

Toward a Triangle of Coordination: The Role of the European Commission, the European Central Bank and the European Investment Bank in (Re-)Making EU Industrial Policy

**Daniel Mertens and Matthias Thiemann** 

LUHNIP Working Paper Series 7/2024

December 11, 2024

LUHNIP Working Paper 7/2024

#### Daniel Mertens<sup>1</sup> and Matthias Thiemann<sup>2</sup>

# **Executive Summary**

The European Union's emergent industrial policy regime has raised concerns over lacking ambition and scope to keep pace with policy initiatives in both China and the US. Inadequate financial means and an overly reliance on private financial market actors to bring forward investment aligned with official goals is one line of criticism; deficient strategic coordination within the European multilevel system is another. This working paper addresses these concerns by discussing the role of three central EU institutions in the emergent regime: the European Commission, the European Central Bank, and the European Investment Bank. We review each institution's respective contribution and shortcoming in European industrial policy and highlight the dimensions of institutional change over the past 15 years as well as their limitations in re-making EU industrial policy fit for the current challenges. Particularly, we provide insights on potentials for and obstacles to effective industrial policy coordination on the supranational level.

In line with our brief analysis, we put forward three recommendations to move the EU's industrial policy ahead based on the capacities of the Commission, the European Central Bank, and the European Investment Bank. First, we recommend fostering intra-institutional cooperation in industrial policy financing. The ECB's purchase of EIB bonds that allows the EIB to expand a combination of concessional loans and grants based on target benchmarks set by the EC should no longer be ruled out. Second, the enormous expertise on economic and financial monitoring each institution possesses should be used for enhanced analytical cooperation. Such cooperation could form the backbone of a European Industrial Policy Board that includes national ministries to engage in an industrial policy feedback loop and facilitate the formulation of missions. Third, and finally, we suggest the creation of a green credit register, based on the EU Taxonomy, to advance a system of preferential loans. Connecting the orchestration powers of the EC and the financial and analytical powers of both the ECB and EIB might thus enable a more robust industrial policy that is fit for decarbonization amidst global change.

1

<sup>&</sup>lt;sup>1</sup> Osnabrück University, daniel.mertens@uos.de

<sup>&</sup>lt;sup>2</sup> Sciences Po, matthias.thiemann@sciencespo.fr

### 1. Introduction

In the current era of competitive industrial policy among the leading industrial nations and economic regions, several observers have noted the limited capacity of the EU's institutional setup to keep pace with either US or Chinese initiatives (e.g., García-Herrero and Schindowski 2024; Jansen et al. 2023). While the Inflation Reduction Act can capitalize on the US dollar as a global reserve currency and its associated fiscal firepower, China's industrial policies combine several tools of planning and coordination with a multi-level investment and subsidy system. The EU, however, neither fits the institutional prerequisites of what has been called "robust derisking" for the US nor the "big green state" for what China is approaching. Instead, it is seen as applying a form of "weak derisking", where limited fiscal resources, especially on the supranational level, are used to incentivize private capital, but without the bureaucratic means to discipline it and impose strict though efficient conditionalities (Gabor and Braun 2024). In our view, there is widespread agreement among scholars that this mode of industrial policymaking in the EU is painfully insufficient to tackle unfolding environmental crises, geoeconomic competition, and regional inequalities.

This state of affairs raises the question of whether core European institutions could increase their impact through stronger inter-institutional coordination and mutual support of the financing tools at their disposal. Focusing on the European Commission (henceforth EC), the European Central Bank (ECB) and the European Investment Bank (EIB), this working paper assumes the mission of evaluating these three central institutions' roles in European industrial policy and exploring the possibilities (and pitfalls) of heightened coordination and collaboration. In particular, it will propose that instead of relying on "blending and rebranding", the EU's emergent industrial policy regime might benefit from a) elevated financing coordination that strategically aligns both the ECB and the EIB with the industrial and climate targets defined by the EC; and b) elevated coordination of expertise that dovetails the analytical capacity of all three institutions.

