Joint public procurement as a tool for European Union industrial policy

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Francesco Nicoli and Roel Beetsma

Executive summary

JOINT PROCUREMENT IS an important tool that is currently under-exploited at European Union level. It can greatly enhance the effectiveness of public spending in Europe, achieving greater coherence between spending across different countries, exploiting monopsony power, producing economies of scale, reducing downward competition between public authorities, improving the single market and producing a degree of solidarity without resulting in redistribution between EU countries. The EU has already implemented several joint-procurement projects, including for COVID-19 vaccines, gas supplies and ammunition for Ukraine.

THESE PREVIOUS EXPERIENCES can work both as a blueprint and as a pilot for larger-scale actions. Joint procurement could be particularly relevant in sectors with substantial economies-of-scale and industry-government ties, such as defence. Despite some degree of political opposition, experimental public opinion studies have shown consistently that joint procurement in such areas can strongly improve public support for EU-level action.

MEASURES THAT COULD expand European joint procurement in a politically sustainable way include the use of framework contracts, which allow for *ad-hoc* commitments tailored to the needs of different EU countries; reporting by countries of their future large public procurement plans as a part of the European Semester so that the European Commission could propose coordinated actions if necessary; and the use of staggered contracting and multiple-award strategies, which can ensure a level playing field among companies of similar market power, promoting market-building and supporting the entry of new competitors.

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1 Introduction

The European Commission under Ursula von der Leyen has spearheaded a controversial pivot towards a more assertive, European Union-led industrial policy that combines public funding for large-scale industrial projects, a relaxation of certain state aid rules and more assertive oversight of Europe's economic interactions with the rest of the world. By adopting such a coordinated approach to industrial policy, the EU seeks to leverage its collective strength to foster innovation, support sustainable development and enhance its competitiveness in key technological sectors – an approach seen as especially relevant at a time of challenging global geo-economic shifts.

Joint procurement could increase the effectiveness of public spending and help strengthen the EU single market

These actions require substantial public funding, which risks distorting the European single market or could be ineffective in addressing the actual bottlenecks of the European economy[1]. However, other instruments are available. One is the use of joint public procurement to purchase at EU level certain strategic products that member states would otherwise have to purchase domestically. Such joint procurement would increase the effectiveness of public spending and help strengthen the single market. Ursula von der Leyen has restated its importance in her political programme for the next Commission (Von der Leyen, 2024).

There have already been a number of instances of EU-coordinated joint procurement, though in very different contexts: COVID-19 vaccines, gas contracts in the context of the energy crisis caused by the full-scale Russian invasion of Ukraine, and artillery ammunition to sustain the Ukrainian army. Other initiatives have been proposed or are already underway. The European Defence Industry Reinforcement Through Common Procurement Act (Regulation (EU) 2023/2418) sets out rules to boost common procurement of weaponry. Estonian prime minister and nominee as EU High Representative of the Union for Foreign Affairs and Security Policy Kaja Kallas has called for the issuance of €100 billion of Eurobonds for defence spending[2].

We explore the economic rationale for and political feasibility of joint EU procurement as an instrument of European industrial policy. EU industrial policy is expensive, while national industrial policy undermines the single market. Since procurement is taking place anyway, it may be collectively beneficial to focus it more on industrial-policy objectives. In itself, this may justify joint procurement. However, as pointed out by Tagliapietra *et al* (2023) in relation to the Net Zero Industry Act (NZIA, Regulation (EU) 2024/1735), deploying public procurement is futile when foreign technology is substantially cheaper than domestic technology, because national authorities are not obliged to purchase the latter. Efficiency gains from lifting procurement to the EU level may make purchase of EU technology financially compelling and create opportunities for joint procurement as a strategic industrial policy instrument.

In the most narrow sense, joint procurement is defined as the central and collective procurement of goods and services that could have been otherwise procured and then used by the individual parties involved – national governments and administrations in EU terms. Given the complexity of the way the EU is organised, in particular the financial framework at both the EU and national levels, multinational joint procurement can take very different forms. We therefore adopt a somewhat wider definition of joint procurement. This includes central activities involving the following:

- Pooling research and development expenditure around a product (without necessarily resulting in joint purchases of this product, which might still be procured separately by the participating countries);

1 For example, McWilliams *et al* (2024) viewed subsidies for EU solar manufacturing as unwarranted as they risk increasing the costs of solar panels, slowing down their deployment and creating an industry becoming dependent on subsidies. They propose alternative ways of reducing reliance on China as the near-monopolistic provider of solar panels.

