where the government supports investment bets that the private sector is already making without government support, in order to accelerate investment in that particular sector. The other is "government leadership" of the market, where the government provides incentives for the private sector to make investments in specific sectors that the private sector would hesitate to make on its own (Wade 1990a, 1990b, 1993).

The government of President Biden is acting in more of a "government leadership" role than governments of the past several decades outside the military sphere (Wade 2017). The government is identifying key sectors and deploying public investments and targeted incentives, such as massive subsidies, to draw in private money, as well as imposing restrictions on private investments.

The Biden government's full-hearted promotion of industrial strategy was articulated in a speech on 27 April 2023 not by the Treasury Secretary or the Commerce Secretary but the *national security advisor*, Jake Sullivan. Under the title "Renewing American Economic Leadership", he said that he was articulating "the new Washington Consensus".

"A modern American industrial strategy identifies specific sectors that are foundational to economic growth, strategic from a national security perspective, and where private industry on its own isn't poised to make the investments needed to secure our national ambitions. It deploys targeted public investments in these areas that unlock the power and ingenuity of private markets, capitalism, and competition to lay a foundation for long-term growth" (Sullivan 2023).

A year earlier US Treasury Secretary Janet Yellen called for a new Bretton Woods framework and reform of the World Bank and the IMF, her call coinciding with the annual meetings of the organisations (Yellen 2022). She said that US trade policy should no longer merely leave markets to operate unguided. Countries should not be allowed to use their "market position in key raw materials, technologies or products to have the power to disrupt our economy or exercise unwanted geopolitical leverage." She went on to advocate the principle of "resilient trade", as distinct from "free trade", as the appropriate principle for liberal democracies to converge on. Resilient trade is trade where international supply chains for critical inputs rely on "friendly suppliers", not necessarily cheapest suppliers; hence "friendshoring", distinct from "onshoring" and "offshoring".

The new ideas on trade were further elaborated in a speech by US Trade Representative Katherine Tai in June 2023. She detailed how pursuit of efficiency in trade policy and in company strategies often led to vulnerable and high-risk supply chains. She explained how the new US trade policy is reversing the trend so as to "strengthen supply chain resilience", code for managing trade so as to raise standards, stress sustainability, and prioritise the needs of "our workers and producers."

She explained that US trade policy -- equally US competition (or anti-trust) policy -- has given too much weight to "benefits to consumers" relative to producers and workers. "Our trade policy places workers at its centre to reflect the reality that the consumer who enjoys the low prices of imported goods is also a worker who must withstand the downward pressures that come from competing with workers in other parts of the world toiling under exploitative conditions…. Similarly, prioritizing and pursuing the consumer welfare standard in competition policy has led to consolidation and unchecked dominance in our domestic market, which has stifled competition and diminished economic liberty for our citizens and workers." She summarised her role as US Trade Representative as to "put the US back into USTR" (Tai 2023).

Causes of the unheralded revolution

The Biden government's embrace of industrial policy (IP) did not come out of the blue. Reka Juhasz and others examine the frequency of IP in a large English-language data base of economic policy (the Global Trade Alert) in the period 2009 to 2020, covering many countries. They include as IP only policies intended to change the *composition* of activities; so if a tariff is intended just to raise revenue it is not included; if it is intended to nurture an infant industry, it is. The use of IP trended upwards from some 20% of total policies in 2009 to nearly 50% in 2019. Wealthy liberal democracies (in the top quintile of the average income distribution) make more use of IP than countries in lower income quintiles. The authors conclude, "IP is used heavily across rich countries, which runs counter to conventional wisdom" (2022; also Cherif et al. 2020).

Industrial strategy has come to central prominence in the Biden government for several reasons, including the Covid pandemic (from early 2020), Russia's war on Ukraine (from early 2022), and climate (ongoing). The government has used the sense of polycrisis to launch a latter-day New Deal, not least to show Biden as a visionary leader, not just a safe administrator, with the 2024 election in sight.