It is important to note that all three institutions have seen considerable change and contestation with regard to their roles over the course of the last 15 years. The European Central Bank, through the Euro crisis and its aftermath, has been forced into a much more activist role, engaging in quantitative easing (QE) and hence the purchase of national government debt, despite initially perceived legal limitations. This change, in turn, went hand in hand with a new emphasis on the ECB's secondary mandate, which is to support EU policy as long as this does not contradict its primary mandate to secure price stability (Van 't Klooster and De Boer 2023). The EIB, on the other hand, squarely placed itself at the top of climate financiers by becoming the EU's climate bank in 2019, pushing further its role as the central investment vehicle for large EU policy challenges (Mertens and Thiemann 2023). Lastly, the European Commission itself has fundamentally altered its own image and its activities, moving from acting as a neoliberal

regulatory state to coordinating, orchestrating and partly financing industrial policy in the EU at an unprecedented scale. This includes the pursuit of Important Projects of Common European Interest (IPCEI) as well as the coordination of massive investment packages in the context of the Recovery and Resilience Facility (RRF), to name the two most pertinent examples, but also broader aspects of climate and energy governance (Prontera and Quitzow 2022; Spendzharova 2023).

All of these changes were initiated by external circumstances, catalyzing change that was often evolving over time in incremental fashion, rather than following a meditated, large-scale design that seeks to take possible mutual synergies into account and learns from other regions. This is the task of this working paper, which seeks to develop an external view which can lead to suggestions for policy change. To this end, we will first outline the current activities and roles of the three main players, then evaluate the possible benefits and drawbacks of increased coordination. Here we draw on recent calls for coordination based on the ECB's secondary mandate (Van 't Klooster and De Boer 2023; Ryan-Collins et al. 2023) and its potential to work with the EIB (Varoufakis and Holland 2012).

## 2. European institutions' role in industrial policy

Before we delve into the question of existing and possible coordination pathways in the remaking of EU industrial policy, we will briefly lay out the core features standing out in each institution's industrial policy function.

### 2.1 The Role of the European Commission

In contrast to some common interpretations, the European Commission has been a key actor in European industrial policy for a long time: Limits to state subsidies, competition enforcement, but also furthering the privatization of state infrastructure can be understood as a particular form of (neoliberal) industrial policy that cuts across the preference for horizontal rather than vertical policies. This approach can first and foremost be described as steering the structure and evolution of European industries through regulation, not least through pricing and information disclosure.

In the last decade, however, the EC has increasingly deviated from this market-based approach and taken a more assertive role. Defining areas of geoeconomic security and priority areas for industrial expansion to secure international competitiveness, it has sought to both steer and allow for a stronger and vertical industrial policy of member states. This has become visible in a wide range of measures, from temporary frameworks in EU state aid, IPCEIs, to the RRF of NextGenEU. Prescribing the share of green and digital investments in the national plans of the latter, the Commission has been negotiating the content of these plans in order to secure that planned investments fit with broad-based industrial policy goals (e.g., Zeitlin et al. 2023). Finally,

the EU itself has sought to engage in active industrial policy by setting up the European Innovation Council in order to fund promising start-ups in vital areas of (geoeconomic) interest of the EU (Mocanu and Thiemann 2024). A closer look at some industrial policy announcements, such as REPowerEU, the Net-zero Industry Act and more generally 'strategic autonomy', reveals the emergent capacity of the EC to formulate specific objectives and pathways, identify critical sectors as well as areas for policy integration – though not a coherent and accountable industrial policy framework (Pianta et al. 2020).

Beyond the RRF, however, financing initiatives have been the weak spot of this more assertive role. In offering financing tools, the EC – still largely dependent on member states' contributions – must resort to a strategy that we call "blending and rebranding". For instance, the proposal for the net-zero industry act (COM(2023) 62) referred to €250 billion already available through the RRF, €100 billion available in existing cohesion funds, €40 billion available for green R&D in the existing Horizon Europe program, and an alignment with the InvestEU program. Additionally, it refers to REPowerEU, which itself is heavily based on €225 billion from an untapped RRF loan facility. Next to these rather opaque repurposing efforts (rebranding), initiatives since the Investment Plan for Europe under the Juncker Presidency have sought to "mobilize" private and public investment. This has happened largely through channeling some existing budgetary funds as guarantees to the EIB group, which is expected to leverage further own resources, "blended" with other expected financial contributions.