2 *ERR News*, 'Kaja Kallas proposes €100 billion Eurobond issue to bolster defense sector', 19 February 2024, https://news.err.ee/1609257408/kaja-kallas-proposes-100-billion-eurobond-issue-to-bolster-defense-sector.

- Centrally negotiating framework contracts on behalf of member states, even though the actual purchases are then left to member states at the price-points and contra clauses resulting from the common negotiation;
- Joint procurement proper, whereby the central level – the EU through the European Commission – directly purchases goods and services on behalf of the member states.

Section 2 discusses economic arguments in favour of joint public procurement. Section 3 presents three examples of joint procurement already under way. Section 4 makes use of a set of original survey data from 2020 and 2022 to assess the level of public support (and, hence, potential political feasibility) for joint procurement policies. A substantial part of the discussion focuses on the defence industry, but we also demonstrate support for a role for joint procurement in the areas of energy and medicines.

2 The economic added value of joint European procurement

2.1 Advantages of joint procurement

From a conceptual and theoretical perspective, jointly procuring certain goods and services at European level has a number of potential benefits, including economies of scale, monopsony power, avoidance of downward competition, single market enhancement and reinforced solidarity.

2.1.1 Economies of scale

The academic consensus points towards significant effects of procurement pooling on price (Karjalainen, 2011). Hence, by aggregating demand across the EU, larger purchases can be made, resulting in efficiency gains on several fronts. First, unit costs can be lower, because a large number of purchases can be replaced by a single procurement exercise. Karjalainen (2011) demonstrated very clear cost advantages from procurement pooling, which can manifest themselves even when a small number of agents pool their demands, providing empirical evidence.

Second, when the needs of the various parts of the EU are uncertain and the procured products can be stockpiled, the EU stockpile can be smaller than the sum of all member-state stockpiles when each one procures for itself. This is because needs are generally not perfectly correlated across countries. Through a common stockpile countries, effectively insure each other against unexpected demand. This is relevant, for example, for vaccines and other medicines.

Third, commitment to joint procurement at a large scale may support investment in costly cutting-edge R&D. Domestic procurement guarantees alone might not make it worthwhile for firms to make the relevant investment in R&D. Pooling public financing for R&D in this way therefore allows a greater number of critical projects to be financed, widening the number of potential beneficiaries. The rationale for joint action in R&D is so strong that the EU is in fact already quite active on this front, for example in the area of defence[3].

3 For example, see European Commission news of 19 December 2023, 'European Defence Fund: start of 37 new defence R&D projects', https://defence-industry-space.ec.europa.eu/european-defence-fund-start-37-new-defence-rd-projects-2023-12-19_en.

2.1.2 Monopsony power

By pooling demand, the EU can exploit its role as prime or even sole buyer, approaching a condition of monopsony

Scale matters not only for efficiency reasons, but also because it allows stronger negotiating positions. By pooling demand, the EU can exploit its role as prime or even sole buyer, approaching a condition of monopsony (the opposite of a monopoly). Concentrated purchasing power allows the EU to influence market conditions, dictating more favourable procurement terms, including lower prices and better contract conditions. This can be particularly advantageous in markets where suppliers possess significant market power or in sectors critical to the EU's strategic interests, such as technology and energy.

In general, however, monopsony power may lead to inefficient outcomes. The situation tends to be inefficient to start with, because of monopoly power on the side of producers and/or producers having close ties to their national authorities, resulting in a market that is already distorted. Hence, the exertion of monopsony power helps to push prices towards those that would prevail under perfect competition. In the longer run, however, producers may reduce innovation or leave the market if they are squeezed too much, hence it is important for the authorities to stimulate competition and look for ways to interact with producers so that they find it in their interest to stay in the market and continue to innovate.

Whether monopsony power translates into lower prices is primarily an empirical question for which cross-sectoral evidence is sparce. For instance, Atkinson and Kerkvliet (1989) found evidence of monopsony power in coal markets. Muller *et al* (2002) conducted a double-auction lab experiment to demonstrate the empirical effects of both monopsony and monopoly powers in emissions trading markets. Chown *et al* (2019) found substantial evidence in support of the claim that Canadian pharmaceutical prices for prescription drugs are less than half the price of their United States equivalents due to monopsony power. Finally, Yeh *et al* (2022) found strong evidence of employers' monopsony power over workers in the US manufacturing labour market. However, the extent to which these results apply generally across sectors is not clear, especially in those sectors where the monopsony power is matched by a monopoly or a cartel.