But what produced rare bipartisan agreement on the "new Washington Consensus" was the change in politics: the bipartisan perception of China as posing an acute national security threat, and the need to have "China-free" supply chains in several strategic industries – to protect against Chinese attempts to "weaponize" supply chains against the US and, less advertised, to "contain" China in its economic and diplomatic challenge to the US. The US-China relationship is becoming increasingly defined by military tensions, with talk of a possible war being normalised in both Washington and Beijing (Wade 2023).

The US military and intelligence establishment was stunned in 2021 when China circumnavigated a missile around the globe at hypersonic speed, which defied the laws of physics by firing another projectile as it flew. This was a Sputnik moment, akin to the existential shock to that establishment and the public when the Soviet Union launched the world's first satellite in 1957.

China's hypersonic weapons were developed with supercomputers which ran on US software and on chips made in the US or its allies. National security advisor Sullivan was emphatic that the US could not allow China to use American technology to undermine American security. In a speech in late 2022 he said, "Our strategic competitors should not be able to exploit American and allied technologies to undermine American and allied security", as he explained why the Biden government was making it as hard as possible for China to obtain advanced technologies with military applications (Sullivan 2022). China's own capabilities to make advanced chips lag those of Taiwan, South Korea, and the US by half a decade.

In late June 2023 Antony Blinken, secretary of state, gave a talk in New York in which he asked, "How is it in our interest to allow them to get technology that they may turn around and use against us?", citing China's expanding nuclear weapons programme, development of hypersonic missiles and autonomous drones, and its use of AI "potentially for repressive purposes. If they were in our shoes, they would do exactly the same thing" (Swanson et al. 2023).

The reason for devoting so much effort to blocking China's access to very advanced chips is illustrated by the fact that OpenAI's ChatGPT was reportedly trained on 10,000 of the most advanced chips currently available.

The great-power rivalry between the US and China is quite different to any other great-power rivalry in history, in that it is occurring between nations "that have become as economically intertwined as the strands of a DNA molecule" (Friedman 2023). The US remains enormously dependent on Chinese imports; its goods trade deficit in China in 2022 was the second highest on record.

China now has the world's largest industrial capacity, larger than that of the US, Germany and Japan combined. Its government is tightly focused on sectorally-targeted industrial strategy to move up the value-added supply chain in semiconductors, new energies, new materials, life sciences, medical equipment and more. It is massively subsidizing state and non-state firms to race ahead in these fields, when initially returns are very low. The economy already dominates renewables like solar and wind because its firms invested early when there was no return. Chinese solar panel costs are two-thirds of the costs of a European-made product; Chinese companies now own about 80% of the global solar panel supply chain. Chinese wind turbines are half the price of western rivals. (Production of its turbines and solar panels is electricity-intensive, much of the electricity coming from coal power plants.) China is building EV factories in about a third of the time needed in other countries, and it dominates the production of almost every resource, material and component used to make EVs, including almost 80% of the world's battery manufacturing capacity. In 2022 China overtook Germany in automobile exports, and it is on track to overtake Japan as the world's biggest auto exporter in 2023. Huawei, in electronics and telecommunications, has over 100,000 employees in research centers around the world (Morris 2023).

The understanding in Washington is that China has been able to make big relative gains within the existing, open, rules-based multilateral order (with the WTO and WHO at its core) by using aggressive industrial policy and managed trade to boost the ability of Chinese companies to compete on the world frontier, while taking advantage of western governments' non-use of aggressive industrial policy and managed trade to boost their own companies. This sense that China has gained by playing unfair in international and national economics has shaken the earlier domestic consensus in the US on defending this open, rules-based multilateral order.