## 2.2 The Role of the European Central Bank

With respect to the ECB's role in industrial policy, we can state that as of today it generally has no direct role in industrial policy – even though, historically, central banks in Europe have played an important industrial policy role through credit allocation (e.g., Monnet 2018). Furthermore, a strict price stability mandate that allows for keeping inflation below that of external competitors and a focus on structural reform can be seen as features of an industrial policy catering to export sector interests. However, the ECB's few actual ventures into industrial policy terms can be linked to its QE programs and the undeniable fact that it thereby became a major player in the EU's debt markets (Thiemann et al. 2023). One consequence of this development was the ECB's ability to rebalance its portfolio of assets to make it less 'dirty', a tilting exercise it practiced in 2022, but which shortly after was ended, as the ECB's QE program itself came to a halt (Kedwards et al 2024). This short-lived action can be linked to the secondary mandate of the ECB, which obliges it to support the EU's (industrial) policies if it is not endangering the primary mandate (van 't Klooster and de Boer 2023). In the past, however, this primarily implied a focus on the Capital Markets Union, with the ECB actively intervening in the policy discourse on this topic. Although today this is framed as "Green capital markets union", this follows the ECB's longer-term engagement on this issue (Braun and Hübner 2018; Baioni et al. 2024).

In the context of these debates, the ECB has also been weighing the possibility of engaging in preferential interest rates for the green transition (Schnabel 2022). However, this project has been postponed, as taming inflation became the primary concern. Such a policy has several infrastructural prerequisites. Most importantly it would require a credit register that would allow the ECB to easily distinguish between green and non-green loans. Based on this distinction, it could then permit member banks to refinance their loans at the discount window and/or to pledge these loans as collateral for a repurchase agreement (repo) for preferential rates. However, as of today, this project is on hold, meaning that the EU falls further behind other jurisdictions which have already successfully established such policies (see below).

This leaves the supervision of financial institutions, including the EIB, as a lever for the ECB to push for certain changes in the Euro area to achieve decarbonization or other industrial policy goals. Staying within the boundaries of the macro-financial framework of market-based finance (Kedwards et al. 2024), industrial policy's room for maneuver is very limited as it seeks to mostly nudge financial market participants (for a discussion, s. Smolenska and Van 't Klooster 2022). Here, the biggest focus lies in transition plans for financial institutions that incentivize them to move away from the financing of fossil fuel projects, an activity which as of today is legally non-binding, and hence has only exerted a limited impact on the actual behavior of large banks.

## 2.3 The Role of the European Investment Bank

Lastly, we come to the EIB's role in industrial policy. The EIB is a multilateral development bank owned by the EU member states. Founded in 1958, it has evolved from a bank seeking to foster development in particular regions to a bank with a balance sheet the size of 550bn Euros, which increasingly pursues European policy initiatives, not just those of member states, following the lead (and using the money of) the EC. This rapprochement between the EIB and the EC occurred especially from 2000 onwards as a conscious strategy by the EIB to secure resources and legitimacy (Mertens and Thiemann 2019).

Focusing on the three institutions in terms of industrial policy funding, it is evident that the EIB is the most active. The EIB has acted as a key financier for IPCEIs since the beginning, most prominently in the hydrogen sector and the battery value chain. The EIB also finances critical infrastructure such as underwater electricity cables to distribute electricity based on renewables and invests heavily in the roll-out of renewable energy production. This commitment to the EU's green industrial plan has emerged with the bank's pivot to become the EU's climate bank in 2019 when it pledged to steer 50% of its lending operations to climate action and environmental sustainability until 2025. Furthermore, the EIB group is, via the European Investment Fund (EIF), the main actor in the venture capital market, seeking to push for radical low-carbon technological innovations. In addition to the financing of industrial policy initiatives, the EIB is also active in the EU's regulatory initiatives, such as in the EU taxonomy, and has been

expanding its advisory services, such as the InvestEU Advisory Hub, to support investment projects from identification to implementation.