2.1.3 Prevention of a race to the bottom

Relatedly, joint procurement initiatives can significantly increase the capacity of public authorities to deliver adequate levels of supply across Europe, especially in times of unexpected crises when public demand for certain goods or services (say, vaccines or facemasks) increases very sharply, but supply is sticky in the short run. Market dynamics, in this context, would lead to downward competition – a race to the bottom – between public authorities, which scramble to gain access to a suddenly scarce resource. Empirically, some evidence exists in certain markets on the impact on pricing and conditions of purchases induced by such races to the bottom. For instance, Di Maggio *et al* (2015) used a natural quasi-experiment to identify the causal impact of de-regulation on races to the bottom in the mortgage market, finding strong evidence that deregulation had worsened average mortgage conditions.

In the European context, such dynamics could have adverse political consequences, especially when livelihoods are at stake. By pooling procurement, the EU can simultaneously buy products at better prices and conditions than would be the case when many public authorities are out-bidding each other, and allocate the product optimally across the entire EU territory. This stops lower-income countries from being structurally cut off from supplies of essential products.

2.1.4 Single market integrity

A single authority pooling the purchases of certain goods or services of different public authorities across the EU can also be a unifying force for the single market for public purchases. In some sectors – for instance energy or defence – individual countries have very few industrial players and those they do have tend to have strong ties with national bureaucracies and governments, regardless of whether or not they receive direct funding from their authorities. These 'national champions' dominate their sectors, hindering the

emergence of any meaningful competition. Moreover, they are often so entwined with policymakers and institutions that they can exert influence on regulatory or financial measures to their advantage or to detriment of competitors.

With joint EU-level procurement, the EU can create meaningful competition between large industrial players that dominate their respective markets but are locked-out from meaningful access abroad. If appropriately designed, joint procurement helps to safeguard the single market against fragmentation, promoting a more competitive environment within the EU. To achieve this, however, the EU should design instruments that enable newcomers – even small and medium enterprises – to compete directly, for instance by forming consortia.

Another approach would be to reserve dedicated competitions, at least initially, to smaller entities, which may thereby develop into serious competitors for incumbent companies. NASA's Small Business Innovation Research programme and the American Department of Defence Small Business Strategy (2023), for example, aim to support the integration of smaller businesses into the respective supply chains. Such approaches could be particularly helpful for the European market for defence products, which is highly fragmented according to national boundaries.

In these contexts, monopsony is of little help, because the issue is not pricing *per se*, but rather politically-induced market fragmentation. This can be reduced by pooling or creating a certain number of centralised demands for defence equipment. Hence, the EU could progressively shape a common market for defence products, while helping the member states in fulfilling their 2 percent of GDP defence spending NATO commitment.

One risk associated with this approach, of course, is that some national defence providers might lose out on their status of national champions. However, this is unlikely to be the case, since defence remains primarily a national prerogative. Nevertheless, the need for European countries to increase their military spending to meet the Russian threat and fulfil their NATO commitment opens a window of opportunity for enhanced competition. By creating limited, but sufficiently sizeable, central procurement of additional equipment, the EU might create a competitive subsidiary marketplace in which national champions could compete fairly against each other without – at least initially – endangering their national positions.

Furthermore, since defence is typically an industry characterised by economies of scale in production, there is a risk that a common marketplace would disadvantage smaller players. To avoid such an outcome, the EU might learn from the US Department of Defense and the European Space Agency, which have both started to procure orbital rocket launchers in a staggered approach. This involves earmarking purchases for different classes of providers depending on their size, hence enabling a level playing field between near equals. Similarly, NASA has adopted, since 2008, a multiple-awards approach to provision of space launch services, explicitly aiming not only at provisioning capabilities but also at creating a marketplace. Importantly, in these cases, procurement is seen as much as a market-building effort as an effort in actually purchasing goods and services, and therefore this approach would fit well with the single-market enhancing functions of joint EU procurement in defence.

Even limited joint procurement schemes can reduce prices to levels at which certain goods or services become available to the less-affluent participants

2.1.5 Solidarity

Finally, solidarity might be a rationale for joint procurement. Thanks to economies of scale (in purchases but also in development) and to monopsony power, even limited joint procurement schemes can reduce prices to levels at which certain goods or services become available to the less-affluent participants in the scheme, when this would otherwise not have been possible. Solidarity thus emerges as a by-product of joint procurement initiatives. In fact, when it comes to medicines, pharmaceutical companies sometimes refuse to supply especially smaller countries that negotiate too fiercely for lower prices. Joint procurement implicitly prevents this from happening.

Solidarity can also be built into the design of the procurement. For instance, joint stockpiles of essential goods (for instance, medicines) could be established and made available not simply on the basis of relative financial contributions, but on the basis of need. This explicitly

solidaristic objective, although not strictly required for joint procurement to work, might provide a degree of political justification for joint procurement, as detailed below.