The US government's campaign to restrict China in high-tech goes well beyond the earlier-mentioned steps. For example, the Biden government has also been focusing on what can be done to address security concerns about the cloud computing divisions of Chinese tech giants like Alibaba, Huawei, Tencent and Baidu, and to limit the companies' growth abroad. Officials fear that Beijing could use Chinese data centres in the US and elsewhere to gain access to sensitive data, as they are also concerned about Chinese telecom gear and TikTok. The US State Department has been warning other countries against Chinese cloud computing providers (Hayashi and McKinnon 2023).

Well before Biden, the government started to restrict China's subsea cable initiative, started in 2015. A year later the US government created the Clean Network Initiative, which in effect bans new subsea cables connecting the US to China or Hong Kong. It has been warning developing countries against accepting bids for "Digital Silk Road" projects priced 20 to 30 percent below what competitors would charge (China seeking diplomatic influence in part-exchange) (Gross and Heal 2023).

Complementing its confrontational policies against China, the Biden government has been strengthening its network of alliances in Asia. For example, in May 2022 it initiated an agreement with 13 states of Northeast and Southeast Asia and the Pacific called the Indo-Pacific Economic Framework (IPEF). In May 2023 ministers from these states issued a proposed IPEF Supply Chain Agreement, aimed at making their supply chains more "resilient and competitive", and at ensuring "that American workers, consumers, and businesses [note the order] benefit from resilient, reliable, and efficient supply chains" (Detroit Press Statement on Supply Chains 2023).

US military deployment in China's backyard of the western Pacific is another pillar of the strategy. The US now has 34 military bases or access to host-nation bases there. Ten are in the arc from Japan to Okinawa to Singapore to Palau/Micronesia/Marshall Islands to Australia. Fifteen are in South Korea. Another nine in the Philippines. And more bases further out in Guam, Hawaii, and Alaska. The US is also mobilising European allies to join in military operations in "Indo-Pacific", integrating the European theatre and the Pacific theatre. The specific objective is defence of Taiwan (Sevastopol and Hille 2023).

We are in a new broad-spectrum "Great Game" -- to use the phrase for the rivalry between the 19th century British and Russian Empires for control in Central Asia. This Great Game has global reach. But in all the alarm about the China threat, little attention is given to the fact that China's average income at purchasing power parity is still only around 30% of the US's (World Bank 2022).

Reactions to the US industrial strategy

The American industrial strategy raises a clash between the interests of the country and the interests of companies. It claims to "derisk" economic engagements with China – but adds risks to company competitiveness.

The standard model of US politics has big business and especially finance in the driving seat of economic policy. Against that model, it is surprising how far national security objectives have shaped the Biden government. But US companies dependent on selling into China's market and restricted under these two acts are not sitting on their hands. As the government deliberates about tightening the existing restrictions, "The deliberations have touched off an intense lobbying battle, with Intel and Nvidia working to prevent further curbs on their businesses. Chip companies say cutting them off from a major market like China would substantially eat into their revenues and reduce their ability to spend on research and innovation in new chips" (Swanson 2023). Companies installing solar panels protest US restrictions on imports of China-made solar panels, by far the cheapest in the world. They say that these restrictions are bad for US progress in combatting climate change.

China's internet giants are rushing to buy high-performance Nvidia chips needed for AI systems, making orders worth $5 bn in a frenzy fuelled by fears of further US export restrictions. The US government already prevents Nvidia from selling its most advanced chips (A100 and H100) to China. Meanwhile, Beijing has responded to Washington's sweeping restrictions on sales of advanced chips with restrictions on exports of gallium and germanium, metals used in the production of a range of strategically important products, including next-generation missile defence and radar systems.

The Biden government has put great pressure on the Taiwan government and the world's leading fabricator of advanced chips, Taiwan Semiconductor Manufacturing Company (TMSC), to open factories in the US. TSMC has (reluctantly) agreed to make a $40 billion investment in Arizona – aided by large subsidies and tax credits -- to build two factories to produce chips one or two generations behind the most advanced ones. But construction costs alone are estimated to be four times higher than in Taiwan, and TSMC has told the government it must offer American companies incentives to buy the more expensive American-made chips.

