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Beyond Military Keynesianism: Defence Investment, Technological Spillovers, and the Institutional Asymmetry between the United States and the European Union

1. Introduction

In his classic essay “Political Aspects of Full Employment” Michał Kalecki observed that opposition from business circles to the expansion of public spending does not apply equally to all forms of state intervention. Particularly problematic are measures that create competition for private enterprises, expand the scope of state activity, or weaken capital’s control over investment decisions. In this context, military expenditure occupies a distinctive position. It can increase demand, output, and employment without requiring the state to enter ordinary markets for goods and services directly. Kalecki even noted that opposition to public investment was less pronounced when such investment did not compete with private business, while expenditure on armaments made it possible to circumvent some of the political difficulties associated with other forms of fiscal expansion (Kalecki, 1943, pp. 325-326).

This political asymmetry constitutes one of the starting points for military Keynesianism, although the concept itself encompasses several distinct theoretical traditions. In its simplest macroeconomic formulation, military expenditure is treated as a component of public demand which, through the multiplier mechanism, may affect output and employment. The literature developed around this issue is considerably more diverse, however, and also includes institutionalist and Marxist approaches, while the empirical significance of the positive effects of military expenditure remains contested. Dunne emphasises that there is no single coherent theory of military Keynesianism and that the straightforward identification of military expenditure with an effective stimulus to economic growth is not unequivocally supported by the evidence (Dunne, 2011, pp. 2-4). From the perspective of this article, however, a different limitation of the macroeconomic framing is more important. Even an accurate estimate of the effect of expenditure on aggregate demand does not answer the question of to whom the state directs that demand, or what consequences this choice has for firms’ technological capabilities and competitive position.

The issue becomes particularly significant with the growing importance of dual-use technologies. The transfer of technology between the military and civilian sectors is, of course, not a new phenomenon. The literature on dual-use technologies has long challenged the simple

image of a one-way transfer of military technologies into civilian applications. Cowan and Foray argue that this relationship depends, among other things, on the nature of the technology, the stage of its development, and the organisational conditions that make it possible to use knowledge effectively in the other sector (Cowan & Foray, 1995, p. 851). Molas-Gallart, in turn, emphasises the diversity of mechanisms through which technologies are transferred between military and civilian applications, making it difficult to treat dual-use as a single, uniform category (Molas-Gallart, 1997, p. 367). The contemporary shift therefore does not consist in the sudden disappearance of a boundary between two previously isolated spheres. Rather, it concerns the growing importance of technologies such as artificial intelligence, cloud computing, semiconductors, cybersecurity, and autonomous systems, which are developed and deployed simultaneously in broad commercial markets and for security purposes. Increasingly, the state purchases from a company technology that the same company also supplies to other customers, while the resources obtained through a defence contract may subsequently be used to strengthen its position in civilian market competition.

This article proposes to analyse this phenomenon through the concept of the defence contract as a competitive asset. Its value to a firm may extend beyond the revenue generated by the contract itself: an order may increase the scale of operations, accelerate learning and technological development, enable testing in demanding environments, strengthen reputation, and facilitate access to capital, data, or infrastructure. The central question of the article is therefore whether the macroeconomic approach of military Keynesianism remains a sufficient analytical framework in a context in which defence expenditure may affect not only the level of economic activity but also the future structure of competition. The answer is no. This does not imply rejecting military Keynesianism as an analytical perspective, but rather recognising the need to complement it with industrial policy, innovation theory, and competition policy. The comparison between the United States and the European Union then serves to demonstrate how different systems of public funding and procurement affect the state's capacity to scale technologies and firms, as well as the associated risks of market concentration or fragmentation.

2. Military Keynesianism: From the Demand Effect to the Problem of Selection

Military Keynesianism does not constitute a single theoretical tradition. In its simplest form, military expenditure is treated as a particular type of public spending that may increase effective demand and, through the multiplier mechanism, affect output and employment. Alongside this approach, however, institutional perspectives developed that analysed the military-industrial

complex and its impact on the economy, as did approaches rooted in Marxist economics, in which military expenditure was linked to the absorption of surplus and the structure of monopoly capitalism. Dunne rightly notes that, for this reason, it is difficult to speak of a single, straightforward narrative of military Keynesianism (Dunne, 2011, pp. 2-3). This article therefore does not assume that the earlier literature ignored the impact of the defence sector on the structure of the economy or that it was concerned exclusively with the fiscal multiplier. Its focus is narrower: an analysis of the aggregate effects of expenditure does not in itself reveal how public demand distributes technological capabilities and competitive advantages among specific firms.

