I. Why the subject is important

Studies of the defense industry and its national and international organization can contribute to our understanding of international relations as well as international political economy. In a more narrow sense, these studies provide a better understanding of the basis for decisions on security policy, and in particular for arms procurement decisions. The production and sale of military goods and services, which is the preoccupation of the defense industry, is situated at the intersection between security and defense policy on the one hand and economics on the other. As a producer of the tools of violence, the defense industry constitutes a crucial element of the pursuit of power by states. As an actor in the economy, often in the advanced technology sector, the defense industry also has an economic dimension, in that it is both subject to economic laws and has an impact on the economy. This dual nature of arms production sometimes leads to conflicts between security considerations and economic goals.

The Western European defense industry has undergone a profound transformation since the end of the Cold War. This has involved significant cuts in production volume and capacity and changes in the structure and ownership of the defense industry. This transformation reflects changes in both the larger security environment and in national defense policies. At the same time, conditions and changes in the defense industry have an impact on defense policy and on defense itself. In particular, such changes have implications for the future development of European integration and for transatlantic relations. To the extent that European integration is to include defense policy and defense cooperation, it also involves also the defense industry. Increasing European defense industry integration during the 1990s, within the broader context of the development of a common European Security and Defense Policy (ESDP, sometimes abbreviated CESDP), in particular since 1999, has raised questions about the future of transatlantic relations. Some fear that such European integration could lead to a deterioration in transatlantic relations, while others hope that it will contribute to a strengthening of the transatlantic partnership.

Developments in the European defense industry also have implications for the international system of arms production and trade. A shift in the structure of the European defense industry from fragmented national industries and defense markets to increased integration will present a potential challenge to the U.S.’s dominant position in the international system. It is also likely to have implications for the ownership and political control of the means of arms production and for arms transfers.
The impact of the globalization of the international economy on the defense industry raises many important questions. How does it affect the proliferation of military technology? How does it affect the role of national defense industries as a foundation for national security and the international status of states? How does it affect state–industry relations? More theoretically, to what extent do economic forces have an impact on security and national sovereignty through the medium of the defense industry?

II. Overview of events

The development of the European defense industry since World War II can be divided into four main periods: 1. The first years of rearmament, with U.S. assistance; 2. A period of rebuilding of European defense industrial capabilities; 3. A period of increasing intra-European collaboration, and; 4. Since the end of the Cold War, a period of restructuring and consolidation to adjust to a lower level of production and to increase the competitiveness of European arms production.

Immediately after 1945, the European defense industry had been decimated by war, and European rearmament proceeded in close cooperation with the United States, first through direct U.S. supplies of arms and then, over time, through licensed production of U.S. weapon systems.

During the second period, Europe began to rebuild its own design and production capabilities into an indigenous defense industry, spurred by growing nationalist ambitions and facilitated by a strengthened European economy. The high costs of this policy—due to high development costs and duplication of effort by different nations—led to continued cooperation with the U.S. through a range of collaborative armaments programs through the late 1970s and early 1980s, within the framework of the North Atlantic Treaty Organization (NATO), which was created by the Washington Treaty in 1949. A new feature in this period was that some of the new major systems were of European origin.

The third period was marked by an increased emphasis on collaborative programs within Europe. This shift in policy from a transatlantic to an intra-European focus was partly the result of European discontent with restrictive U.S. policies on the transfer of military technology and partly the result of limited access for European companies to the U.S. defense market. A number of European collaborative armaments programs were initiated. However, the demands of national sovereignty and industrial and national employment considerations still imposed severe barriers to any significant amount of European integration in arms production.
The fourth and current period began after the end of the Cold War—by and large after the fall of the Berlin Wall in 1989—when there was a renewed attempt to achieve integration of the European defense industry. The deep cuts in the demand for military equipment as a result of the new security environment led to a downsizing of the defense industry in all main arms-producing countries, including those in Europe. There was a shift in focus from collaborative development of arms to efforts to achieve industrial integration. The industry, and eventually the various governments, regarded the consolidation of the defense industry at the regional level as crucial to the survival of a competitive defense industry in Europe. This shift toward greater integration was reinforced by the economic recession in Europe and a general restraint on public expenditures. This period has developed in two major stages: first, a stage of adjustment on the part of defense contractors to the reduced market for military equipment during the first half of the 1990s, and then a stage of concentration and internationalization, challenged by increased competition from the U.S. defense industry. With reduced domestic defense markets in Europe, international competition in the defense sector became more intense.