Many American economists are outraged at Biden's industrial strategy, measuring it against the truth of the standard neoclassical arguments for free trade and no-more-than-horizontal promotion policies for industry. For example, Adam Posen, president of the

Washington DC-based think-tank, the Peterson Institute for International Economics, rejects the Biden strategy, implying that any sectorally-targeted interventions will likely cause a net loss of welfare in the intervening country and in the world at large (in Parikh 2023).

In terms of relations with allies, Washington worries that its limits on US firms in China widen opportunities for German, French, Japanese, South Korean, and Taiwanese firms in China -- unless they are equally constrained. So the US wants them all to agree to the same restrictions against China as it imposes. For example, Rahm Emanuel, US ambassador to Tokyo, recently said: the response to Beijing's economic coercion must "be collective and must be led by the United States". The Financial Times says, "The restrictions are likely to increase as Washington presses allies to work in lockstep on stymying China's semiconductor industry" (Chazan et al. 2023).

The EU and Japan are also anxious to reduce dangerous dependencies on China. But they are more cautious, more selective than the US about restricting China, because China remains a crucial and growing market for them. Many European and Japanese businesspeople salivate at the size of the Chinese market, and most political leaders' visits to Beijing are transparently sales pitches. China is Germany's most important trading partner; Germany is roughly twice as exposed to China as the US is. The EU and Japan both fear a subsidy race with the US (Inagaki 2023).

America's allies are also worried that their companies are "subsidy shopping", setting up operations in the US to get access to the subsidies and avoid US import restrictions while also pressing their own governments to match US subsidies. The Washington Post in January 2023 reported that, "Many of America's closest friends – Britain, France, Germany, Japan, South Korea and others – worry that hundreds of billions of dollars for electric vehicle and semiconductor manufacturing in the United States will syphon investment and production away from their domestic industries" (Knox 2023). Indeed, in the year since the president signed the industrial strategy acts into law, foreign investors from Europe, Japan, South Korea, Taiwan have poured money into American factories, mainly in computer and electronics manufacturing, particularly of semiconductors (White House 2023).

The European Commission President von der Leyen said in a speech at Davos in January 2023, "To keep European industry competitive, there is a need to be competitive with the offers and incentives that are currently available outside the EU". France's President Macron, on a state visit to Washington, delivered a blunt warning, saying the IRA and the CHIPS law might "fragment the West" and dry up transatlantic investment unless America and its allies "resynchronize" their economic policies. Biden in reply said he would make "no apologies" for either law (Rose et al. 2022)

The EU has limited budgetary power – it has been called "a regulatory superpower and budgetary dwarf". To compensate for its lack of subsidy power Brussels is waiving its rules limiting member states' use of "state aid", rules meant to prevent subsidy races between member states; it is allowing member states to adopt "matching aid" to compete with "countries outside the EU".

But peripheral states in the EU have protested at the relaxation of limits on state aid, because they fear that fiscally strong countries like Germany will be able to use big subsidies to further improve their competitive edge, making for even more polarisation within the EU.

Japan, South Korea, and Taiwan have all raised subsidies for their chips industry. But they all know they could end up drawing business away from not just China but also from each other and the US – to the benefit of the corporations.

A well-known commentator on the transatlantic alliance, Constanze Stelzenmuller, said in the Financial Times, "The transatlantic alliance, the EU, and the member states, so effective in standing up to Russia together, have presented a sorry picture of disunity on China" (2023). In July 2023 the Financial Times reported on the "mutinous mood among some American allies in both Europe and Asia at the scale of the new US subsidies [which] allies have interpreted as a thinly veiled exercise in protectionism because it encourages companies to shift plants and customers to Buy American" (Chazan et al. 2023).

"Friend-shoring" as a compromise?