The significance of this problem was constrained by the particular organisation of the traditional arms market. The state is its dominant and, in many cases, sole final purchaser; it defines technical requirements, controls market access and exports, finances part of the development process, and subjects procurement to specific security requirements. The selection of contractors is therefore not a departure from the normal functioning of the market, but one of its inherent features. The state must select the producer of a ship, aircraft, or missile system, and the success of one firm necessarily means the loss of the contract by another. This does not mean that such choices had no broader economic consequences. Military funding contributed to the development of technologies, capabilities, and entire industrial centres, while the literature on the military-industrial complex also examined the negative consequences of this particular allocation of resources. What matters, however, is that the state's direct selection primarily took place within a specific, administered defence market. Even Dunne, when discussing institutional variants of military Keynesianism, points to the distinctive nature of defence production and its potential impact on the civilian sector through externalities and the crowding out of resources (Dunne, 2011, pp. 2-3).

For the argument developed below, it is therefore necessary to distinguish between technological spillovers and direct competitive selection. In the first case, a state decision taken for the purposes of the military market subsequently produces civilian effects through knowledge transfer, technological adaptation, or the emergence of new applications. This process is not automatic. As Cowan and Foray emphasise, the possibility of using a technology beyond its original application depends on the nature of the technology and on the organisational conditions of transfer (Cowan & Foray, 1995, p. 851). Molas-Gallart likewise shows that dual-use transfer may occur through different mechanisms, requiring varying degrees of technological adaptation and different forms of production organisation (Molas-

Gallart, 1997, pp. 367-368). Direct competitive selection is different in nature. In this case, the state selects a firm that already operates in a broader commercial market, and the contract may immediately strengthen resources that the firm also uses in civilian competition. There is no need to wait for a subsequent technological spinoff, because the same firm, and often the same technological base, operates simultaneously on both sides of the former divide.

Historically, the two mechanisms could coexist and should not be presented as belonging to two separate eras. The development of contemporary dual-use technologies does, however, increase the importance of the second mechanism. If the state purchases cloud services, AI solutions, semiconductor components, or autonomous systems from firms that simultaneously compete for civilian customers, the procurement decision is no longer confined to a specialised arms market. Public demand may directly affect the scale, resources, and credibility of one of the participants in the commercial market. The key analytical distinction therefore does not run between military and civilian technology, but between the indirect effects of defence expenditure through subsequent spillovers and a situation in which the state, through its own demand, strengthens a firm that is already engaged in civilian competition. It is precisely this shift that justifies moving from the classical analysis of demand effects to an analysis of the defence contract as an instrument of selection and provides the starting point for the feedback mechanism between commercial and military markets discussed below.

3. From Spinoff to Feedback Between Civilian and Military Markets

Dual-use technology is not a uniform category. It may refer to a solution developed for military purposes and subsequently commercialised, a civilian technology adapted by the armed forces, or a common base of knowledge, components, and capabilities from which both types of applications are developed. Dual-use should therefore be understood as a relationship between technology, markets, and institutions rather than as a permanent characteristic of a particular product (Cowan & Foray, 1995, pp. 851-856; Molas-Gallart, 1997, pp. 367-374). The contemporary shift does not consist in a simple replacement of spinoff by spin-in. Both processes continue to occur. What has changed is the importance of the commercial market as a source of technologies subsequently used for security purposes. In artificial intelligence, cloud computing, cybersecurity, parts of the semiconductor industry, and autonomous systems, development takes place within large commercial ecosystems whose scale may substantially exceed the direct demand generated by the defence sector. The state therefore increasingly does

not create technology from the outset, but instead becomes one of its particularly demanding users.

