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Coordination for EU Competitiveness

The debate about EU competitiveness has been reignited by the energy price shock following the Russian invasion of Ukraine, the deployment of large-scale industrial subsidies in China and the United States, and the challenge of reconciling decarbonization, deficit reduction, and higher defense spending.¹ One side of this debate implores EU policymakers to finally address long-standing weaknesses of the single market. The other side calls for a change in paradigm, toward a more interventionist EU on clean-tech industrial policy, looser state-aid rules, and a mild form of protectionism via public procurement and tariffs.

The purpose of this paper is to argue for a third approach, which we view as complementary to the first and an alternative to the second. We call it “Coordination for Competitiveness.”

Single market reform involving a large transfer of authority and money to the EU level, as would be the case with a full banking union or a much larger EU budget, is not currently viable. What may be both feasible and effective, however, is to seek coordination of policies and spending at the national level (or joint spending in support of coordinated policies), in specific areas, provided that this can trigger large competitiveness gains over the medium term.

In many cases, the gains from this type of coordination will not be driven primarily by spending per se but by common or coordinated policy action, investment, and reform. Joint spending plays a role by creating incentives and lubricating coordination, including ensuring that there are no significant losers. The paper is primarily intended to make the case for this type of coordination, bolstered by two specific examples: an energy policy coordination; and an EU Advanced Research Projects Agency (ARPA).

A ROUGH GUIDE TO EU COMPETITIVENESS

The term competitiveness is ubiquitous in European policy debates, particularly in times when EU companies are losing ground to foreign competition because of higher input costs and foreign subsidies. The statement “*the EU is losing competitiveness*” seems to be an obvious characterization of the problem, and the objective of regaining competitiveness to be a natural way to organize a policy discussion.

Countries do not compete in the same way that firms do, because one country’s success, in terms of economic growth, is normally good for its trading

- KEY MESSAGES
- **The competitiveness of countries and that of firms are different concepts**
 - **EU GDP is stable at two-thirds of the US, but productivity growth has lagged since the 1990s. The EU does better on wealth equality and clean-tech export shares**
 - **The EU faces two supply-side disadvantages: high energy costs; and a fragmented internal market**
 - **We propose a strategy of “Coordination for Competitiveness”: national-level policy coordination as an alternative to full EU-level integration**
 - **We illustrate this with two examples: energy policy coordination; and an EU-level ARPA**

partners² and not a zero-sum game. In the remainder of this paper, we follow the convention of applying the term “competitiveness” to the EU and its member states rather than just EU firms, but define it differently from firm competitiveness. Firms are competitive if they can make a profit while selling at lower prices than competitors. Economies are competitive if their supply-side conditions and policies lead to high productivity growth relative to their peers, sustainably.

Trying to answer the question of whether the EU is competitive or not, and whether its competitiveness has declined, we briefly sketch comparisons at three levels: aggregate performance, sector and firm-level performance, and supply-side conditions underpinning that performance.³

At the aggregate level, while EU GDP per capita has remained stable at two-thirds of the US level (with Eastern Europe catching up and Southern Europe in relative decline, see Darvas (2023)), labor productivity and total factor productivity growth have trailed the US since the 1990s. The EU has done consistently worse on TFP growth since 2001, with an average annual TFP growth of 0.34 percent compared to 0.56 percent for the US during the 2013–2019 period. It has done worse on labor productivity as well, except during 2013–2019. However, according to OECD data, the US pulled far ahead of the EU during the most recent, 2020–2022 period, with average labor productivity

² See Smith (1771, Book IV) and Krugman (1994).

³ For a more detailed comparison, see the full paper available at: [https://www.europarl.europa.eu/thinktank/de/document/IPOL_STU\(2024\)747838](https://www.europarl.europa.eu/thinktank/de/document/IPOL_STU(2024)747838).

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growth of 1.41 percent compared to 0.77 percent, reflecting its more vigorous recovery from Covid-19. China's GDP per capita has been catching up rapidly since 2000, although this has recently tailed off. TFP growth in China was remarkable before the global financial crisis, but has been negative in the Xi Jinping era. In contrast, India's productivity growth has been strong both in TFP and labor productivity terms. Importantly, prosperity tends to be more equally distributed in the EU than in the other economies mentioned.

At the sector and firm levels, labor productivity growth has been fastest in the manufacturing and information and communication technology (ICT) sectors in both the EU and the US, but the former sector has driven the EU productivity performance, whereas the latter has driven the US performance (ECB 2021). Some of this is attributable to slower IT adoption and lower IT capital in the EU than in the US. However, IT investment alone does not explain all productivity differences. The UK leads in IT investment but lags in overall productivity.

Furthermore, private R&D expenditure in the EU is also far lower than in the US. This is mostly attributable to the smaller number of large R&D investors in the EU rather than to lower R&D intensity. The EU also trails the US and, increasingly, China in patents in frontier technologies (McKinsey Global Institute 2022). However, it still leads the US, but lags China, on clean-tech export shares (batteries, wind, and solar).