Policy circles in the US, EU and Japan have converged on the neologism, "friendshoring", as a compromise to the conflicting interests between the US, EU and Japan, hoping to avoid zero-sum actions. They emphasise that they all share a common interest to build more redundancy in those supply chains that have potential to be "weaponized"; and second, that this can be achieved not by each country trying to boost its own production by offering large subsidies, which might be construed as "decoupling", but by friendshoring, which might be described as "globalization between friends".

But trade agreements between "friends" will very likely breach WTO rules, in particular the cornerstone rule of the post-Second World War economy, the "most favored nation" principle. Also, calculations of the location, or origin, of inputs have to be made far down the supply chain. With reference to physical goods, barriers to entry of goods based on rules of friendly or unfriendly origin are difficult but possible. With reference to digital data, almost impossible. Yet just about all complex goods now have both a goods component and a digital component, including software updates. Even a smart fridge requires market access for its embedded digital component as well as the physical product. Global digital trade is growing faster than goods trade. How will its origin be traced for purposes of implementing friendshoring trade deals? (Torres 2023)

Conclusion

The modern American sectoral industrial strategy gives the state an unprecedented role in steering the high-tech production structure and consumption structure, "following" and in a narrow range of sectors "leading" the market. In this sense we can talk of a revolution in thinking about international and national economic policy in the world's most influential government, even if not yet in the neoclassical mainstream of economics.

The come-back of industrial strategy has been driven largely (not only) by geopolitics. The momentum comes substantially from the national security establishment and from China hawks in the Democratic and Republican parties. Advocates of the industrial strategy see China as an almost existential threat, the only state which is a real military rival in Eurasia and the Pacific, and an economic and diplomatic alternative to American influence in the Global South.

The legitimization of industrial strategy in the world's most influential power has a potentially important benefit for the rest of the world, including developing countries, in a way that cannot just be dismissed with phrases like "the government cannot pick winners" and "the best industrial policy is none at all". It opens the way for an analytical discussion of the appropriate role of the state in diversifying and upgrading the production structure (Fasteau and Fletcher forthcoming; Wade 1993). The discussion has to recognize that the state can intervene effectively not only to fix "market failure" but also to "create markets"; and equally that "government failure" is all too real in developed and developing countries, in democracies and in authoritarian regimes (Bienefeld 1987). Adam Posen rightly warns, "…once you put narrow government interventions into place, they tend to stick around, expand and get distorted by entrenched special interests. But over time, they tend not to serve what they were initially supposed to do" (in Parikh 2023). The design of policy has to be shaped by the two-by-two matrix of less-risky "government followership" and more risky "government leadership"; and less risky "horizontal policies" and more risky "sectoral or vertical policies". Having substantial activity in the "sectoral-leadership" cell is a necessary but not nearly sufficient condition for developing countries to reduce their income gap with developed countries.

Robert H. Wade is professor of Global Political Economy at the London School of Economics and Political Science. A New Zealand citizen, he worked at the Institute of Development Studies at Sussex University, the World Bank, Princeton University, MIT, Brown University; and researched economic development in Italy, India, South Korea, Taiwan and inside the World Bank. He was awarded the Leontief Prize for Advancing the Frontiers of Economic Thought in 2008.

Robert H. Wade is a Global Policy Advisory Board Member and a professor of political economy and development at the London School of Economics. He is the author of Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization (1990, 2004), which won the American Political Science Association's Best Book in Political Economy award, 1989-91. He won the Leontief Prize for Advancing the Frontiers of Economic Thinking in 2008.

References

Bienefeld, M. 1987, "Industrial policy research and aid: 'the need to retreat in order to advance'", paper for "Industrialisation in developing countries", Advisory Council for Scientific Research in Development Problems, The Hague, 28-30 October.

Chazan, G. et al., 2023, "A global subsidy war? Keeping up with the Americans", Financial Times, July 13.