This does not represent a break with the earlier model of defence innovation. The historical effectiveness of US military programmes resulted not only from high levels of research funding, but also from the combination of such funding with a demanding user and subsequent procurement. Mowery points out that military procurement could support technological development, among other reasons, because performance requirements and the state's role as an early customer facilitated improvements in quality and reductions in technology costs (Mowery, 2012, p. 1711). The contemporary relationship differs, however, in that a firm entering into a relationship with the state may already have an established civilian market, investors, a customer base, and its own technological trajectory. The flow therefore does not end with the adaptation of civilian technology to military use. A government contract may alter the supplier's subsequent development opportunities, allowing it to return to the commercial market with strengthened resources.

This creates a feedback loop: the civilian market develops the technology, the state adapts it to defence needs and creates additional demand, the contract enables further learning, investment, or scaling, and the resulting resources may subsequently be used in civilian competition. This mechanism is particularly important in sectors characterised by high fixed costs, economies of scale, the importance of data, or cumulative learning processes. Additional demand may increase the utilisation of costly infrastructure, finance further product iterations, or help build a supply chain. In digital sectors, the opportunity to test technology in demanding environments and the reputational effect of securing a customer responsible for national security may also be significant. Unlike a classical spillover, some of these effects may arise during the performance of the contract itself rather than only many years after the completion of a military research programme.

This mechanism does not, however, operate automatically. Its significance depends on the nature of the technology, the size and design of the procurement, the number of suppliers, rights to data and intellectual property, interoperability, and the extent to which experience gained in a military project can be used in commercial activity. The argument of this article therefore does not assume that every defence contract leads to market concentration. It only suggests that, under dual-use conditions, the benefit derived from a contract may exceed its nominal value and affect a firm's future ability to compete. Assessing the significance of this mechanism

therefore requires moving from a general analysis of public demand to an examination of how a specific procurement creates resources and advantages for the contractor.

4. The Defence Contract as a Competitive Asset

The literature on innovation policy has long emphasised that public procurement is not merely a technical instrument for meeting the needs of public administration. Through procurement, the state articulates demand, defines technical requirements, and may create a market for new solutions. Edler and Georghiou identify public procurement as one of the principal demand-side instruments of innovation policy and argue that the design of public demand can influence the direction of innovation (Edler & Georghiou, 2007, pp. 953-956). This mechanism is particularly important in the defence sector, because the state is not only a major purchaser, but also a demanding user, a regulator of access to parts of the market, and often a source of funding for technological development. In the case of dual-use technologies, the effects of this relationship may subsequently be transferred to the commercial market. A defence contract can therefore be analysed as a competitive asset: a set of resources and capabilities whose value to a firm extends beyond the revenue stream generated by the contract itself.

The first and most obvious channel is scale. Multi-year or sufficiently large public demand allows firms to expand production, spread fixed costs, and justify investments that they would not undertake under greater uncertainty regarding future sales. Closely related to this mechanism is learning. A demanding public-sector user may provide feedback, enable technologies to be tested under specific conditions, and force firms to solve problems that subsequently improve products offered to civilian customers as well. These are not separate effects. Greater scale increases the number of iterations and learning opportunities, while learning may reduce the cost of further expansion. The historical role of defence procurement as an initial market for new technologies demonstrates that combining performance requirements with actual demand can constitute an important element of the innovation process (Mowery, 2012, p. 1711).

The second set of benefits is reputational and financial. Securing an order from an institution responsible for defence or national security may signal that a technology meets high standards of quality, security, or reliability. Such a signal is particularly important in markets where customers have limited ability to evaluate technologies independently or where the cost of selecting the wrong supplier is high. At the same time, recurring public demand may reduce

investors' perceptions of the risk associated with a firm's future cash flows, facilitate access to finance, and allow investment to increase before private demand reaches a sufficient scale. A contract may therefore affect competition even when its value is small relative to the size of the overall market, if it changes the firm's credibility and access to capital.

The third channel concerns the structure of the market itself. Technical requirements adopted by a major purchaser may influence standards, system architecture, and the choice of compatible solutions. Integrating a technology into state infrastructure may at the same time increase the costs of switching suppliers at a later stage. Data, interfaces, intellectual property, and the ability to interoperate with competitors' solutions are particularly important in this context. Procurement designed around an open architecture may create room for additional suppliers, whereas a closed ecosystem may transform the contractor's initial advantage into a lasting dependence on the part of the purchaser. In this sense, through the design of procurement, the state not only selects a supplier but also partly determines the conditions of future competition.

