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Research Report

Guidelines for a European economic policy towards China

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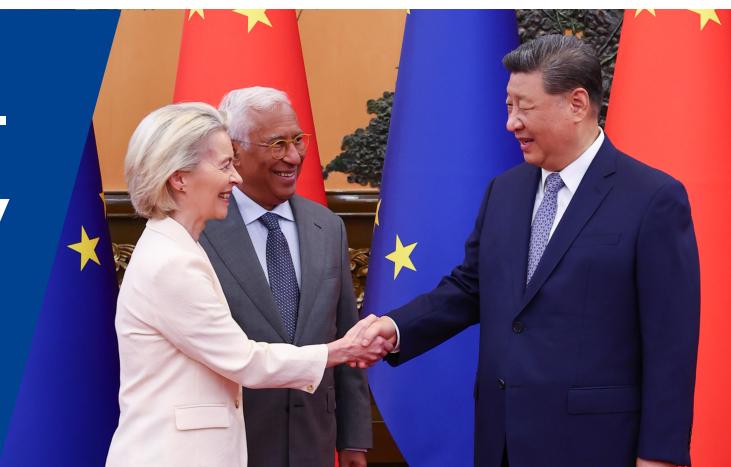
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KIEL **POLICY BRIEF**

Sébastien Jean, Isabelle Méjean, Moritz Schularick

**Guidelines for a European Economic Policy
towards China**



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Overview

- In this paper, we (i) discuss the drivers of Chinese success in manufacturing; (ii) analyse the resulting challenges for the German and French economies; and (iii) present economic guidelines for economic policies to deal with China.
- Over the past two decades, China has emerged as the world's leading industrial power, accounting for roughly one-third of global manufacturing value. Chinese industrial success was driven by a combination of supportive industrial and macroeconomic policies, but also by fierce domestic competition and economies of scale.
- European businesses face acute challenges due to growing competition at home and in export markets, declining demand from China, and increasing protectionism in the global economy. China now leads Europe in a number of cutting-edge technologies.
- Confronted with these challenges, we propose a precautionary strategy for Europe that maintains the benefits of openness, but does not naively hand over sensitive areas of the European economy to Chinese dominance. This applies most clearly to sectors closely linked to national security in the communication, technology, and defence space.
- In important sectors where Europe lags technologically (e.g., batteries), the best policy is a strategy that welcomes Chinese and other countries' foreign direct investment in Europe, preferably linked to technology transfers and joint ventures. In sectors that have little strategic relevance and where Europe is not competitive, the best policy response is to let European buyers reap the benefits of low Chinese prices.

Keywords: EU, China, trade policy

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Guidelines for a European Economic Policy towards China

Sébastien Jean, Isabelle Méjean, Moritz Schularick

In the past two decades, China has become the global industrial superpower. Roughly one third of global manufacturing value added is concentrated in China, compared with 15% in the EU. In 2024, the manufacturing sector accounted for 25% of GDP in China, substantially more than in comparable large economies¹. Chinese export shares in key markets and sectors have grown rapidly, including in traditional strongholds of European industry (Jean 2024). Other than EVs and batteries, China now dominates green technologies in terms of production capacity and increasingly technological sophistication (International Energy Agency (IEA) 2024; Gerarden, Reguant, and Xu 2025). It has also taken over from Germany as the world market leader in machinery, and is the world's largest car exporter. At the same time, China is widely seen as having gained technological advantages over Europe in key future sectors such as robotics and artificial intelligence. The number of European firms that locate their R&D activities to China is rising.

In this policy brief, we (i) discuss the drivers of Chinese success in manufacturing and the role of Non-Market Practices and Policies² (NMPP); (ii) analyse the impact on the French and German economies and the link to global imbalances; and (iii) sketch policies to deal with China, including responses to China's raw material policies.

(i) The drivers of China's industrial success

China's manufacturing successes have relied on a mix of policy tools that include industrial policies and subsidies, macroeconomic policies geared toward over-investment, a competitive exchange rate, technology transfers, but also advantages with respect to regulation, innovation, and economies of scale in the large and highly competitive domestic market. Importantly, outright non-

¹According to the World Bank, the contribution of the manufacturing sector to aggregate GDP is equal to 14% in the EU, and 10% in the US. The Chinese ratio is also high compared to other large emerging economies, around 13% in BRICS economies.

