Shareholder nationality among the major European and American defense contractors: an exploratory data analysis

Jean BELIN¹, Mahdi FAWAZ¹, and Hélène MASSON²

¹GREThA, UMR CNRS 5113, Université de Bordeaux, ²Fondation pour la Recherche Stratégique (FRS).

Corresponding author: Mahdi FAWAZ, mahdi.fawaz@u-bordeaux.fr

Date of submission: 19/10/2018
Date of publication: 06/06/2019

Abstract
This article presents the first results of a statistical analysis of the ownership links between the major European and American defense contractors. This approach, centered on the shareholders and subsidiaries of these companies, enables us to explore the depth of the national links (company and country of origin) and the density of the ownership cooperation that exists within Europe, as well as with the rest of the world, particularly the United States. Information about defense contractors’ ownership links is difficult to obtain and precautions must be taken in the interpretation of the results. In terms of defense contractor shareholders, it would appear first that the national link is strong for Sweden, Spain and France, less so for Germany and Italy, and particularly weak for the United Kingdom. Next, in European terms the links are concentrated on Airbus, MBDA and KNDS and are little developed in other companies. Finally, we observe asymmetrical links with the USA and a significant presence of American investment funds.

1. Introduction

The extent of international mobility of capital has considerably changed over the last century and a half. High during the period of the gold standard, the mobility of capital was much lower during the Bretton Woods period and has accelerated sharply over recent years (Hogendorn, 1998), particularly because of modifications to the legislation on Foreign Direct Investment (FDI) (see Globerman, 1988;
Wehrlé and Pohl, 2016) and because of a more positive view\(^1\) (Markusen and Venables, 1999). Foreign shareholdings in companies have thus increased.

In France, the official report by the National Association of Joint-Stock Companies (ANSA) recently pointed out that, « Non-resident investors have become the biggest group of shareholders in listed companies. They own about 40% of share capital ».

These figures, which relate to France, do not distinguish between defense and civilian companies. To our knowledge there has never been a statistical study of shareholder nationality among defense contractors. Nevertheless, holdings in civilian companies and defense contractors might differ.

The ownership of defense corporations is crucial on both the military and economic side. On the military plan, having a national production is a necessity in order to secure the supply. Then, the national ownership must be favored. As the Livre Blanc Défense et Sécurité Nationale (2013) highlights, defense corporations are also important on the economic side. They contribute strongly not only to the employment and foreign trade but also to the R&D and the innovation. Public authorities try then to protect the property rights of these innovations.

Over recent years, acquisition of shares in certain strategic sectors has been increasingly called into question and most countries have introduced mechanisms for identifying and banning foreign shareholdings in fields concerning national security (see Shima, 2015; or Wehrlé and Pohl, 2016).

This article presents the first results of a statistical analysis of the ownership links between the major European (Germany, Spain, France, Italy, the United Kingdom and Sweden) and American defense contractors. This approach enables us to explore the depth of the national links (company and country of origin) and the density of the ownership cooperation that exists within Europe, as well as with the rest of the world, particularly the United States.

Whereas the majority of defense contractors through the world were under public control until the 1970s, the national links have been weakened due to the presence of foreign shareholders. The shareholders’ links of each European countries are generally weak and concentrated on three companies – Airbus Group, MBDA and KNDS. They should be developed to build a truly European defense industry. Links with the USA are asymmetrical and many American investment funds own shares in European defense contractors.

\(^1\) Markusen and Venables, 1999 : In the 1970s, many host country governments and certain economists considered that investment from multinationals was prejudicial to the well-being and development of host economies, creating monopoly situations which exploited those local economies and stifled local competition. In the 1990s, viewpoints were considerably different and more optimistic, suggesting that multinationals had important complementarities with local industry and could stimulate development in host economies.
2. Ownership links

The literature on ownership structure is highly developed in international finance and economics but few articles deal with the strategic nature of ownership or with fields concerning defense and national security.

2.1 Two separate strands of literature

In finance, the literature on ownership structure focuses above all on the analysis of relationships between the manager and the shareholders, postulating that ownership structures are dispersed (Berle and Means, 1932; Baumol, 1959; Marris, 1964; Penrose, 1959; Williamson, 1964; Galbraith, 1967; Jensen and Meckling, 1976; Grossman and Hart, 1980). Other authors have then shown that this view is not necessarily appropriate and that in many countries, ownership is concentrated (Eisenberg, 1976; Demsetz, 1983; Demsetz and Lehn, 1985; Shleifer and Vishny, 1986; Morck et al., 1988; Holderness and Sheehan, 1988; La Porta et al., 1998). The analysis of types of shareholder and their consequences has become more widespread but this literature does not give much space to examining shareholder nationality. La Porta et al. (1999) emphasize the importance of the type of shareholder but do not study their nationality and their sample excludes companies under foreign control.