Scale, learning, reputation, financing, and influence over standards and access to key resources together create a cumulative mechanism. A firm that gains access to a demanding public-sector customer may thereby improve its technology more rapidly, obtain capital more easily, and attract additional customers, and may subsequently use its greater scale and experience in another public procurement procedure. This does not mean that the state should avoid selecting firms. Selection is unavoidable in public procurement. The problem is that in dual-use sectors its consequences need not end within the defence market. Procurement thereby becomes an instrument of innovation and industrial policy at the same time, while its design acquires significance from the perspective of competition policy.

Understood in this way, the defence contract shifts the analysis from the question of how much the state spends to the question of what capabilities it creates through the way in which it spends. Two policies with the same fiscal value may produce different outcomes if one disperses contracts among competing suppliers and preserves interoperability, while the other concentrates scale, data, and standards around a single firm. This distinction is of fundamental importance for the comparison between the United States and the European Union that follows, because the two systems differ not only in the scale of expenditure, but above all in their capacity to combine research funding, public demand, and the subsequent scaling of technologies.

5. Method and Scope of Comparison

The article adopts a conceptual and institutional-comparative approach. The mechanism of the defence contract as a competitive asset developed in the preceding sections serves as the framework for a structured comparison of the United States and the European Union. These cases are particularly useful because both systems declare the need to strengthen technological and defence capabilities, yet differ fundamentally in the organisation of fiscal authority, research, and public procurement. The same questions are applied to both cases: who finances technological development and scaling, who creates subsequent demand, whether there is a possibility of combining R&D funding with large-scale procurement, and how the design of policy instruments affects the number of suppliers and their ability to achieve scale.

The empirical material covers strategic documents, funding instruments, and selected procurement decisions from 2022-2026, with particular emphasis on artificial intelligence and digital infrastructure. These technologies are especially useful for the argument developed here because the same suppliers operate simultaneously in commercial markets and for the defence sector. Semiconductors are used as a supplementary example of a sector in which the problem of scale primarily concerns physical production capacity. The purpose of the comparison is not to provide a quantitative estimate of the impact of specific contracts on firms' market shares, but to identify the institutional conditions under which the previously described channels of competitive advantage may be strengthened or constrained. Given the short period during which some of the analysed instruments have been in operation, as well as limited access to the terms of certain contracts, the conclusions therefore concern mechanisms and institutional architecture rather than causally established effects on the competitive position of individual firms.

6. United States: Industrial Policy through the National Security State

The US innovation system has long been difficult to describe as a model in which the state confines itself to protecting competition and financing basic public goods. Block characterises it as a “hidden developmental state”: a system in which federal agencies finance technological development, connect firms with researchers, help overcome barriers to commercialisation, and participate in shaping standards, even though these activities are rarely presented as a coherent industrial policy (Block, 2008, pp. 188-193). The national security state plays a particularly important role in this model. DARPA is a classic example of an institution whose significance

extends beyond the provision of funding. Fuchs shows that programme managers operate within durable informal institutions that allow the state to organise networks of researchers and firms and influence the direction of technological development, describing this model as embedded network governance (Fuchs, 2010, pp. 1134, 1145). National security therefore provides not only a source of research funding but also an institutional structure that enables the state to connect technological development with the needs of a specific user.

A contemporary expression of this logic in relations with commercial firms is the Defense Innovation Unit. Its function is to shorten the path between technologies developed outside the traditional defence industrial base and their adoption by the Department of Defense. Of particular importance is the possibility of moving from prototyping funded through simplified Other Transaction agreements to larger production contracts. According to DIU data, since 2016 it has awarded 450 prototype contracts to commercial firms, while 62 projects subsequently progressed to follow-on federal contracts. The total ceiling value of these contracts amounted to USD 5.5 billion, while the beneficiary firms raised USD 19.1 billion in private capital in parallel (Defense Innovation Unit, 2024). These figures do not demonstrate that public contracts caused the inflow of private financing, but they illustrate the institutional logic of the system well: the state does not merely finance a prototype, but may create a pathway from a commercial solution to recurring public demand. From the perspective of both investors and firms, the crucial feature is precisely the possibility of moving from experimentation to an actual market.