During the period 1989–95, the demand for military equipment in Europe, as indicated by NATO statistics on expenditure on military equipment in NATO Europe, declined by 31 per cent. While some of these cuts affected the European demand for imported arms, their major impact was on the domestic national defense industries. The result was a significant reduction in Western European arms production capacity, some by default—lost arms sales leading to company bankruptcies and the sale or closure of arms-producing divisions—and some by company strategies of diversification or military specialization and mergers, acquisitions, and joint ventures. The combined arms sales of the 50 largest arms-producing companies in Western Europe increased from $57 billion in 1990 to $65 billion in 1996, but this actually represents a fall of about one-fourth in real terms. Since the Top 50 represented the largest companies in each respective year, the reduction in the entire Western European defense industry was probably steeper, given the tendency toward consolidation in the sector. Dependence on arms sales for revenue fell for the Top 50 as a group. However, within this group there were a small number of companies that significantly increased the share of arms sales in their total sales by increasing specialization in military production. The impact of corporate mergers and acquisitions on the level of arms sales and on the degree of concentration, however, was marginal during this period. With the exception of France, national defense industries in Europe already had a high degree of concentration. Difficulties in executing pan-European acquisitions prevented further concentration in the Western European defense industry. There was an initial wave of cross-border acquisitions during the first years of the 1990s, but this trend soon faded in the absence of political agreement and support for such acquisitions and the lack of appropriate Europe-wide institutional and regulatory frameworks. During this period, it was the industrial sector that was more responsive to the
need for adaptation, while governments were slower to respond to the new environment. This was probably the main reason for the slow rate of adaptation, particularly in comparison with developments in the U.S.

In the second half of the 1990s, and in particular since 1998, European-level defense industry integration began to have more significant results, spurred on by the increasing fear of competition from the rapidly consolidating U.S. defense industry. It was also facilitated by changes in government policy on defense industry privatization in France, Italy, and Spain, where the main part of the defense industry had, until then, been state-owned. A number of large international joint ventures have been created since the mid-1990s, in particular in the aerospace sector but also in other defense industry sectors, and there has also been a series of international corporate mergers and acquisitions. In 1999, the two largest British defense companies, British Aerospace (BAe) and GEC merged their defense activities into a new company, BAE Systems. This was followed in 2000 by the creation of the first major European transnational company, the European Aeronautic, Defense and Space Company (EADS), produced by the merger of French, German, and Spanish companies. In the field of defense electronics, the acquisition in 2000 by the French company Thales (formerly Thomson-CSF) of the British company Racal Electronics represented a significant consolidation. In the space sector, Astrium, a joint venture created in 2000, combined the space activities of the former DASA (Germany) and Matra Marconi Space (France/UK). In the missiles sector, further consolidation was achieved in 2001 with the creation of MBDA, a joint venture owned by BAE Systems, EADS, and Finmeccanica (Italy) that will include the missile activities of Anglo/French Matra/BAE Dynamics, DASA, and Finmeccanica.

While these international acquisitions and joint ventures represent significant intra-European concentration of organization and ownership, it is still not clear to what extent they will also involve consolidation and genuine integration. How far the integration of the European defense industry will proceed, to what extent it will be predominantly an intra-European process, or whether it will also include a marked transatlantic dimension, is still far from clear. This was illustrated by two developments during 2001. First, the collapse of plans by EADS and Finmeccanica to create a joint venture for the production of military aircraft, the European Military Aircraft Company (EMAC). Second, the decision by the British Government to participate in the U.S.-led Joint Strike Fighter (JSF) program, a decision that was followed in 2002 by other European NATO countries.

(Further reading: Creasey and May, 1988; Brzoska and Lock, 1992; Steinberg, 1993; Schmitt, 2000; and Sköns and Weidacher, in SIPRI Yearbook, annual.)

III. Historical controversies
Developments in the European defense industry are associated with a number of historical controversies, most of which concern the various drivers of and barriers to international cooperation and integration of defense production. These controversies are primarily rooted in the dual nature of defense contractors, who simultaneously function as the supplier of military requirements for national security and as important components of advanced technology industrial sectors. From a government perspective, the main rationale for increasing the internationalization of arms production is the potential for cost reductions, in particular during periods of declining demand, reduced production runs, and reduced-scale economies. This is reinforced by the sharp rise in the unit cost of advanced weapon systems due to the high level of required research and development. The main government arguments against increased internationalization are related to national security concerns and industrial, labor, and technological considerations. From the corporate perspective, the objectives are business-related. Some companies can gain from international collaboration and mergers and acquisitions, while others risk losing. It is mostly the large companies that gain, and they have the most influence at the level of policy. National differences in corporate culture have also posed difficulties to industry integration. Actual developments in the European defense industry are, to a large extent, the result of the balance between these different forces and actors.