Finally, the EU faces two supply-side disadvantages relative to the US: higher energy costs; and a fragmented internal market. The latter is likely one reason why growth funding by venture capital is significantly inferior to US and Chinese levels. Moreover, the energy price gap has recently widened with China, the US, and South Korea, and there is no likelihood of it declining in the foreseeable future. Electricity prices for business were already 60 percent higher in the EU than in the US before the Covid-19 pandemic.

A STRATEGY FOR RAISING EU COMPETITIVENESS

Against this background, two strategies should be pursued to strengthen EU competitiveness: (a) deepen the

single market; (b) cooperate in sectors that offer the greatest gains, supported by some EU-level funding.

The cost of non-Europe is much higher nowadays than it has been in the past. The cost of not having an integrated energy market has increased with the discontinuation of Russian gas shipments and the declining share of easily tradable fossil fuels in the future EU energy mix. The cost of not having an integrated labor market has increased in a world in which productivity relies on the mobilization of skills. The cost of not having a single market for services has increased in a world dominated by digital giants. The cost of not having a unified capital market has increased in a winner-takes-most world in which fast-growing firms can quickly acquire world dominance. To only cite a few examples. The fragmentation of the EU and the imperfections of the single market remain despite massive past efforts. Market integration is in a way the EU's Sisyphean rock.

But market integration (Plan A) may not suffice due to resistance against across-the-board integration. Because Europe consists of sovereign countries with no or limited direct federal resources, it is harder to fund projects irrespective of which country benefits from them, harder to cooperate on regulatory alignment, harder to maintain a level playing field for firms, and harder to coordinate public investment with cross-border spillovers. The results are higher trade barriers, lower access to growth finance, and also higher energy costs.

Acknowledging this reality, Plan B, in complement to Plan A, should focus on specific high-return integration projects that yield the highest common gains and pursue a strategy that we call *Coordination for Competitiveness*. The remainder of this paper offers two concrete ideas for coordination that would achieve significant medium-term gains.

POLICY CONCLUSIONS

We focus on two reform avenues: energy policy coordination; and the redesign of EU innovation policy. Neither of these reforms would require a fundamental overhaul of the EU Treaty architecture. Rather, they



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imply that the EU and the member states should focus their attention on deficiencies in the current policy system and on ways to address them.

Energy Policy Coordination

If decarbonization proceeds as expected, in two decades virtually all sectors will be dependent on electricity. Consequently, the cost of electricity will become the single most important variable for the cost competitiveness of all energy-intensive sectors. Since clean energy (electricity, green hydrogen) is generally much more expensive to transport than coal and oil, production based on domestic renewable energy (e.g., wind) or imported energy-intensive pre-products (e.g., green steel) will generally be cheaper than if it is based on imported energy (e.g., green hydrogen). As a result, the transition to a carbon-free economy has the potential to redraw the global and the European competitiveness map.

It is not clear whether accelerated decarbonization will reduce or increase the total cost of energy at the EU level. However, we *do* know that the current cost structure is far from optimal. Because decarbonization will rely essentially on substituting capital for fossil fuels, the main costs in a clean electricity system will be capital costs. Hence, the allocation of capital will determine whether the system is well-tailored to minimize costs.

This insight forces us to revisit the gains from integrating electricity markets, which can yield advantages through five channels. First, by exploiting geographic comparative advantages. Second, by reducing volatility, thus reducing the need for backup capacity. Third, by reducing fuel consumption during the energy transition. Fourth, by diminishing capital costs through a more reliable market framework. And finally, by realizing cost savings through better sequencing of investment.

In the short term it might look more attractive to reduce electricity prices for certain types of consumers – often energy-intensive industry – to help their competitiveness (McWilliams et al. 2024). This can be done in very different ways, which all have in common

that some other market participants would have to shoulder a higher share of the system cost.⁴ Common to all such cost-shifting solutions is that they reduce the incentive for the beneficiaries to count the true cost they are imposing on the system. Given that the transition is about efficiently matching new demand and supply patterns, cost-shifting driven by the desire to improve the competitiveness of individual sectors is not a sustainable strategy.

The only sustainable way to improve energy competitiveness is to contain energy system costs through stronger coordination of energy policies and energy-market integration. This could happen to various degrees of ambition:

- A gradual way forward would be to let a trusted public institution conduct electricity system planning scenarios for Europe, against which national plans and policies are scrutinized (e.g., in state-aid cases). Concretely, such an institution (a European Energy Agency?) could assess redundancies and gaps in the entirety of the national energy and climate plans and the national network development plans. Existing policy processes, such as the European scrutiny of national investment incentives and market design choices, and European support mechanisms such as the Connecting Europe Facility, as well as new policy processes such as European investment incentives and funds, could help address the observed shortcomings. This should be accompanied by some degree of harmonization of national investment incentives (such as contracts for difference (CfDs) and capacity mechanisms) and credible oversight over any national tools that have disproportionate adverse effects on investors in other EU countries. At best it will give rise to competitive European incentives for investments (e.g., a European capacity mechanism). A common fund for cross-border lines and other common infrastructure would help fill crucial gaps (and might also entail some compensation for those who benefit less). It could be established as a common

⁴ For more detail on what not to do, see the full paper.