Nonetheless, one of the challenges that emerges for the EIB in the European industrial policy landscape is the feature of having multiple principals. As a multilateral institution and the EU's policy bank it has to balance potentially competing objectives – from different member states and supranational institutions – for which it employs its capital, and from which complex accountability and transparency issues arise (Ban and Seabrooke 2016).

## 3. Coordination among EU institutions: Status quo, potentials and pitfalls

Against this background, centering on the issue of industrial policy coordination relies on a large body of innovation and industrial policy literature. In short, this literature has long argued that successful industrial policy relies on strategic coordination – between the government and the private sector, but also among government entities (e.g., Evans 1995; Kattel and Mazzucato 2018). Developing public sector capacities to effectively utilize resources greatly hinges on the level of inter-government and inter-agency coordination (Wu et al. 2018). But for the European multi-level system, vertical coordination has received much more attention than horizontal coordination, especially between the institutions of interest here.

## 3.1 Coordination in the status quo

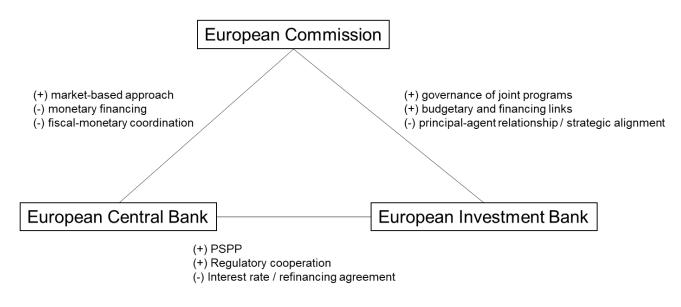
As outlined above, some of the industrial policy strategies formulated at the Commission level require financing implementation by the European Investment Bank or other national or transnational financial institutions, but it has not yet been precisely examined. In Figure 1 below, we seek to present the current links and alignments on policies between these three different bodies, which signals that the current equilibrium is characterized by contradictory effects upon these institutions' capacities to engage in industrial policy. In particular, we can observe an alignment of the EC and the ECB in terms of a market-based approach, especially in the realm of financial market integration. At the same time, fiscal-monetary coordination is ruled out officially by both actors, as is monetary financing of any policy initiatives.

With respect to the EIB and the ECB, there are only very few official links between the two. The first is the fact that the public sector asset purchases by the ECB have led to the purchase of certain debt instruments issued by the EIB. Secondly, the ECB, since acquiring its mandate as the lead supervisor of the largest banks in the Eurozone (SSM), has supervised the EIB and its portfolio. In addition, there is the collaboration of ECB and EIB in different EU initiatives, such as sustainable finance and the CMU. This collaboration is further advanced by institutional linkages, such as ECB President Lagarde sitting on the advisory body of the EIB for its climate action. As such, certain links do exist, and the two actors interact with each other on an everyday basis. There are also more indirect (and uncoordinated) links between the two. The most

pertinent is the impact of interest rates set by the ECB on the EIB's business model. Here, the higher the current rates, the greater the attractiveness of the EIB's concessional lending offers. Note that while this link implies a positive relationship between the ECB's rates and the EIB's policy impact, it creates macro-financial tensions in the larger industrial policy framework. For instance, the expansion of renewable energies is prone to have high upstart costs and hence suffers in particular from high interest rates.

Lastly, the link between the EC and the EIB is characterized by the EC's strong reliance on the EIB to implement its industrial policy via the latter's balance sheet and financing operations. While this strong reliance on the EIB underwent a low point in 2018, when the EC believed that the EIB - rather than pursuing industrial policy goals - took too much advantage of the EU's budgetary means to generate internal profits, the EIB is still a major actor in basically all of the EC's industrial policy initiatives. Institutionally, the EC currently nominates one member (out of 28) of the EIB's Board of Directors, issues opinions on each project presented to the board, and is a major shareholder of the EIF. Still, it is not the main principal of the bank. Additionally, all joint financial programs linked to the EU budget have shared governance structures, which sometimes require conflictive negotiations between the EIB and the responsible Directorates-General (DGs).