The cloud computing sector also illustrates how such demand may affect firms that already hold strong positions in civilian markets. In 2022, the Department of Defense selected Amazon Web Services, Google, Microsoft, and Oracle for the Joint Warfighting Cloud Capability programme, with a maximum ceiling of USD 9 billion. The programme covers commercial cloud services available across different classification levels, while competition among the four providers also takes place at the level of individual task orders (U.S. Department of Defense, 2022). The design of JWCC illustrates well the dilemma arising from the mechanism described above. The state benefits from the scale and technological capabilities of the largest commercial providers, while at the same time deliberately maintaining a multi-vendor model rather than making the entire infrastructure dependent on a single contractor. This does not eliminate the risk of strengthening firms that are already dominant in civilian digital infrastructure, but it shows that procurement design can limit the accumulation of advantage around a single firm.

The issue is even more visible in artificial intelligence. In June 2025, OpenAI Public Sector received an Other Transaction agreement with a maximum value of USD 200 million for the development of prototype frontier AI applications for national security and administrative purposes (U.S. Department of Defense, 2025). The mere award of such a contract does not establish that it will strengthen the company's position in the civilian AI market. The case does, however, illustrate the structure of the mechanism examined in this article: the state commissions technological development from a firm whose core technological base, resources, and activities are simultaneously commercial in nature. Knowledge, experience, and reputational benefits associated with performance of the contract therefore need not remain confined within a separate defence market.

The institutional advantage of the United States does not stem from the existence of a single central industrial policy authority. Rather, it lies in the ability to combine different functions of the state: research funding, the organisation of innovation networks, prototyping, and the creation of large and relatively unified demand. In the case of dual-use technologies, this means an ability to move rapidly from a commercially developed solution to a military application and subsequently to procurement that provides the firm with scale. The same feature, however, also generates the central risk of this model. If the benefits generated by public demand accumulate among a small number of suppliers, the state may simultaneously increase its own technological capabilities and deepen market concentration. The US case therefore illustrates both dimensions of the contract as a competitive asset: it may accelerate the adoption of new technologies by the defence sector, but its design also determines whether public demand fosters competitio

7. European Union: Industrial Policy without a Unified Purchaser

For a long time, the European Union developed its capabilities primarily as a common market and a regulatory order, while the main responsibility for defence, military budgets, and procurement remained at the level of the Member States. In recent years, however, this division has begun to change. Russia's aggression against Ukraine, the experience of production shortages, and the growing importance of technological security have led defence policy to become increasingly linked to the problem of industrial capacity. The 2024 European Defence Industrial Strategy explicitly identifies demand fragmentation as one of the weaknesses of the European defence industrial base and sets the objective of increasing the share of joint procurement to at least 40% by 2030 (European Commission & High Representative, 2024). The Readiness 2030 White Paper goes further, pointing to the need to increase and better

coordinate spending, strengthen the European industrial base, and accelerate procurement (European Commission & High Representative, 2025, p. 3). The EU is therefore moving away from treating defence exclusively as a security issue and is increasingly framing it as a problem of organising production, investment, and demand.

The instruments created in response illustrate both the Union's growing capacity to conduct industrial policy and the limits of that capacity. The European Defence Fund enables joint financing of defence research and technology development, but the success of a research project does not automatically result in the emergence of a large procurement order. This institutional structure is even more apparent in the case of SAFE. The instrument creates up to EUR 150 billion in lending capacity for defence investment and is intended to encourage joint procurement, but the borrowers and ultimate purchasers remain the Member States. The EU therefore increases the capacity of states to generate demand and influences the conditions under which that demand is exercised, but it does not itself become the equivalent of the US federal customer. EDIP has a similar character. With EUR 1.5 billion in grants, it supports the expansion of production capacity and procurement cooperation and introduces instruments designed to facilitate long-term cooperation in the defence sector. These are significant institutional changes, but the scale of the programme remains limited in comparison with national defence budgets, while decisions concerning the procurement of major capabilities still rest primarily with the Member States.