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institution that would lend on a long-term basis to network operators, or a consortium of them, and would favor cross-border interconnection investments.

- A more radical approach would be to undertake a market reform that envisions a truly borderless market. Such a market would have rules that limit national interventions on the one hand, and efficient European system development and system management institutions on the other. For example, a European system manager (independent system operator) could run the short-term electricity market throughout Europe, with granularity reflecting local demand-and-supply conditions. This would be overseen by the European regulator (Pisani-Ferry et al. 2023). This would result in a future-proof system that overcomes many of the complexities and inefficiencies of the current patchwork of inconsistent instruments and reduces their unpredictability. It would also require a governance system that ensures member-state governments know they can still exert control in case of dramatic events.

An EU-ARPA

On average, European firms are older, less productive, and less innovative than their US counterparts (Schnabel 2024). Without policy initiatives, there is a risk that Europe will continue losing ground to both the US and China.

This calls for a strong industrial policy that promotes innovation, demonstration, and commercialization at the technology frontier. And there are good reasons for undertaking action at the EU level. It allows for sustainable comparative advantages across the entire value chain, helps manage cross-country externalities, prevents inefficient national subsidies, and avoids distortions in competition within the single market. The question, however, is not if there is a case for initiatives at European level. Rather, it is whether the EU has the will and the capacity to design and implement policies with the potential to remedy its economic illnesses.

The share of R&D expenditures in the EU budget (as reflected by the Framework Programme budget) has risen from 5.8 percent in 2007–2013 to 7.9 percent in 2021–2027. Qualitatively also, instruments have diversified, with an increasing part of the funding coming through extra-budgetary programs. As things stand, European initiatives can be grouped into three buckets: EU budget-funded programs (e.g., Horizon Europe), the emissions trading system-funded Innovation Fund, and Important Projects of Common European Interest (IPCEIs) and Alliances. Europe cannot be accused of being oblivious of the need to mobilize funds and let its business sector thrive. There are, however, two problems with EU programs: a bias against risk-taking; and weak governance.

Missions initiated within the framework of the Horizon Europe program provide a good example. The governance of these missions is in the hands of Deputy Director-Generals in the European Commission, who lack the time and technical deep expertise to properly guide the missions towards their KPIs. Given this governance structure, it is unclear, to say the least, if these missions will be able to correct the prevailing rigidity in the allocation of EU funding, or if they will result in the termination of projects that do not deliver.

We propose the creation of an EU-ARPA dedicated to a limited number of explicit policy priorities and run by an independent agency. This agency would be allocated a budget based on precisely defined objectives. The agency would then issue competitive calls for projects corresponding to these objectives. These could include, for example, new technological alternatives to critical components, products, or services where there are supply risks in existing technologies, thus addressing the EU's demand for resilience by soliciting the EU's science and innovation capacity.

The EU ARPA could have several compartments (e.g., an EU-ARPA-E, EU-ARPA-C, EU-ARPA-H). It could also connect to complementary funding schemes at the national (e.g., Germany's SPRIN-D) and EU level (such as upstream ERC and downstream Innovation Fund). The ERC and EIC should keep their focus on supporting bottom-up ideas, thus balancing EU ARPA's top-down focus.

An EU-ARPA could also top up national funding for projects that demonstrate pan-European collaboration (such as the IPCEIs), thus contributing to the creation of new high-tech ecosystems at the EU scale, and it could top up national public procurement of innovative technologies (for instance, as proposed by the Net-Zero Industry Act) to enable more strategic use of this tool in Europe, fostering the rollout of innovative technologies at the EU scale.

It is important to stress that an ARPA-style approach requires more than just importing a label. It requires sufficient funding – part of which could be funded by redeploying existing budgets – to allow it to make multiple bets within a portfolio approach to manage the high-risk position it should take. A total budget of about EUR 5 billion, similar in size to non-defense, non-health US ARPA-type programs, would be adequate. Equally important would be its autonomy and organizational flexibility, especially the ability to recruit venture capital entrepreneurs and technology specialists as policy programmers and officers. Calls must have clear quantifiable goals and trackable metrics, so that policy officers can be given elevated levels of autonomy, together with clear mandates and accountability.

Innovation policy cannot be expected to fix by itself the inevitable trade-off between excellence and cohesion. Excellence should be the only selection criterion for innovation policy measures, but the dis-

tributional challenge should be acknowledged and addressed. At the very least, dedicated programs to ensure cohesion must be put in place in parallel to the launch of the scheme, for instance to transfer innovation results or to foster the mobility of researchers.

For example, support for high-risk, high-return projects can yield fewer benefits for some countries than the money they contribute by taking part in the overall financing of the scheme. If this is the case, it is rational for these countries to oppose it. Thought should be given to ways to tackle this problem. One approach would be to cap the loss a country can incur from participating in the innovation-supporting scheme. A change in the risk profile of aggregate investment would improve the incentive to participate in the scheme because, while gains would not be capped, losses would. It is important that loss limits be applied over a multi-year period to the whole portfolio of investments, and not to individual projects.

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