2.2 Limitations on joint procurement

First, joint procurement would not be deployable in all possible policy areas. It leaves limited room for differences in preferences across countries and should focus on areas where there is little variation in those preferences. This is straightforward when it comes to a vaccine, for example, for the most relevant feature is its ability to protect against a virus. However, other products might have multiple characteristics that appeal to different countries or groups. This further implies an inherent tension – which in fact characterises all sorts of procurement or purchasing – between prices and quality. This conflict can be particularly problematic in the context of joining otherwise independent purchasing.

Second, monopsony power on the side of the Commission (acting for the EU) could supress R&D efforts by producers if their profit margins are eroded too much. Some producers may stop producing in the EU or servicing the EU market, moving some of their activities elsewhere, for example to the US. While maximising short-term aggregate welfare, excessive monopsony power might therefore come at the expense of long-term growth.

It should be noted, however, that while monopsony leads to under-utilisation of factors of production, this is the case only when compared with the theoretical outcomes of genuine perfect competition. In the current context, monopsony would benefit the purchasers but might push some of the producers out of the market. This outcome, however, needs to be weighed against two considerations:

- First, many of the markets in which joint procurement has been introduced or could be expanded are highly uncompetitive to start with and characterised by large conglomerates; examples include the pharmaceutical, energy and defence sectors. These inefficiencies benefit corporations rather than the EU public.
- Second, the potential inefficiencies introduced by EU-wide joint procurement need to be balanced against the natural reduction in market segmentation across national boundaries that joint procurement would induce in a number of important markets, thereby reducing inefficiencies from a lack of competition in those markets.

One might also legitimately ask, assuming that joint procurement at EU level is beneficial, why not set up joint procurement with other countries or blocs? However, since it is already difficult to align EU countries on a joint procurement initiative, this would be even more difficult when other blocs are involved, as it would require additional coordination, political support from a broader set of countries and agreement on common legal foundations. The EU already has some experience of coordinating procurement beyond its borders (for instance in the case of certain pharmaceuticals) but this happens on a very contextual basis to face specific challenges.

All in all, even though a proper balance needs to be found on a case-by-case basis between the advantages laid out in section 2.1 and these considerations, the relative under-utilisation of joint procurement at the European level suggests that there is scope for harnessing untapped potential, while remaining attentive to its limitations.

3 Current joint procurement initiatives

Joint procurement has already been a core part of the EU response to three major crises: the COVID-19 pandemic, the energy crisis and the full-scale Russian invasion of Ukraine. Table 1 provides an overview of EU joint procurement actions undertaken in the last five years.

Even though joint R&D is not new for the EU, and joint procurement was envisaged as one of the main goals of the European Defence Agency since its inception, the genuine added value of EU-level procurement initiatives became apparent only after the EU put in place the 2020 EU Vaccines Strategy. This included centralised EU financing for vaccines development with a series of industrial partners, an expedited regulatory and approval framework and the introduction of the advance purchase agreements (AMAs) for vaccine doses, which allowed member states to signal their interests in purchasing COVID-19 vaccine doses and allowed the Commission to negotiate favourable quotas given the pooled demand (Beetsma *et al*, 2021).

Table 1: Joint procurement in response to crises, 2020-2024

Sector / type	Research and Development	Contract negotiations on behalf of member states	Direct purchases
Pharma	EU Vaccines Development Strategy (June 2020)	COVID-19 advance purchase agreements (June 2020)	
Defence	European Defence Fund (2017; 2021)	Collaborative ammunition procurement (2023)	Collaborative ammunition procurement (up to €1 billion) (2023)
Energy		EU Energy Platform (2022); AggregateEU & Joint Purchasing Mechanism (2023)	

Source: Bruegel.

The creation of a joint procurement initiative to respond to the 2022 energy crisis was complicated by the inherently geopolitical nature of energy relations, by the general limited available supply within the European Economic Area (with only Norway and the Netherlands having sizeable gas reserves) and by the fact that public authorities are often not responsible for actual gas purchases, given the competitive and liberalised nature of the market. To address this, the EU launched the European Energy Platform in 2022. This originally worked as a transparency tool for gas pricing for utility providers, but was quickly extended into a tool to pursue joint procurement[4].