Figure 5.1: Status quo of industrial policy coordination



Note. Author's own. (+) present; (-) indirect/absent

As such, the current triangle undergirds the regime of "weak derisking", in which strategic alignment is most visible with regard to financial market integration and a market-based approach in the sense of a 'green CMU'. Coordination between the EC and the EIB mostly relies on a "blended finance" approach, but does not entail clear strategic coordination because of a

lacking principal-agent relationship. What is more, the current configuration is characterized by the exclusion of certain policies, such as the direct financing of industrial policy by the ECB (directly, or indirectly via the EIB) and the provision of preferential interest rates for industrial policy objectives. Still, the triangle also entails potential for stronger coordination and strategic alignment to which we turn now.

### 3.2 Potentials for coordination

Having reviewed instances of the current coordination between the EC, the ECB and the EIB, we see that two elements stand out. First, there is the possibility for a greater use of the ECB for industrial policy, in relation to both the EC and the EIB. For instance, the use of preferential interest rates for loans that finance green projects is of primary importance. These preferential interest rates are already granted by central banks in Japan and China (DiLeo 2024), which indicates the general feasibility of such schemes. Looking into these activities, we see the need for a green credit register, which allows the central bank to verify the nature of the loan given and then provide a preferential interest rate. While this is currently signaled as the greatest hurdle for a broader initiative by the ECB (Schnabel 2022), prior work on the EU taxonomy provides a foundation for putting such a policy initiative into action. As China's example teaches us (Chen 2024), public development banks play a central role in this initiative as they source said projects and transmit the interest rate advantages to the projects. Given the EIB's central role in these efforts (Mertens and Thiemann 2023), it is clear that it is predestined to fulfill this role.

A more controversial variation of this proposal is for the ECB to commit to purchasing ex-ante an amount of (green) bonds issued by the EIB, allowing the latter to engage in massive planning for renewable energy expansion. This central leadership role of the EIB, enshrined in an explicit refinancing chain for green investment projects by the ECB, could be based on growth targets set out by the EC. This would link the ECB via the EIB to the final projects, with the EIB giving preferential loans which will then be cheaply refinanced by the ECB (Varoufakis and Holland 2012). The advantage of this option is that it would be possible to plan for a much larger EIB investment portfolio. Rather than engaging in bottom-up sourcing of projects, such an initiative could even envision setting up an investment branch at the EIB that directly coordinates with the large national energy providers to accelerate investment in this crucial sector. In the end, this variation on the policy design could be preferred, if one believes that the roll out of large renewable energy build-up requires a focal actor and that the EIB could deliver on this.

This relates to the second outstanding element, i.e., that such a policy option could pave the way for a much larger role for the European Commission in terms of implementing ambitious goals for the EU and defining core strategies. The EC in this setting could provide not only general targets for solar and wind construction efforts, but instead provide a much more concrete

European plan for renewable energy production, which seeks to generate an optimal policy for the EU as a whole, rather than relying on national energy plans. Here, the EC could take inspiration from the example of China, which operates based on large national plans that are then implemented locally. Certainly, this raises issues about the politics, the economics and the legal foundations of planning (e.g., Dermine 2024; Ban et al. 2024). But it can be approximated more incrementally by improving on the EU's analytical capacity through this triangle of coordination.

In fact, all three institutions employ a large number of economists who engage in macroeconomic analysis and the monitoring and reviewing of both the European economy and, in conjunction with the ESCB, member state economies. Along with the EC's and the ECB's databases and reports, the EIB produces an annual investment outlook, which analyzes constraints and potentials for investment in the European Union, based on a dataset of more than 10,000 companies, providing a basis for more strategic planning. These three bodies could, for instance, cooperate in the context of a European Industrial Policy Board, to which other national bodies could be invited and which then provides extant policy feedback in the emergent regime. An interesting blueprint for said initiative is the European Systemic Risk Board, which besides the ECB and the national central banks also houses national ministries of finance, jointly discussing the systemic risks the Eurozone is exposed to. How to set-up such a body to achieve the multitude of input needed, all the while remaining capable of taking decisions and converging on a common plan, is a tricky matter, which future analysis should seek to understand.