From the perspective of dual-use technologies, the fundamental problem is therefore not the absence of European industrial policy. Such a policy exists and is becoming increasingly explicit. The problem lies in the ability to complete the sequence from research funding to the achievement of scale. A European firm may participate in a joint research project, receive support for technological development, and still lack certainty that a sufficiently large and predictable customer will emerge once a prototype has proved successful. It must then compete for contracts from states with different technical requirements, procurement schedules, procedures, and political priorities. SAFE and EDIP mitigate this problem by creating incentives for demand aggregation and cooperation, but they do not eliminate it. From the perspective of the mechanism described above, this means that the EU is capable of supporting the creation of technology, but has less capacity than the United States to use unified public demand as an instrument for rapid scaling.

Fragmentation also has ambiguous consequences for competition. It reduces the likelihood that a single federal procurement decision will provide one contractor with dominant scale across the entire European market, but at the same time makes it more difficult for firms to achieve the scale required to compete globally. Demand dispersed among Member States may lead to duplication of capabilities, small production runs, and the preservation of national champions rather than the emergence of a competitive continental market. EDIS explicitly seeks to reverse this logic by increasing joint procurement and intra-EU trade. In a world of dual-use technologies, the European problem therefore concerns not only the level of expenditure, but also the ability to transform public funding and fragmented demand into sufficient technological scale.

8. Comparison: Concentration or Fragmentation of Public Demand

The comparison between the United States and the European Union does not support a simple contrast between American interventionism and European liberalism. Both systems finance technological development, identify strategic sectors, influence the location of production, and create conditions that favour particular categories of suppliers. The principal difference concerns the organisation of public demand. In the United States, research funding, prototyping, and subsequent procurement can be combined within the federal national security system. This does not imply complete centralisation or the absence of competition between agencies and programmes, but it makes it possible to create a relatively credible pathway from technological development to large-scale procurement. In the European Union, the different stages of this pathway are more often separated. Research funding may be European, investment support may come from both the EU budget and the national level, while the key procurement decisions continue to be taken by the Member States.

This difference directly affects the operation of the contract as a competitive asset. The US system can relatively quickly provide a selected firm with scale, learning opportunities, reputation, and predictable demand. This can accelerate technological development, but it also increases the risk that competitive advantages will accumulate around a limited number of suppliers. The European system disperses selection across a larger number of institutions and purchasers, reducing the possibility of a single decisive selection but also potentially weakening all of the scale-related channels of advantage. The American problem therefore lies in the risk of creating excessively strong winners. The European problem lies in the risk that none of the potential winners will receive enough demand to achieve global scale.

For this reason, the aggregate value of defence expenditure reveals relatively little about its long-term economic significance. An additional billion devoted to defence may finance the import of a finished product, support several competing technologies, provide scale to a single domestic producer, or be divided among numerous short and incompatible programmes. From a macroeconomic perspective, these expenditures may generate a similar initial demand impulse, yet their consequences for productive capacity, firm-level learning, technological ownership, and future competition may differ substantially. It is precisely here that the perspective of military Keynesianism needs to be complemented by institutional analysis: what matters is not only how much the state spends, but also who receives the demand, in what form, and whether public funding leads to the creation of durable capabilities.

The difference between the United States and the European Union does not imply that one model is unambiguously superior. The capacity to scale technologies rapidly is particularly valuable under conditions of security pressure and rapid technological change, but the concentration of public procurement may increase the state's dependence on suppliers that public policy itself has helped to strengthen. European fragmentation provides some protection against this effect, but at the cost of potentially losing economies of scale and delaying deployment. In both cases, the central challenge is therefore the design of institutions capable of using the selective character of public demand to build technological capabilities without unnecessarily foreclosing competition.

9. Discussion: From the Volume of Spending to the Organisation of Demand

The analysis presented above shifts the focus in the assessment of defence expenditure. Military Keynesianism remains useful as a framework for analysing the effects of spending on demand, employment, and the utilisation of productive capacity, but under conditions of dual-use technologies it does not exhaust the problem. If a defence contract can increase a firm's scale, accelerate its learning process, strengthen its reputation, facilitate access to capital, and influence standards and market architecture, the question of how much is spent must be complemented by the question of how that spending is organised. Two programmes of similar fiscal value may have entirely different structural consequences depending on how many suppliers receive contracts, what rights the state retains, whether technologies remain interoperable, and whether public demand creates new capabilities or merely reinforces the position of incumbent suppliers.