In international economics, there is also a significant body of literature on ownership structures and shareholdings, but as Fritz and Kalina (2015) observe, until recently, analyses in international economics and those in corporate finance have developed separately. Most articles give a very positive image of FDI. « There has been a growing interest in the determinants of foreign direct investment (FDI) in developing countries, as FDI is considered one of the most stable components of capital flows to developing countries and can also be a vehicle for technological progress through the use and dissemination of improved production techniques » (Bénassy-Quéré et al., 2007). FDI enables multinationals to exploit their specific advantages by transferring them across frontiers within the company (Bellak, 2004; Markusen, 1995; and Dunning, 1977). The incentive to internalize these advantages stems from the presence of market imperfections. Mobility comes from the intangibility and low marginal cost when this advantage is used in a foreign subsidiary (Markusen, 2002). The specific advantage may exist before relocation overseas but it can also arise from the choice of location (via the acquisition of shares).

2.2 A resurgence in studies of strategic interests
A few articles do, however, question the benefits of foreign shareholdings. Over most of the last 30 years, the United Kingdom has received the greatest quantity of FDI entering the EU, particularly from North American and Asian investors (Dimitropoulou et al., 2013). Braddon et al., (2005), used case studies to emphasize the importance of foreign shareholders among British defense contractors. They noted that a significant number of the biggest suppliers to the British government were held, or controlled by, foreign interests, particularly American.

In the USA, Hemphill (2007) showed that at the end of the 1980s, because of concerns about foreign acquisitions in certain categories of American company, Congress adopted the Exon-Florio amendment. This measure gives the American president the authority to block foreign acquisitions, or mergers or acquisitions of American companies that threaten national security. Moreover, Zhang and Van Den Bulcke (2014) partly explain Chinese companies’ growing interest in establishing themselves in Europe due to the more indulgent attitude of European countries compared to the United States, where some acquisitions were abandoned when they encountered political opposition based on security concerns.

Belin and Guille (2008), in a study carried out for the French Defense Ministry, show that innovative defense SMEs are choice targets. They are more likely to have foreign shareholders than other SMEs. In Canada, Beaudry and Schiffauerova (2011) found that, in the field of nanotechnology, most of the fruits of Canadian innovation leave the country. Half of the patented inventions by Canadians are held by foreign beneficiaries, of whom the majority are private companies. Most work by star inventors is also carried out for foreign companies. Several articles take a specific interest in Chinese investment, which has considerably increased in recent years (see Kolstad and Wiig, 2012; for a review). Kolstad and Wiig (2012) show that Chinese outward FDI is attracted to big markets and to countries that combine significant resources and inefficient institutions.

From a theoretical viewpoint, Al Azzawi (2012) develops a model showing that technology followers have a lot to gain from the spin-offs of FDI, whereas those from more technologically advanced economies should carefully weigh up the costs and benefits of FDI.

Apart from the case study by Braddon and Bradley (2005) in the United Kingdom, there are no analyses of the ownership structures of defense contractors and we do not have access to any international comparison in this field.

3. Ownership structure and shareholder nationality: comparison between Europe and the United States

2 See also Floyd et al. (2016) without distinction between civil and defense companies.
We have thus sought to analyze shareholder nationality in the major European and American defense contractors. The sample consists of 29 European companies (major suppliers and core companies of the Defense Technological and Industrial Base (DTIB) (see Dunne, 1995) in the main European States producing defense systems: Germany, Spain, France, Italy, the United Kingdom and Sweden) and 34 American companies, public and private. Information about ownership links among defense contractors is difficult to obtain and precautions are necessary in interpreting the results. The methods and detailed results are presented in the Appendices.

3.1 Shareholder profile: a weaker, but still substantial national link

Comparing the nationality of the shareholders of the European companies in our sample, it would appear that in Sweden (84.1%), Spain (78.2%) and France (63.4%), the national link remains strong. No less than 84.1% of the Swedish aerospace and defense company Saab Group, which concentrates the majority of the country’s industrial and technological defense capacities, is held by Swedish shareholders, the biggest of whom include the Investor AB and Wallenberg Foundations, both emanation of the Wallenberg family.