European defense integration

Integration of the European defense industry is intimately related to the issue of European security cooperation, currently in the context of the development of a common ESDP. The story of European integration began with defense. After the end of World War II, the primary goal of European integration was to build a European Defense Community to reduce the risk of future wars. The main reasons for the failure of defense integration in Europe were the demands of national sovereignty, intra-European divisions, and the dependence of the European NATO countries on the United States for their defense. This situation remained relatively unchanged throughout the Cold War period. Since the fall of the Berlin Wall in 1989, there has been a gradual change in the defense debate in Europe, but defense integration has continued to be a sensitive issue, blocked primarily by British opposition. A turning point came at a summit meeting of the British and French heads of state in St-Malo, France, in December 1998, when British prime minister Tony Blair made clear that the UK was prepared to endorse the build-up of a European defense capacity under the political auspices of the European Union (EU). This set the process in motion and, at the EU Council meeting in Helsinki in December 1999, two decisions with far-reaching implications were made: first, to inaugurate a new and permanent set of security and defense institutions within the EU, and second, to create a shared, although limited, European military capability in the form of the European Rapid Reaction Force (ERRF), the so-called Headline Goal. The development of a common ESDP has reinforced the view in Europe that Europe needs its own military capabilities independent from those of the U.S. and an industrial base capable of supporting these military capabilities.
Developments on the political level are reflected in the formulation of institutional and legal frameworks governing the process of European defense integration. Decision-making over foreign security and defense matters remained until recently a national prerogative, and the defense industry was deliberately exempted from the EU rules and regulations that are aimed at the creation of an internal market and harmonization of policies. Article 269 (formerly Article 223) of the Treaty on the European Community allows EU member states to invoke their national security interests to exempt the armaments sector from European Community regulations on the industrial, export, competitive, and procurement aspects of arms production.

Efforts towards a common European arms market

On the demand side, the fragmentary nature of the European defense market, consisting as it did of various national procurement processes, constituted a barrier to achieving the lengths of production runs and economies of scale that were requisite to render integration of the defense industry economically feasible. Efforts to create a single European Armaments Agency (EAA) in the early 1990s were not successful. Instead, an array of ad hoc arrangements has developed, with the goal of achieving harmonization in arms procurement within Europe.

Both of the primary European defense organizations—NATO and WEU—have subordinate bodies responsible for facilitating cooperation in arms production and procurement: the Conference of National Armaments Directors (CNAD) within NATO and the Western European Armaments Group (WEAG) and the Western European Armaments Organization (WEAO) within the WEU. The EU has established an ad hoc working group on armaments policy (POLARM) as part of the ESDP. In addition, the major arms-producing countries have set up an organization outside the established institutionalized frameworks, the Organisme Conjoint de Coopération en matière d'Armament (OCCAR) (Joint Armaments Co-operation Organization, or JACO). There is also the so-called Letter of Intent (LoI) process between the six major arms-producing countries. These organizations and processes all aim towards the same goal, but with differences in membership, day-to-day functions, and legal status. They range from institutional frameworks with limited scope, such as OCCAR, which functions basically as a project management body, to organizations with more far-reaching objectives, such as the WEAO, which aims at broader harmonization of European arms procurement in the long term.

OCCAR was established in November 1996, and was given legal status in September 1998. The agreement went into force in January 2001 following ratification by the four member countries: France, Germany, Italy, and the UK. OCCAR is used primarily for the management
of joint procurement programs. The organization does not apply the principle of *jus retour*, but instead aims to achieve a multi-program balance over several years.

The WEAG was assigned the task of establishing a European Armaments Agency (EAA), as called for in the 1992 Maastricht Treaty, but concluded in 1994 that the conditions did not yet exist for the creation of such an agency. This led instead to the creation in 1995 of the WEAO as a subsidiary body of the WEU. While a master plan for an EAA was developed in 1998, and the WEAO has obtained the legal authority to place contracts, the mandate of the WEAO is still limited to research and technology. With the partial absorption of the WEU into the institutional framework of the EU in 2001, the WEAG and WEAO continue to exist as separate entities.

The failure of multilateral attempts to agree on a common political and legal framework for the EU defense industry eventually led the major defense firms in Europe to undertake negotiations outside the established institutional frameworks to overcome political and regulatory impediments to continued consolidation. In a Letter of Intent signed in July 1998, the defense ministers of the six major arms-producing countries in the EU (France, Germany, Italy, Spain, Sweden, and the UK) stated their “desire to establish a co-operative framework to facilitate the restructuring of European defense industry.” In the subsequent Framework Agreement, signed in July 2000, these six countries agreed on concrete measures to facilitate cooperation and transfers between signatory states. The Agreement reflects the dilemma of needing to protect national assets while aiming for cooperation that will result in mutual interdependence between countries and defense contractors. One of the central issues of the Agreement is how to achieve national security of armaments supplies through a mechanism of international cooperation.