In dual-use technologies, procurement design therefore becomes simultaneously a matter of innovation, industrial, and competition policy. This does not mean that the state should avoid selecting firms. In many sectors, selection is unavoidable, while dispersing procurement at all costs may prevent firms from achieving the scale required for effective technological development. The issue is rather how such selection is organised. A portfolio approach, staged increases in procurement, and the preservation of interoperability may reduce the risk of prematurely locking the market around a single contractor. Rights to data, interfaces, and intellectual property are also of particular importance. Where the performance of a contract results in the creation of assets financed with public funds, the state should at least retain the ability to switch contractors, audit the system, and ensure interoperability with solutions supplied by other firms. The objective is therefore not to prevent firms from achieving significant scale, but to avoid a situation in which the success of industrial policy results in the state becoming technologically dependent on a firm whose growth it had previously helped to finance.

The comparison between the United States and the European Union illustrates two different variants of the same dilemma. The US system links technological development more effectively with subsequent demand, but for the same reason it may also accumulate competitive advantage more rapidly around a limited number of firms. In the European Union, the principal problem remains the absence of a durable mechanism linking joint research funding to sufficiently large and predictable procurement. SAFE, EDIP, and the emerging instruments for joint procurement mitigate this weakness, but do not alter the underlying structure in which a substantial share of demand remains in the hands of the Member States. The further development of European defence industrial policy should therefore focus not only on increasing available funding, but also on aggregating demand, harmonising requirements, and creating a credible pathway from prototype to production. This need not imply the full federalisation of defence procurement. In selected technologies, however, it may require long-term joint procurement commitments and institutions capable of acting towards the market as an actual purchaser rather than merely as a coordinating body.

The broader implication extends beyond the defence sector itself. If national security justifies the deliberate direction of public demand towards particular technologies and the development of production capabilities, it becomes difficult to maintain a simple distinction between “neutral” economic policy and intervention involving the selection of technologies or firms. In practice, the state makes such choices through procurement, regulation, financing, and

standards. The central question is therefore not whether selection takes place, but which institutions organise it, what conditions are imposed on beneficiaries, and whether the advantage created through intervention remains consistent with the long-term public interest.

10. Conclusions

The starting point of this article was the asymmetry identified by Kalecki: military expenditure enables the state to increase demand without directly entering most ordinary civilian markets. Military Keynesianism captured the macroeconomic dimension of this mechanism well, but the development of dual-use technologies increases the significance of another effect of public demand. The state increasingly enters into contracts with firms, and for technologies, that operate simultaneously in military and commercial markets. Under such conditions, procurement may affect not only output and employment, but also the contractor's scale, learning capacity, access to finance, reputation, and future competitive position.

The article conceptualises this mechanism through the defence contract as a competitive asset. Not every contract creates a durable advantage, and not every dual-use technology leads to market concentration. The analysis nevertheless demonstrates why the nominal value of expenditure is insufficient for assessing its economic consequences. The structure of procurement, the method of supplier selection, the scale of subsequent demand, and the possibility of transferring resources acquired in the defence sector into civilian markets also matter.

The comparison between the United States and the European Union further demonstrates the importance of institutional architecture. The US system has a greater capacity to combine research funding, prototyping, and large-scale federal demand, which facilitates the rapid scaling of technologies but also increases the risk of concentration. The EU is developing an increasingly active defence industrial policy, but remains constrained by the fragmentation of purchasers and the incomplete connection between joint funding and subsequent procurement. The European problem therefore no longer lies primarily in the absence of strategies or instruments, but in the ability to translate a shared diagnosis into sufficiently large, predictable, and coordinated demand.

Military Keynesianism therefore remains a useful starting point, but it is not sufficient as the endpoint of the analysis. In an economy increasingly shaped by dual-use technologies, the question of whether defence expenditure stimulates economic activity should be complemented

by questions concerning what capabilities such expenditure creates, which firms it strengthens, and how it affects the future structure of the market. Only such an approach makes it possible to understand defence expenditure not merely as an instrument of fiscal policy, but also as an element of industrial and competition policy.

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