Although scaled back in recent years, the substantial level of State ownership of shares in defense contractors explains the importance of the national link, particularly in France (DCNS, Thales, Safran and KNDS/Nexter) and Spain (Navantia and Indra Sistemas). Reciprocal shareholding between defense domestic contractors is a second explanatory factor. Although the French companies DCNS and Dassault Aviation are characterized by a national link that is close to 100%, the situation is different for Thales and Safran with 51% and 26% of national shareholders respectively (excluding the public float).

Germany (45.5%) and Italy (38.4%) are at a lower level. The capital of the core companies of the German DTIB remains mainly in the hands of national shareholders (financial institutions, companies, investment funds, and family shareholdings), despite a substantial reduction in recent years. In Italy, although the national link is dominant for the naval group Fincantieri (72%, mainly State shareholdings) and for electronics company Elettronica (67% owned by the Benigni family and Leonardo), it is much weaker for Italy's biggest defense group, Leonardo (ex-Finmeccanica) with 32% (State shareholdings). However, this result should be qualified because the group is publicly listed and there is a significant public float (where the nationality of shareholders is unknown).

In the United Kingdom, all the defense contractors covered by this study are publicly listed and a very high proportion of shares are in the public float (84%). In this context, the identifiable national link

3 The information about shareholders come from Bureau Van Dijk’s Orbis database.
(excluding the public float) appears to be very low (9.7%) and the influence of the stock market is decisive. This result can be explained mainly by the shareholders of BAE Systems, the main supplier to the MoD and biggest defense group in Europe, while also concerning the other British companies in the sample (Babcock, Rolls Royce, Serco Group, Qinetiq, Meggitt, GKN and Ultra Electronics).

3.2 Shareholder links between the countries studied: globally weak, and concentrated on Airbus Group, MBDA and KNDS

Analysis of each European country’s shareholdings in companies from the other countries forming part of the study shows that the shareholder links are concentrated on three companies – Airbus Group, missile manufacturer MBDA and the Franco-German holding company KNDS (result of the alliance between Nexter and KMW in the land armaments sector).

For the rest of the sample, it would appear that Swedish, German and Italian capital is practically non-existent in the shareholdings of companies from other countries while French capital is marginal. Among the countries studied, the United Kingdom is an exception, with holdings in Spanish (5.6%), Italian (5.1%) and German (4.5%) defense contractors.

3.3 Europe / United States: an asymmetrical situation, a significant presence of American investment funds

It is not always easy to identify American shareholdings in European defense contractors. Companies’ communication on this subject is limited, but above all such shareholdings are often made via investment funds that buy floating shares listed on the stock market. From the data that are available, the first observation we can make is that American shareholdings appear in second place in Spain (7.5%), Italy (5.9%), the United Kingdom (5%) and France (4%). In Germany, they are in third position behind national and British shareholdings. Sweden, represented in this study only by Saab Group, appears to be less closely linked to the USA, with only 1.1% of American shareholdings.

Although the analysis of total holdings remains difficult because of the presence of double-counting, it brings to light the presence of American investment funds in the floating capital of European companies listed on the stock market. This is the case for all the British companies in our sample. Italian (Leonardo), French (Thales and Safran), German (Rheinmetall) companies and Airbus Group are also concerned. The most active American funds include Capital Group Co, Blackrock Inc, Franklin Resources Inc, Vanguard Group Inc, State Street Corp, Ameriprise Financial Inc, Capital group International and JP Morgan.
On the contrary, the American defense contractors in our sample show very little presence of shareholders from the European States studied (between 0.1 and 2%)\(^4\). The situation is clearly asymmetrical. The capital of the American defense contractors studied is characterized by a predominance of national shareholders (54.4%), often the investment funds mentioned above, followed by the floating capital (34.4%), “Other World” (5.2%) and “Other Europe” (2.3%).

### 3.4 Macro and micro - economic explanations

These results cannot be explained solely on macroeconomic grounds (amount of FDI in the country, type of national financing, legislation, etc.); the specific characteristics of the defense contractors must also be taken into account.

The intensity of inward FDI stocks in each country only provides a partial explanation of the degree of foreign shareholdings in the United Kingdom and Sweden (the former being the European country with the largest stocks of inward FDI and the latter the country with the smallest). It does not explain the percentage of foreign shareholdings among defense contractors of other countries. For example, the USA is one of the countries receiving the most FDI whereas the shareholdings in defense contractors are mostly national. Similarly, Italy, which receives relatively little FDI (less than France or Spain), has a high percentage of foreign shareholders.

We do not have an indicator for the openness of regulations in the defense industry, but for all industries taken together, among the countries in our sample the USA seems to have the most restrictive policy in relation to FDI. Although regulations can provide an understanding of the differences between the European countries on the one hand and the USA on the other, they do not explain the differences between the European states.