²Throughout the note, we will use the term "Non-Market Practices and Policies" to designate any trade-distorting policy that gives "unfair" competitive advantage to Chinese producers in international markets. While this term is arguably vague, it includes trade-distorting subsidies opening the right for anti-dumping and countervailing duties under the WTO. See also the broader definition provided by the US Trade Representative (<https://ustr.gov/sites/default/files/NMPPs%20model%20text.pdf>). Given the unclear outlines of the concept, it is not possible to systematically quantify the contribution of NMPPs to the rapid expansion of China in world manufacturing production.

WTO compliant tools are only one part of the overall success, but their importance differs by sector. At the current juncture, Chinese strength in key industries (batteries, EVs, green tech, machinery) is not primarily due to specific subsidies or non-market practices, but the result of a broad range of macroeconomic and microeconomic policies, some of them commented below, that led both to very large production capacities and advantages when it comes to economies of scale. China's success also reflects the weakness of Europe when it comes to cutting-edge technology, regulatory burdens, inflexible labour laws, long innovation cycles and lack of scale in the European market (see Draghi (2024)).

China largely outweighs other countries in terms of industrial policy expenditures (see e.g. OECD (2023); EC's "distortion reports" (2024); DiPippo, Mazzocco, and Kennedy (2022); Bick- enbach et al. (2024); Garcia-Macia et al. (2025)). In a recent report, the Kiel Institute estimates from official data that China spends close to 2% of GDP on industrial policies, about 5-6 times more than the EU or the US³. Moreover, Chinese industrial companies in strategically important sectors receive additional subsidies via industrial development funds established at all levels of government — f.i., the Big Chip Fund as well as local funds in Shenzhen and Shanghai. Local governments often provide cheap land and power, or directly help fund capital expenditures. With the "Made in China 2025" strategy, the country had a policy agenda to become the world market leader in key industrial sectors and has used the strategy to occupy key positions in global manufacturing supply chains.

A central dimension of the specific pro-manufacturing bias is financing, in a country where the banking sector is dominated by state-owned enterprises (SOEs), and where credit is strongly influenced, in both prices and quantities, by political objectives and affiliations (Harrison et al. 2019; Song, Storesletten, and Zilibotti 2011; Hachem 2018). Using data from the People's Bank of China, Akinci et al. (2024) show that, since 2020, aggregate bank lending growth has been redirected from the property sector toward the manufacturing sector. As a consequence, the growth rate for new industrial lending has roughly quintupled⁴. Using micro-level data covering the period from 2010 to 2023, Garcia-Macia et al. (2025) estimate that firms in the manufacturing sector benefit from effective interest rates that are 0.4 percentage points below those of other sectors. Other channels of government support include a preferential access to critical raw materials, and the strategic use of

³DiPippo, Mazzocco, and Kennedy (2022) reports a ratio of industrial subsidies to GDP of 1.73% for China, against 0.55% for France, 0.41% for Germany and 0.39% for the US. These estimates include direct subsidies, government support for R&D, R&D tax incentives, other tax incentives, below-market credit to SOEs, support through state investment funds, and "China-specific factors". Garcia-Macia et al. (2025) instead use financial statements of listed firms, together with land registry data to estimate the combined value of cash subsidies, tax benefits, subsidized credit, and subsidized land. They estimate that these four IP instruments add up to 4.4 % of GDP as of 2023.

⁴The authors confirm the trend using the quarterly reports of 50 publicly listed Chinese banks. Bank lending to manufacturing grew 18% year-on-year in 2022.

public procurement (most recently this includes the official exclusion of EU companies from major medical technology procurement procedures).

China has to some extent avoided the innovation and competition reducing effects of traditional industrial policies. Chinese industrial policy does not pick “national champions” ex ante but combines subsidization from local governments and state banks with cut-throat competition in the domestic market. Currently, there are more than 100 different EV companies in China that compete to become market leaders and realize the economies of scale that lead to cost savings and subsequent competitiveness on world markets. Their very low returns on investment are a challenge to European (and global) competitors: even in electric vehicles – China’s most successful sector – only a few firms are profitable. This is not to say that China’s subsidy approach is efficient in an economic sense as exit of loss-making companies remains problematic⁵, but it has clearly been effective in delivering outcomes in sectors such as wind, solar and vehicles.