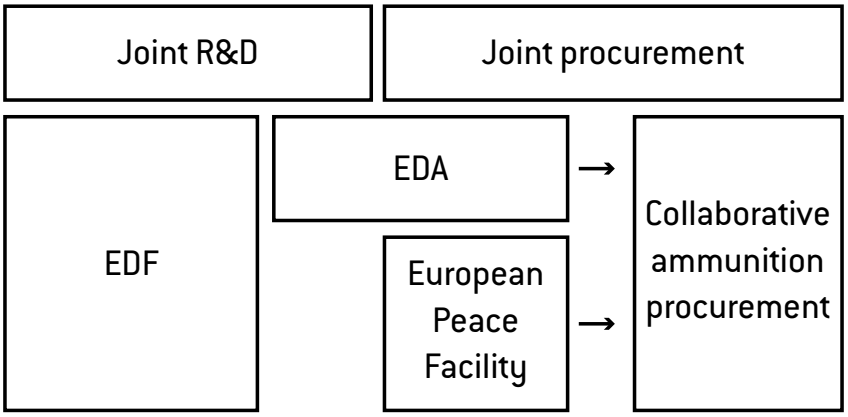
In particular, under the platform, the Commission launched the AggregateEU initiative, which includes a Joint Purchasing Mechanism. The Joint Purchasing Mechanism (Council Regulation 2022/2576) acts largely on a voluntary basis. National bodies and companies that wish to combine demand and therefore obtain better prices can delegate the authority to negotiate joint purchasing contracts to PRISMA European Capacity Platform GmbH – a

4 See European Commission press release of 25 April 2023, 'EU Energy Platform: Commission launches first call for companies to jointly buy gas', https://ec.europa.eu/commission/presscorner/detail/en/ip_23_2403; see also Boltz *et al* (2022).

dedicated private service provider appointed by the European Commission[5]. However, to ensure minimum levels of stock refilling, the platform is mandatory for 15 percent of the national storage capacity of natural gas, ensuring a minimum amount of joint procurement and therefore achieving, on its own, a sizeable price effect (Nicoli *et al*, 2023a).

Finally, joint procurement is taking place in the context of stopping the Russian invasion of Ukraine. As mentioned, joint development and purchasing of military goods has a long history in joint weapons programmes and associated framework contracts, both within Europe, such as the Eurofighter programme, and transnationally, as in the case of the F35 fighter jet. NATO has dedicated provisions to that end, and joint procurement constitutes one of the missions of the European Defence Agency (EDA) (Caranta, 2023), even though the impact and scale of these activities remain limited. Furthermore, the EU has had since 2017 a dedicated instrument to jointly finance defence R&D, the European Defence Fund with an €8 billion endowment (about €1.1 billion/year over the 2021-2027 EU budget cycle). These various activities, summarised in Figure 1 provide foundations on which a European defence industry could be built, if political resistance can be overcome.

Figure 1: Joint procurement initiatives in EU defence



Source: Bruegel. Note: The EDA and the European Peace Facility have much broader mandates and more activities than procurement. The figure reports only those activities involving procurement.

The full-scale Russian invasion of Ukraine represented a watershed moment. Joint procurement became a tool not just to secure a certain amount of industrial orders for the development of new armaments, as was typically the case in the past, but also to procure and deliver standard products such as 155mm artillery shells, which Ukraine desperately needs. Once again, the Commission proposed a two-level process. The EDA is in charge of negotiating framework contracts with industry partners on behalf of member states, which can commit their own finances to purchase ammunition either for themselves (to replenish stocks) or for Ukraine. Furthermore, the EU, through the European Peace Facility, reimburses purchases of ammunition for Ukraine up to €1 billion[6]. All in all, such 'pilot' experiments have delivered lower prices, exceeded expectations for vaccines procurement and seem to have

5 See European Commission Questions and Answers of 25 April 2023, 'Joint gas purchasing: The AggregateEU mechanism to increase energy security for Europe', https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_2404.

6 Council of the EU press release of 5 May 2023, 'EU joint procurement of ammunition and missiles for Ukraine: Council agrees €1 billion support under the European Peace Facility', https://www.consilium.europa.eu/en/press/press-releases/2023/05/05/eu-joint-procurement-of-ammunition-and-missiles-for-ukraine-council-agrees-1-billion-support-under-the-european-peace-facility/.

helped in the gas markets[7], while the ammunition plan has fallen short of the initial ambition. Scaling up these schemes, however, requires substantial political will.

4 Feasibility of joint procurement schemes

Despite the potential advantages, using joint procurement to shape the EU's turn towards an industrial policy faces an uphill political battle, especially in the defence sector. We focus on three main points that would determine whether a joint procurement scheme is feasible: availability of a legal basis, government support and popular support.

4.1 Legal basis

The legal basis for joint procurement agreements varies depending on the specific policy field: in other words, there is no horizontal legal basis that permits the EU to pursue joint procurement routinely in all fields of action. However, an indication in the EU Treaties that the EU shares some responsibility in a policy field has been typically seen as enough for the EU to pursue joint procurement whenever EU countries support it in order to face a particular challenge.