Cherif, R., M. Engher, F. Hasanov, 2020, "Crouching beliefs, hidden biases: the rise and fall of growth narratives", IMF Working Paper WP/20/228.

Detroit Press Statement on Supply Chains, 2023, "Substantial conclusions of negotiations on landmark IPEF supply chain agreement", 27 May.

Fasteau, M. and I. Fletcher, forthcoming, *Industrial Policy for the United States*, Cambridge University Press.

Friedman, T. 2023, "What are America and China fighting about, anyway?", New York Times (International), 17 April.

Gross, A. and A. Heal, 2023, "China pulls back from global subsea cable project as US tensions mount", Financial Times, February 10.

Hayashi, Y. and J. McKinnon, 2023, "U.S. looks to restrict China's access to cloud computing to protect advanced technology", Wall Street Journal, July 4.

Inagaki, K. 2023, "'De-risking' China links takes precedence over 'decoupling'", Financial Times 19 May.

Juhasz, R. et al. 2022, "The who, what, when, and how of industrial policy: a text-based approach", Structural Transformation and Economic Growth working paper, August.

Knox, O. 2023, "Europe's not happy with Biden's Inflation Reduction Act", Washington Post, 17 January.

Morris, I., 2023, "Huawei gained 12k employees last year in R&D splurge", LightReading, April 3.

Parikh, T. 2023, "Russia and North Korea worked hard to be self-sufficient, it has not turned out well", Financial Times, 15 July.

Rose, M. et al., 2022, "Biden says can 'tweak' inflation act to include European countries", Reuters, December 1.

Sevastopulo, D. and K. Hille, 2023, "The US build-up in China's backyard", Financial Times 2 June.

Stelzenmuller, C. 2023, "Germany's China dilemma takes on a new urgency", Financial Times 28 April.

Sullivan, J. 2022, "Remarks by national security advisor Jake Sullivan at the Special Competitive Studies Project Summit", The White House, 16 September.

Sullivan, J. 2023, "Remarks by National Security Advisor Jake Sullivan on renewing American leadership at the Brookings Institution", 27 April.

Swanson, A. D. McCabe, M. Crowley, 2023, "US considers barring China's access to AI chips", New York Times (International), 30 June

Tai, K. 2023, "Ambassador Katherine Tai's remarks at the National Press Club on supply chain resilience", 15 June.

Tooze, A. 2022, "An arms race on industrial policy is the last thing that Europe needs", Financial Times, 24-25 December.

Torres, H. 2023, "Advocates for friendshoring have not reckoned with digital trade", Financial Times, January 26.

Wade, R. H., 1990a, "Industrial policy in East Asia: does it lead or follow the market?", chapter 9 in G. Gereffi and D. Wyman (eds), *Manufacturing Miracles: Paths of Industrialization in Latin America and East Asia*, Princeton University Press.

Wade, R. H. 1990b (2004), Governing *the Market: Economic Theory and the Role of Government in East Asian Industrialization,* Princeton University Press.

Wade, R.H., 1993, "Managing trade: Taiwan and South Korea as a challenge to economics and political science," *Comparative Politics*, 25(2): 147-67.

Wade, R.H. 2017, "The American paradox: ideology of free markets and the hidden practice of directional thrust", *Cambridge J. Economics* 41 (3), May.

Wade, R.H., 2023, "Conflict between great powers in back with vengeance: the new cold war between the US and China plus Russia", in J. Ricz and T. Gerocs (eds.), *The Political Economy of Emerging Markets and Alternative Development Paths*, Palgrave

White House, 2023, "Bidenomics is attracting new foreign investment in US manufacturing", August 23.

Wolf, M. 2023, "US has buyer's remorse for the world it built", *Financial Times*, 28 June.

World Bank, 2022, *World Development Indicators.*

Yellen, J. 2022, “Transcript of press conference from Secretary of the Treasury Janet L. Yellen”, US Department of the Treasury, April 21.