*(Further reading: Bauer and Winks, 2001)*

**IV. Theoretical relevance**

Seen in a wider context, the Western European defense industry is an important part of the global system of arms production. Since the end of the Cold War, the global defense industry has undergone profound changes in size, structure, and ownership in most of the major arms-producing countries. These changes are gradually transforming the international system of military production and trade. This is likely to affect the conditions for government arms procurement and government control over arms production and international arms transfers. It is also changing the power basis for international relations.

*The international system of arms trade and arms production*
The international system for military production and trade is taking shape in response to changes in the mode of production, military technology, the security environment, and military requirements. Over time, changes in the organization and control of the production and sale of weapon systems have resulted in national variations in the rate of concentration, internationalization, and privatization in the defense industry, with implications for the global proliferation of weapons.

The military-industrial sector emerged during the 19th century, when mass production of weapons became possible as a result of the industrial and technological revolution. The sector was privately owned, produced weapons largely for profit, and was dominated by a few large companies with a markedly international orientation. Exports and production were relatively unregulated, as they were seen to facilitate the maintenance of innovative capabilities and the national industrial base.

Beginning in the 1930s and continuing through World War II, the major powers built up indigenous arms industries under national control. The war involved a dramatic increase in arms production, a profound reconfiguration of the pattern of arms production, and a sharp reduction in the international arms trade. The European defense industries were decimated by the war. After 1945, the international system of arms production and arms transfers became conditioned by the bipolar structure of world politics and dominated by the two superpowers. The system was strongly controlled by the Soviet and U.S. governments and also reacquired a global dimension, as arms transfers came to be used as an important instrument in the superpower rivalry during the Cold War.

The unipolar structure of world politics after the end of the Cold War has resulted in parallel changes in the tiers of international arms production systems. The massive reduction in Russian arms production since the disintegration of the Soviet Union in 1991 has left the United States as the only first-tier producer country with self-sufficiency at the technological frontiers of arms production. The second-tier producers, who possess high-level technological capabilities but fall short of being at the leading technological edge in all sectors, include Russia, China, and the four major European producers (France, Germany, Italy, and the UK). European efforts to achieve integration of their defense industries, if successful, could possibly involve another shift in this tier structure. It would also involve significant changes in the concentration, internationalization, and ownership of the Western European defense industry.

(Further reading: Krause, 1992; Held et al., 1999)

Globalization
Situated at the intersection between national security considerations and an increasingly globalized economic sphere, the defense industry has been affected by two fundamentally opposite forces since the end of the Cold War. While the loss of a perceived common threat, in the form of the Soviet Union, has resulted in a tendency of inward orientation in government policies and has raised questions about the relevance of military alliances and common defense policies, the forces of globalization have had the opposite effect in the realm of economics, by promoting international collaboration and multinational organization on the company level. This has produced some international political–economic tensions. Throughout the period since World War II, and especially since the 1980s, the industrialized countries have sought to advance the spread of a neo-liberal international economy based on the principles of free trade and unrestricted flows of foreign direct investment. However, in the area of arms production, these principles have come into conflict with the politico-military interests of these same countries. In the field of arms production, they have rejected competition and comparative advantage as the basis for the division of labor and have been unwilling to permit the erosion of domestic defense industrial capabilities through import penetration. State preferences in arms production have been in conflict with “free market” principles. Current developments in the Western European defense industry, along with increasing transatlantic defense industrial links, may result in reduced tension between these two forces and a liberalization in defense production. The consequences of the terrorist attacks on the U.S.A on September 11, 2001 may produce another change of direction toward heightened national security concerns, stricter government controls, and increased regulation.

(Further reading: Vernon and Kapstein, 1992; Kapstein 1992; Held et al., 1999)

These developments in the European defense industry may also have an impact on the various dimensions of arms production that are involved in the theory of the military-industrial complex. According to this theory, coined by U.S. President Dwight Eisenhower in his January 1961 farewell address to the American people, there is a risk that coalitions of vested interests within the state and industry will attempt to pursue goals that are in the interests of the coalition members rather than in the interests of national security. Since the downsizing of arms production after the end of the Cold War led to a reduction in the economic importance of defense production, and therefore of the power of the industry’s resident vested interests, one could argue that there was a decline in the operation of these forces. However, with the rise of new trends of internationalization and privatization, one could argue that the military industrial complex, which up until now has had a primarily national scope, is reconstituting itself on the international level.

(Further reading: Dunne, 1995 and 2001)