(ii) Impact on the European economy

French and German manufacturing companies have been hit by a “double whammy.” Growing competition by Chinese exporters as well as a substantial decline in import demand from China have meant that European firms have been squeezed in their home markets and also faced increased competition in their export markets. In the domestic Chinese market, demand for European products has weakened sharply because of a slowdown of interior demand, notably due to the knock-on effects of the downturn in the Chinese real estate sector. Moreover, European firms have lost market shares due to increased competition from domestic producers, policies favoring Chinese producers and consumers shifting away from European varieties (e.g., away from combustion engine cars to EVs). In European markets, overcapacities in some subsidized sectors may have contributed to fueling European imports, although there is no evidence that this problem is endemic across the manufacturing sector.

The Chinese trade balance shows once again large surpluses. In 2024, the Chinese surplus in goods trade reached a record high of about 992 bn US\$, or 5.3% of Chinese GDP, according to Chinese customs data⁶. In 2024, net exports have added close to 2 percentage points to Chinese GDP growth – an unusually high boost from exports, especially for such a large economy. China’s

⁵Garcia-Macia et al. (2025) estimate that IP policies implemented over 2009-2018 affected the allocation of factors, which contributed to a 1.2% reduction in domestic aggregate TFP. IP subsidies, in particular, are associated with excess production.

⁶The surplus in trade of manufacturing goods has reached 11% of GDP in 2024 (\$1,890 bn).

economic model increasingly relies on compensating domestic economic weakness (in particular after the burst of the property bubble) with reliance on external demand and export growth. This export-led growth model exacerbates trade imbalances.

The surge in Chinese exports and rise in surpluses was accompanied by significant real effective exchange rate depreciation by close to 20% in the past three years (see figure 1). While some rebalancing of the Chinese growth model coupled with a strengthening exchange rate could be observed in the early 2010, this trend has reversed in the past few years with widening external surpluses and a weakening exchange rate. In theory, across-the-board productivity improvements and trade surpluses could be expected to lead to exchange rate appreciation. To prevent the exchange rate from strengthening, the Chinese financial sector has accumulated foreign assets of 300 bn US\$ over the past year alone, which could fuel new financial imbalances⁷.

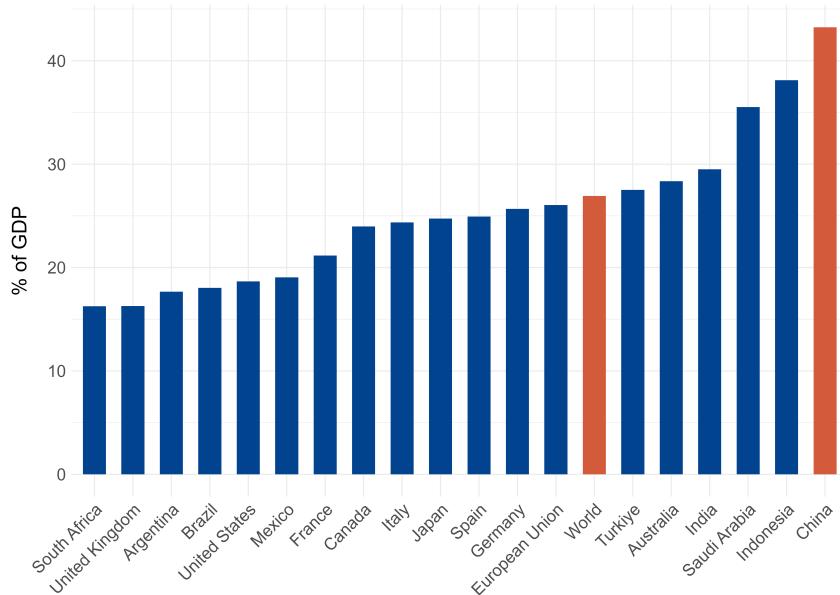
Figure 1: Real effective exchange rate, China - broad basket



Source: BIS

⁷According to Setser (2025), China's state commercial banks, which do most of the day-to-day management of the Chinese currency, added \$70 billion to their net foreign asset position in the second quarter of 2025, after accumulating \$95 billion in Q1 and \$140 billion in the second half of 2024. State banks are also lending dollars to buy yuan using swaps trades, to counteract appreciation pressures.