For instance, the first introduction of a Joint Procurement Agreement to procure medical countermeasures was signed in 2014[8], building on Article 168 of the Treaty on the Functioning of the European Union (TFEU) which states that "*a high level of human health protection is to be ensured in the definition and implementation of all Union policies and activities*". The agreement was signed by EU countries, other countries in the European Economic Area (EEA) and a number of countries outside the EEA[9]. Participation in these health-related joint-procurement agreements is voluntary and different groups of countries may participate in different initiatives[10].

In relation to energy, the legal basis is instead found in TFEU Article 122(1), which enables

7 Collaborative procurement of vaccines has been generally assessed as successful. A World Health Organisation (WHO, 2022) systematic comparison of procurement schemes (within and beyond the EU) showed, among advanced countries, a median price for multilateral procurement that was about half of that for direct procurement from AstraZeneca. For Moderna and Pfizer, multilateral procurement was 10 percent and 30 percent cheaper, respectively. Data on a direct comparison between the EU and prices for other countries is harder to find, but some reports show that the EU generally paid substantially less per dose than the United Kingdom, and also less than the US (with the exception of Moderna, where the EU paid around 20 percent more than the US, but about half that for the UK). See Carmen Ang, 'COVID-19 Vaccine Prices: Comparing the U.S. and EU', *Visual Capitalist*, 7 June 2021, https://www.visualcapitalist.com/covid-19-vaccine-cost-eu-versus-us/; and *The Week*, 'What Covid vaccines cost - and the countries paying over the odds', 30 March 2021, https://theweek.com/951750/what-do-covid-vaccines-cost-who-pays-what. In the gas markets, assessment is harder, because (1) the EU platform only facilitates negotiations between private partners, but the details of the agreements are usually not disclosed; (2) the platform is not compulsory, so agreed quantities are not known; (3) there is no counterfactual to compare prices to, given the unique dependence of the EU on Russian markets prior to Russia's full-scale invasion of Ukraine. Still, negotiations have indicated gas supply offers through the mechanism outstripping demand by a factor of about three, which suggests a downward trend in prices through this purchasing mechanism; see *Reuters*, 'EU's latest joint gas buying round near three-times over-subscribed, Commission says', 28 February 2024, https://www.reuters.com/business/energy/eus-latest-joint-gas-buying-round-near-three-times-over-subscribed-commission-2024-02-28/. Notably, the EU role is weaker in the gas purchasing mechanism, so the effects of joint procurement are likely more limited.

8 See European Commission Decision C(2014) 2258 final of 10 April 2014, https://health.ec.europa.eu/publications/commission-decision-c2014-2258-final_en.

9 As of end April 2020 there were 37 signatories.

10 In the words of the European Commission (2021), in the context of the joint procurement of medical countermeasures: "*it provides for a voluntary mechanism enabling participating countries and EU institutions to jointly purchase medical countermeasures for different categories of cross-border health threat, including vaccines, antivirals and other therapeutics*".

the Council to decide "*in spirit of solidarity between member states*" to implement measures to address severe difficulties in the supply of certain products, which was then implemented starting with Council Regulation (EU) 2022/2576. Finally, in the field of defence, the EU role in joint procurement finds a legal basis in Article 45.1(c, e) of the Treaty on EU, which establishes the European Defence Agency with the goal of pursuing joint projects and implementing measures to strengthen the European military-industrial base.

All in all, the somewhat liberal use of Articles 122 and 168 TFEU indicates that, whenever the political will is present among enough EU countries, the legal bases provided in the Treaty in its current form suffice to pursue joint procurement, especially if this is done on a voluntary basis. In principle, joint procurement could be deployed to pursue the various objectives listed under Article 3 TFEU, including peace, security and the safeguarding of the internal market, as long as it can be shown that joint procurement as such contributes to better fulfilment of these objectives. The fundamental issue, therefore, is not availability of legal bases, which are already sufficiently developed to allow joint procurement when a clear added value is present, but of political support between and within member states, many of which remain sceptical about delegating public procurement to the EU, even when it produces clear benefits.