These results must also be analyzed in terms of micro-economic factors and the specific characteristics of the companies involved. Indeed, foreign investment is concentrated in companies with certain characteristics. According to Markusen (1995), there are more multinationals in industries with certain characteristics: a high level of R&D compared to sales, a large proportion of qualified or technical employees, products that are new and/or technically complex and products that are highly differentiated. One of the motivations for this FDI is to obtain access to new assets and new knowledge (Patel and Vega, 1999; Chen et al., 2008; Beaudry and Schiffauerova, 2011). In the same way, exporting companies have a higher probability of having a foreign shareholder (Mayer and

---

\(^4\) The United Kingdom, France, Germany, Italy and Sweden have very low rates of participation with respectively 1.9%, 1.1%, 0.8%, 0.1% and 0.1% of the capital of the selected defense contractors.
Ottaviano, 2007) and companies that bear financial constraints are also the target of foreign shareholders (Wagner and Weche Gelübcke, 2015).

Compared with civilian companies (Belin, 2015; or Hartley, 2007), defense contractors are R&D-intensive with qualified personnel (researchers, engineers, etc.). A large number of these companies are very active in filing patents. To provide a strategic advantage to their country, they have to develop very innovative and complex products and differentiate themselves from the competition. They have high levels of exports but at the same time are fairly constrained from a financial viewpoint (Belin and Guille, 2008) and dependent on public finance which tends to diminish in line with budgetary constraints.

4. Conclusion

Foreign shareholdings provide companies with the finance they need. The internationalization of activities and the development of projects involving cooperation between companies of different nationalities may also require them to seek foreign investment. Nevertheless, company ownership structures are not neutral. By definition, the shareholder has a right of ownership over the company and its assets. He takes part in the life of the company and, depending on the size of his shareholding, can influence its decisions and performance.

This initial study of defense contractors shows first and foremost that national links have been weakened due to the presence of foreign shareholders whereas the majority of defense contractors throughout the world were under public control until the 1970s. The study also underlines the fact that links should be developed within Europe to build a truly European defense industry. The presence of non-European capital, particularly American, must be monitored. Links with the USA are asymmetrical and many American investment funds own shares in European defense contractors. Since defense contractors are considered strategic from the military and economic point of view, solutions must be found to finance their development and maintain control of them within Europe. Studies should continue into the nationality of defense contractors’ shareholders and the consequences on their performance, on the ownership of assets (particularly in relation to R&D), their location and their operations.

This exploratory work will be extended in two directions. On the one hand, we must work on the data to distinguish the types of shareholders (banks, companies, State and others). On the other hand, we can complete this study with an econometric model taking into account the corporations’
characteristics (R&D, size, sector, etc.). Indeed, with such model, we will be able to know if foreign shareholders target the defense corporations as a priority.

Appendix

For reasons of availability and confidentiality of information, we studied the ownership links of the main defense contractors in these countries, selected on the size of their turnover in the defense sector (see list, Table 1). We classified Airbus Group, MBDA and KNDS apart because of their multinational shareholdings. This work should be continued to analyse changes in ownership links. Moreover, for those companies listed on the stock market, a significant proportion of their shareholders are in the public float. This information is interesting because it means that this part of their capital is traded on the market, thus demonstrating the influence of the financial markets and signaling a faster turnover of shareholders. Nevertheless, we do not have any direct information about the nationality of the shareholders who hold floating capital. It is thus more difficult to determine the nationality of the shareholder because of the difficulties linked to the availability of the information and to the frequent changes. In the same way, the very notion of defense contractor nationality needs to be studied in more detail. We used the information present in the defense contractors’ database (Ministry of Defense/DGA) but other criteria could be considered: the location of the headquarters, the location of establishments, the nationality of the majority shareholders, the total value of national orders, etc. In any case, we limited our analysis to the companies with the biggest turnover in the defense sector. The list could be extended but the results would be very little affected because of our use of weighting. The sample consists of 29 European companies and a total of 1,508 shareholders, all countries taken together, and 34 American companies with 2,388 shareholders. Analyses were carried out based on direct or total holdings, with and without weighting by the contribution of the company’s turnover to the total defense sector turnover for the country concerned. In this document, we present the results obtained for direct holdings weighted by the company’s contribution to the country’s defense industry (company defense turnover / defense turnover of all defense contractors in the country) which gives the most faithful picture.
Table 1 shows most important defense contractors in Europe and the USA constituting the sample. We note a greater development of American defense contractors as compared to European ones, with 34 and 29 contractors respectively.