### 3.3 Obstacles and pitfalls in intra-institutional coordination

There are obvious criticisms that can be levelled at our propositions. First, critics might argue that the bulk of industrial policymaking still occurs at the national level and that, therefore, the major task for the EU is state aid regulation to avoid market power concentration in fiscally more potent member states – with everything else being but marginal add-ons. This is true only if there is no permanent or, again, extraordinary expansion of the EU budget or the EC's borrowing power, or, if financing coordination between the ECB and the EIB remains unexplored. As such, coordination and more explicit goal-post setting by the EC, combined with an expanded support both by the EIB and the ECB, will stand to benefit all individual members.

However, we concede that there is high uncertainty about the existence of the right institutional mechanisms that can secure the above and that can sufficiently address the concerns over input and output legitimacy. Almost twenty years ago, Baldwin and Martin (2006, 134) argued that "(t)he contrast between the vagueness of the benefits of coordination and the surety of the decision-making costs suggests that the EU has no need to set up a new institutional structure for coordinating industrial policy." But the world – and industrial policymaking in the EU – was

different back then and new solutions to pressing policy challenges need to replace the integration mode of "failing forward". Still, financing and analytical coordination should be based on a clear identification of mutually beneficial initiatives. Here, once more, the three institutions we discussed can provide much of the backbone of said intellectual planning infrastructure.

## 4. Conclusions and policy recommendations

This working paper started out with the observation that compared to the US and China, the EU's industrial policy and its level of coordination is much weaker and characterized by a large reliance on financial markets, and hence private actors to achieve its policy goals. To overcome this position of weakness, we have suggested increasing the level of coordination between three institutions crucial for EU industrial policy, namely the EIB, the ECB and the EC. As such, we suggest to foster:

- 1) intra-institutional cooperation in industrial policy financing, namely to consider bond purchasing of the EIB by the ECB, concessional loans and grants through the EIB, based on target benchmarks set by the EC;
- 2) analytical cooperation between the three bodies, based on their economic expertise and the data they collect. Said cooperation could form the backbone of a European Industrial Policy Board, which would assemble national ministries to engage in an industrial policy feedback loop and facilitate the formulation of missions, based on a shared problem perspective.
- **3)** the creation of a green credit register, based on the EU Taxonomy, to advance a system of preferential lending for an industrial policy that targets decarbonization.

We would like to emphasize, however, that these proposals need to be embedded in democratic governance and accountability mechanisms, rather than a purely technocratic exercise that reproduces the failure of the neoliberal regulatory state (see Diessner and Petit working paper). Adding this to the equation makes the re-making of European industrial policy look like a herculean task – but one that is worth pondering upon.

### References

Baldwin, R. and Martin, P. J. (2006). Coordination of industrial policy in the European Union, EIB Papers 11 (1), 134-157.

Ban, C. and Seabrooke, L. (2016). Investing in Integrity? Transparency and Accountability of the European Investment Bank. Brussels: Transparency International EU.

Ban, C., Hasselbalch, J. and Larsen, M. (2024). Green Economic Planning from Concept to Practice: Comparing the Cases of China, Denmark, and Post-war France. Unpublished manuscript.

Baioni, R. et al. (2024). Playing the Capital Markets Union? From the introduction of sustainable finance 'as part of the CMU to the discursive construction of the CMU as a common good. Unpublished manuscript.

Braun, B. and Hübner, M. (2018). Fiscal fault, financial fix? Capital Markets Union and the quest for macroeconomic stabilization in the Euro Area. Competition & Change 22(2), 117-138.

Chen, M. (2024). The Latecomer's Rise: Policy Banks and the Globalization of China's Development Finance. Cornell University Press.

Dermine, P. (2024). The planning method: An inquiry into the constitutional ramifications of a new EU governance technique. Common Market Law Review 61 (4), 959-992.

DiLeo, M. 2024. The Politics of Central Bank Approaches to Climate Change in East Asia and the West. PhD Thesis. University of Queensland.