4.2 Popular support

Survey evidence suggests that, in times of crisis, European public opinion strongly backs joint procurement

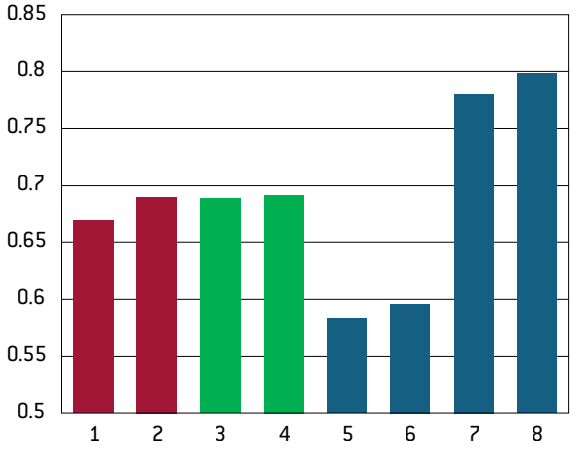
While national government officials often exhibit political opposition to joint-procurement initiatives, experimental survey evidence collected over the past five years suggests convincingly that, in times of crisis, European public opinion strongly backs joint procurement. Two experimental surveys carried out respectively at the end of March/beginning of April 2020, at the beginning of the COVID-19 crisis (Beetsma *et al*, 2021), and in November 2022 at the height of the energy crisis caused by the full-scale Russian invasion of Ukraine (Nicoli *et al*, 2023a, 2023b) tested variants of policies that could be considered as constituting, respectively, a health union, an energy union and a defence union[11].

The surveys found that, generally, respondents support joint procurement. The energy and defence union experiments carried out in November 2022 included the presence or absence of joint procurement of gas and oil, and of armaments, respectively. The March 2020 experiment was dedicated entirely to joint procurement of medicines, going into detail on the various ways of organising a joint procurement policy (for example, whether joint purchases only cover a limited set of medicines for stopping large-scale disease outbreaks, or all medicines for which joint procurement can be financially beneficial).

Figure 2 reports the results for different variations of joint procurement models. It shows that, for example, the level of support for joint defence procurement increases by more than two percentage points when procurement of weapons and ammunition is included. For energy there is little difference in the level of support, whether or not joint purchasing of oil and gas is included, suggesting that Western European respondents are more sensitive to the efficiency gains associated with joint procurement in the military, than in the energy sector. Both experiments include several other dimensions, such as size, governance mechanisms, financing alternatives, opt-outs, and centralization/decentralization.

11 We used the IPSOS online sampling methodology to collect a sample of 2000 respondents in France, Germany, Spain, Italy and the Netherlands for the 2020 wave, and 1500 respondents for the 2022 wave. Quota sampling includes quotas for age, education, gender, regional distribution and profession, as well as 'soft' quota for income distribution. We slightly oversampled Eurosceptic voters. See Beetsma *et al* (2021, 2022) for a more detailed discussion of the sampling, methodology and peer-reviewed results.

Figure 2: Level of public support for policies including joint ammunition, energy or medicines purchases (% of respondents)



1. Defence union (no joint procurement of ammunition)
2. Defence union (**with** joint procurement of ammunition)
3. Energy union (no joint procurement of gas and oil)
4. Energy union (**with** joint procurement of gas and oil)
5. Joint procurement of medicines: narrow scope, distribution based on contributions, national governance
6. Joint procurement of medicines: wide scope, distribution based on contributions, national governance
7. Joint procurement of medicines: wide scope, distribution based on need, national governance
8. Joint procurement of medicines: wide scope, distribution based on need, European governance

Source: Bruegel. Note: Defence union and energy union refer to EU level governance and policy integration. Different options were proposed to survey respondents, covering criteria including governance mechanisms, financing alternatives, opt-outs and degree of centralisation/decentralisation. For details see Burgoon *et al* (2023) (defence) and Nicoli *et al* (2023) (energy). For details of the health union survey see Beetsma *et al* (2021). Defence/energy union survey data collected in November 2022; health union survey data collected in March 2020.

In relation to joint procurement of medicines, there is substantially more support for 'solidaristic' models (the two right-hand columns in Figure 2): solidarity-based models are nearly 20 percentage points more supported than packages including pre-allocated stockpiles depending on contributions[12]. There is also a preference for a shift towards institutional coherence, with EU-level procurement decisions accompanied by EU-level allocation decisions (right-hand column of Figure 2).

All in all, public opinion data suggests that there is substantial public support for joint procurement policies at the EU level, that this support cuts across policy and industrial areas, and that – at least in the case of joint medicines procurement – citizens recognise all three fundamental rationales for joint procurement: efficiency, consistency and solidarity, with the latter playing an overwhelming role in determining public support[13].

12 An alternative explanation to solidarity is the insurance motive: countries insure each other again disease outbreaks at national level, thereby protecting everyone, as urgent action where need is highest reduces or eliminates the spread of the disease between countries. Note that insurance-like mechanisms are still solidaristic in nature, but have an inter-temporal self-serving logic.