Figure 2: Gross domestic savings 2024, G20



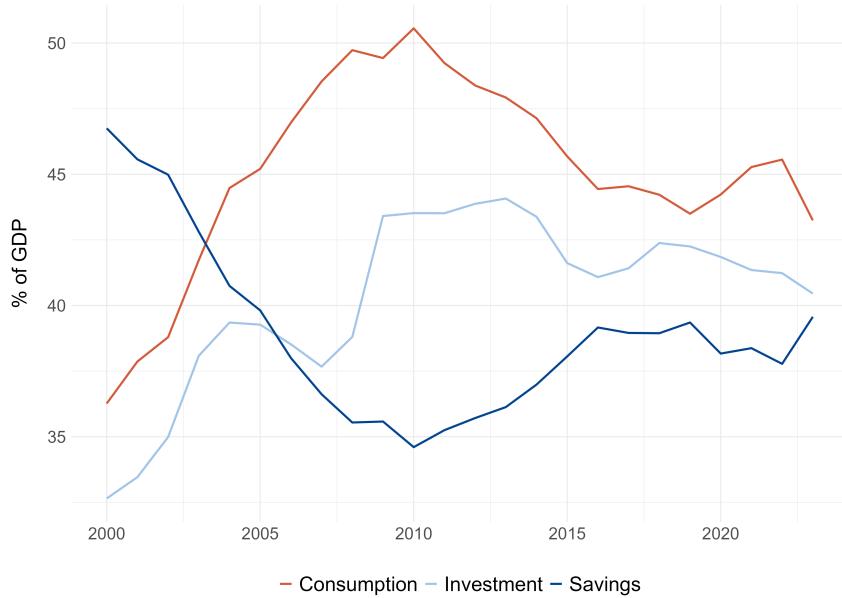
Source: World Development Indicators Database

The tariff policies of the Trump administration could lead to increasing trade diversion from the U.S. to other markets, including Europe, potentially exacerbating the problems of European producers (while benefiting European consumers in the short run). While the overall quantities appear small relative to the size of the European economy – a recent study by the Kiel Institute estimates potential trade rerouting of US\$ 20-30 bn (equivalent to about 0.1% of EU GDP) in an adverse scenario of a return to very high U.S. tariffs on Chinese exports – trade diversion could put additional pressures on European producers in some sectors.

(iii) European policy responses

China's economic and political model is geared towards the generation of large production capacities in manufacturing and their export to the rest of the world. European policy responses must start with the recognition that the success of China does not only rely on “unfair” state aid and industrial policies, but is intrinsic to the Chinese development model. NMPPs are part of the overall mix, but equally important are policies that encourage extremely high domestic savings rates (see Figure 2), an undervalued exchange rate, rapid technological innovation, and intense domestic competition to scale production.

Figure 3: Consumption, saving and investment, China



Source: World Development Indicators Database

The key macroeconomic challenge is the rebalancing of the Chinese economy, a reduction in savings and an increase in consumption. Some Chinese policy makers acknowledge the need for rebalancing using the term “involution” (for inward development), but the process is slow and the incentives on different levels of government still point towards supply expansion (see Figure 3). The burst of the property bubble also counteracts rebalancing. A key task for European policy makers is to press their Chinese counterparts in a coordinated way to take measures to strengthen domestic demand. While Europe has limited leverage over China it should push to accelerate macro rebalancing and in particular exchange rate revaluation (similar to Japan and Germany in the 1970s).

A quick macroeconomic rebalancing of the Chinese economy is unlikely to occur. This means a continued inflow of cheap products for consumers and cheap inputs for European producers, but also intense competition for European firms, growing concentration of manufacturing production in China and potentially increasing dependencies on Chinese supply chains. When thinking about policy responses, it is important to note that overall European consumers have been beneficiaries of low Chinese prices. For instance, the supply of cheap solar panels has greatly contributed to the recent growth of European solar energy generation. While these gains are non-negligible, especially in the context of the green transition, they also come with long-run costs if they dampen Europe's innovation ability.

A taxonomy of policy responses. Awaiting a more fundamental rebalancing of the Chinese economy, the policy response should be guided by economic, strategic and geoeconomic considerations. A balance should be struck between preventing unfair competition and maintaining the benefits of openness. To preserve this balance, it is important to think of policies in light of at least four policy objectives: i) Preserving comparative advantages in high returns to scale / high TFP growth sectors to sustain European growth: This implies maintaining a sufficient level of manufacturing activity, an important driver of TFP growth, especially in sectors with high returns to scale; ii) Sustaining employment in Europe: This can justify policies targeted to sectors that are at risk of rapid disruptions through competition from China; iii) Maintaining Europe's economic sovereignty through well-diversified purchases at all central nodes of value chains; iv) Preserving the advantages of trade with China, in terms of consumer surplus (access to cheap manufacturing products), competition (high competitive pressures on domestic producers) and value added (as many sectors and firms rely on exports to China).