Evans, P. B. (1995). Embedded Autonomy. States and Industrial Transformation. Princeton: Princeton University Press.

Jansen, Jannik and Redeker, N. (2023). For climate, profits, or resilience? Why, where and how the EU should respond to the Inflation Reduction Act. Jacques Delors Institute. Policy Brief.

Gabor, D., and Braun, B. (2023). Green Macrofinancial Regimes. SocArXiv. October 5. doi:10.31235/osf.io/4pkv8.

García-Herrero, A. and Schindowski, R. (2024). Unpacking China's industrial policy and its implications for Europe, Working Paper 11/2024, Bruegel.

Kattel, R. and Mazzucato, M. (2018). Mission-oriented innovation policy and dynamic capabilities in the public sector. Industrial and Corporate Change 27 (5), 787–801.

Kedwards, K., Ryan-Collins, J. and Gabor, D. (2024). Carrots with (out) sticks: credit policy and the limits of green central banking. Review of International Political Economy.

Mertens, D. and Thiemann, M. (2019). Building a hidden investment state? The European Investment Bank, national development banks and European economic governance. Journal of European Public Policy 26 (1), 23–43.

Mertens, D. and Thiemann, M. (2023). The European Investment Bank: the EU's climate bank? In: Rayner, T., Szulecki, K., Jordan, A. and Oberthür, S. (eds.): Handbook on European Union Climate Change Policy and Politics. Cheltenham: Edward Elgar, 68-82.

Mocanu, D. and Thiemann, M. (2024). Breeding 'unicorns': Tracing the rise of the European investor state in the European venture capital market. Competition & Change, 28 (3-4), 433-453.

Monnet, E. (2018). Controlling Credit: Central Banking and the Planned Economy in Postwar France, 1948-1973. Cambridge: Cambridge University Press.

Pianta, M., Lucchese, M. and Nascia, L. (2020): The policy space for a novel industrial policy in Europe. Industrial and Corporate Change 29 (3), S. 779–795.

Prontera, A. and Quitzow, R. (2021). The EU as catalytic state? Rethinking European climate and energy governance. New Political Economy, 27 (3), 517–531.

Ryan-Collins, J., Kedwards, K., and Chenet, H. (2022). Monetary-fiscal policy coordination: Lessons from Covid-19 for the climate and biodiversity emergencies. IIPP Working Paper 2023/04.

Spendzharova, A. (2023). Gouvernement Économique, but Not Like in the 1990s: The Commission and the ECB's Policies Advancing the 'Green Transition'. Journal of Common Market Studies 61 (S1), S. 136–146.

Schnabel, I. 2022. A new age of energy inflation: climateflation, fossilflation and greenflation. Speech by Isabel Schnabel, Member of the Executive Board of the ECB, at a panel on "Monetary

LUHNIP Working Paper 7/2024

Policy and Climate Change" at The ECB and its Watchers XXII Conference. Available at https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220317\_2\inftydbb3582f0a.en.html

Smoleńska, A. and van 't Klooster, J. (2022). A Risky Bet: Climate Change and the EU's Microprudential Framework for Banks. Journal of Financial Regulation 8 (1), 51–74.

Varoufakis, Y. and Holland, S. (2012). A Modest Proposal for Resolving the Eurozone Crisis. Intereconomics 47 (4), 240-247.

Thiemann, M., Büttner, T. and Kessler, O. (2023). Beyond Market Neutrality? Central Banks and the Problem of Climate Change. Finance and Society 9 (1), 14–34.

Van 't Klooster, J. and De Boer, N. (2023). What to Do with the ECB's Secondary Mandate. Journal of Common Market Studies 61 (3). 730–746.

Wu, X., Howlett, M. and Ramesh, M. (Eds.) (2018). Policy Capacity and Governance. Assessing Governmental Competences and Capabilities in Theory and Practice. Cham: Palgrave Macmillan.

Zeitlin, J., Bokhorst D. and Eihmanis, E. (2023). Drafting, implementing, and monitoring NRRP as an interactive multilevel process. Brussels: Foundation of European Progressive Studies.