13 Contrary to what one might expect, the shift from distribution based on contributions towards based on need is not substantially different between countries traditionally sceptical of further EU financial integration and those more in favour of it. For instance, the increment in support associated with the solidarity-based version is 22 percentage points for Germans, higher than the average increase by 20 percentage points, and 19 percentage points for the Dutch, only 1 percentage point lower than the average.

5 Conclusions and recommendations

The EU is increasingly seeking to use joint procurement. In relation to industrial policy, joint procurement has the potential benefits of economies of scale, monopsony power, preventing a race to the bottom, leveraging the European single market and providing solidarity. Of course, not all joint procurement needs to take place at EU level. Joint procurement initiatives make sense only for initiatives with substantial scale that would benefit multiple countries or the entire EU. Hence, there is a subsidiarity argument for conducting such procurement at the level of the EU Furthermore, joint procurement can be enacted in a number of different ways and through several approaches with greater or lesser degrees of centralisation. Thus, the precise design of joint procurement initiatives is crucial and should be tailored to the specific requirements of each policy and context.

Joint procurement initiatives face political obstacles; some countries may fear they will pay for more than their own allocation

Joint procurement initiatives face political obstacles. Some countries may fear that they have redistributive consequences, ie they will pay for more than their own allocation. In cases of critical goods or services, such as scarce vaccines, individual countries may have an incentive to deviate from the collective agreement and secure their own supplies. A second critical limitation of joint procurement as a tool for common industrial policy is that in some highly consequential policy fields, for instance defence or energy, the single market is highly segmented, characterised by 'national champions' with strong ties with their respective governments. These special industrial-political relationships make the initiation of joint procurement harder, even though the contextual need to increase public expenditure in defence may offer, at least for this sector, a window of opportunity for joint procurement action that does not *a priori* produce re-distributive effects between such national champions. In other words, the EU might create a competitive subsidiary marketplace in which national champions could compete fairly against each other without – at least initially – endangering their national positions.

Moreover, our data shows that while governments might feel reluctant about joint procurement, public opinion is generally favourable towards joint procurement, especially if it leads to cost-saving, better capabilities or performance and more efficient delivery.

Against this background, we make a number of recommendations aimed at harnessing the industrial-policy potential of expanding joint purchases, while maintaining political support.

- A starting point could be extending the framework contracts approach, as in the case of vaccine procurement. These contracts allow for joint setting of the main elements of the contract (the frame) under which many different purchase contracts can be agreed over time, saving time and coordination costs. This type of contractual approach also leaves more space for member states to commit to specific quantities at a later stage, and means substantial cross-country redistribution can be avoided. Extending the use of framework contracts may result in initial steps that meet relatively little political resistance. When successful, this approach can be expanded into full-fledged joint contracting mechanisms at a later stage.
- Second, innovative procurement practices can be enacted to ensure that procurement guarantees to the greatest extent a level playing field while also providing a market-building function. In the first case, to avoid being too dependent on a small number of large suppliers and to promote entry of new contestants into markets with little existing competition, a staggered contracting approach could be introduced, with, at least initially, separate competitions for smaller suppliers. This might be particularly important in those markets with both significant economies of scale and strong industrial-government links, such as defence, where there is a risk that a full single market would make smaller players uncompetitive, raising concerns about national strategic autonomy. Market-building can be achieved by ensuring multiple-awards strategies that select a sufficiently diverse number of platforms (as in the case of COVID-19 vaccines in the EU, or of NASA launch services competitions), and that avoid the creation of monopolies.

- In the medium term, it may be useful to provide for explicit instruments within the next EU budget cycle (after 2027) for joint-procurement initiatives. This could take place both through direct budgetary allocations made to a dedicated, flexible reserve fund, and by providing common support to certain coordinated national actions. The European Semester, the EU's surveillance system for member-state economic policies, could be adapted to coordinate national purchasing strategies, coupling EU instruments with Commission coordination of national purchases.
- Importantly, since public support for these initiatives is substantial, European authorities should explicitly develop a communication strategy on industrial policy aimed at the public, ensuring that the main advantages that joint procurement can deliver – lower costs and market-building – are well understood and 'owned' by European voters.

To conclude, given the increasing geopolitical challenges facing Europe, there are growing calls for a European industrial policy and for an expansion of EU competences across policy fields. While the latter can be politically challenging if they require a Treaty change, the former can distort the single market. Joint procurement is a second best to expansion of EU competences. While it does not deliver the top-down industrial policy that some favour, it can offer a pathway to market-enhancing industrial policy that can deliver cost savings and augment common capabilities, while counting on substantial public support.

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