We propose the following guidelines:

1. **Openness to trade and direct investment should be maintained, but handled more strategically than before.** Overall, we favour a precautionary strategy that maintains the benefits of openness, but does not naively hand over sensitive areas of European economy to Chinese dominance. This applies most clearly to sectors closely linked to national security in the communication, technology, and defence space. For instance, it is imperative in the new geopolitical environment that Europe develops independent capabilities in defence technology, autonomous systems, and space industries, including the underlying industrial supply chains (batteries, electronics, etc.). In such areas targeted but limited and mission-oriented industrial policies to fund new technologies and build the industrial bases for European productions of autonomous systems, robotics, satellite and rocket technologies are sensible.
2. **In sectors that are non-strategic and where Europe is not competitive, the best policy response is to let European buyers reap the benefits of low Chinese prices.** This applies clearly to sectors where France and Germany a) do not have their own sizeable production, b) where major technological dynamism seems unlikely as industries are mature, and c) where the potential for economic coercion or monopolistic price setting by China is low. Most consumer goods, many electronics goods as well as household appliances, but also solar panels and low-tech green equipment would fall under this category.

3. **In important sectors where Europe lags technologically (e.g., batteries), the best policy is a strategy that welcomes Chinese and other countries' foreign direct investment in Europe**, preferably linked to technology transfers and joint ventures. Europe should encourage direct investments by Chinese manufacturers and technology leaders in the EU alongside incentives for Korean and Japanese battery makers who are less far behind than Europe. Such FDI should not be viewed as a problem in principle as it would bring investment and production capacity as well as know-how into Europe, provided that real production takes places and factories are not simply assembly lines for foreign kits. Such a strategy would leverage access to the European market in similar ways China did it in the 2000s, would avoid costly industrial policy experiments and ensure that EU companies continue face up to international competition.
4. **In sectors where Europe has sizeable own industries that operate at the technological frontier, the first best response is to strengthen European competitiveness** by improving the business environment, access to finance by finally creating an integrated European capital market, removing excess regulation, investing in R&D, lowering tax burdens, realizing economies of scale in the European market, and increasing the speed of innovation. If unfair Chinese practices threaten healthy European industries, the main available tools to counter these are trade and industrial policies. Both have specific strengths and weaknesses:
 - **In specific cases where the level-playing field is violated trade defence can be used more actively to counter negative impacts on EU's manufacturing sector**, without weakening further the multilateral trading system. Yet while import barriers may help European companies to defend their market shares on their home market (at least temporarily), they would weaken their ability to export to China or to third country markets. Overall, Europe should be cautious in protecting its industry by tariff or non-tariff import barriers beyond cases warranted by unfair competition as it would reduce European companies' incentives and chances to innovate.
 - **Industrial policy raises significant governance, coordination and efficiency concerns as it risks supporting well-connected incumbents in struggling industries instead of helping healthy companies.** While industrial policy has the potential to improve the competitive position of European companies across markets and support an upgrading of Europe's technological capabilities, the success probability of European industrial policy appears low in the sectors where it would have to directly compete with China's policy such as EV batteries.

- **The use case for industrial policy is mostly limited to support for research and development in high tech and defence sectors.** France and Germany should coordinate defence spending to support strategic dual use industries like advanced batteries for defence applications, high-grade military steel, advanced materials, even robotics (Quinet et al. 2025). Increasing investment in defence and space industries and their supply chains are cases where public funds can bridge financial constraints, generate security externalities, and help realize economies of scale. To this aim, it is vital to improve the coordination of public spendings and raise the share of joint defence procurements.
- **Coordinated demand incentives in France and Germany (f.i., for EVs and heat pumps) would be much more effective than national schemes.** Such aligned programs would have to be accompanied by implicit “Made in Europe” incentives to encourage domestic European production (potentially following the French climate scoring provisions for EVs). A joint Franco-German car scheme covering both the consumer and the corporate fleet market could provide a boost to European production and provide incentives for inward FDI without subsidizing outdated technologies or ailing companies.

5. **Countering China's strategic raw material policy and other non-substitutable dependencies is an urgent priority.** China has secured a strategic position in the processing of many industrial raw materials from rare earth to graphite that gives Beijing chokepoints over global industrial supply chains. Similar chokepoints exist in the pharmaceutical industry and in battery production. Alleviating this dependency requires research into substitution options (as Japan has shown when embargoed by China), diversification strategies, stockpiling, R&D to find alternative technologies, as well as investment into own capacities as an insurance policy. To some extent, funds for development assistance can and should be tied more closely to trade on the basis of an interest-based development aid strategy (“aid for trade”).

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