<table>
<thead>
<tr>
<th>Country</th>
<th>Nbr</th>
<th>Names of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>6</td>
<td>Atlas Elektronik; Diehl Defense; MTU Aero; OHB; Rheinmetall and TKMS</td>
</tr>
<tr>
<td>Spain</td>
<td>2</td>
<td>Indra Sistemas and Navantia</td>
</tr>
<tr>
<td>France</td>
<td>5</td>
<td>Naval Group; GiMD; RTD; Safran and Thales</td>
</tr>
<tr>
<td>Italy</td>
<td>3</td>
<td>Elettronica; Fincantieri and Leonardo</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>9</td>
<td>Babcock International; BAE Systems; Cobham; GKN PLC; Meggitt; Qinetiq Group; Rolls-Royce; Serco Group and Ultra Electronics.</td>
</tr>
<tr>
<td>Sweden</td>
<td>1</td>
<td>Saab</td>
</tr>
<tr>
<td>Europe</td>
<td>3</td>
<td>Airbus Group; KNDS (KMW + Nexter Defense) and MBDA</td>
</tr>
<tr>
<td>USA</td>
<td>34</td>
<td>Boeing company; Fluor; AECOM; Textron; Harris; Huntington Ingalls; Oshkosh; Booz Allen Hamilton; Rockwell collins; Leidos; CSRA; United Technologies; CACI International; Orbital ATK; Curtiss-Wright; General Atomic; Aerojet Rocketdyne; Day &amp; Zimmermann Group; Mantech; International; Engility; Vectrus; Moog; Lockheed Martin; Dyncorp International; AAR Corp; Cubic; Viasat; Vencore; Honeywell International; General Dynamics; Bechtel Group; L-3 Communications; Northrop Grumman et Raytheon.</td>
</tr>
</tbody>
</table>

Table 1: Sample of defense contractors

Table 2 indicates shareholders’ nationality of defense contractors for each country in Europe as well as the USA. Firstly, we observe an asymmetrical situation between Europe and the United States. American shareholdings appear in second place in Spain (7.5%), Italy (5.9%), the United Kingdom
(5%) and France (4%), while the American defense contractors in our sample show very little presence of shareholders from the European States studied (between 0.1 and 2%). Secondly, the national link remains strong in Sweden (84.1%), Spain (78.2%), France (63.4%) and the USA (54.4%). Germany (45.5%) and Italy (38.4%) are at a lower level, while the identifiable national link in the United Kingdom appears to be very low (9.7%).

<table>
<thead>
<tr>
<th>Country</th>
<th>Germany</th>
<th>Spain</th>
<th>France</th>
<th>Italy</th>
<th>Sweden</th>
<th>Others UE*</th>
<th>USA</th>
<th>Others World**</th>
<th>Others5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>45.5%</td>
<td>0%</td>
<td>0.3%</td>
<td>0%</td>
<td>4.5%</td>
<td>0%</td>
<td>0.2%</td>
<td>4%</td>
<td>0.3%</td>
<td>45.3%</td>
</tr>
<tr>
<td>Spain</td>
<td>0%</td>
<td>78.2%</td>
<td>0%</td>
<td>0%</td>
<td>5.6%</td>
<td>0%</td>
<td>2.3%</td>
<td>7.5%</td>
<td>0.7%</td>
<td>5.6%</td>
</tr>
<tr>
<td>France</td>
<td>0%</td>
<td>2.1%</td>
<td>63.4%</td>
<td>0%</td>
<td>0.5%</td>
<td>0%</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>30%</td>
</tr>
<tr>
<td>Italy</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>38.4%</td>
<td>5.1%</td>
<td>0%</td>
<td>1.7%</td>
<td>5.9%</td>
<td>1.9%</td>
<td>46%</td>
</tr>
<tr>
<td>UK</td>
<td>0.2%</td>
<td>0.4%</td>
<td>0%</td>
<td>9.7%</td>
<td>0%</td>
<td>0.7%</td>
<td>5%</td>
<td>0.5%</td>
<td>84%</td>
<td>100%</td>
</tr>
<tr>
<td>Sweden</td>
<td>0%</td>
<td>0%</td>
<td>0.8%</td>
<td>0%</td>
<td>84.1%</td>
<td>0.8%</td>
<td>1.1%</td>
<td>2.1%</td>
<td>11.1%</td>
<td>100%</td>
</tr>
<tr>
<td>Airbus, MBDA and KNDS</td>
<td>11.6%</td>
<td>3.1%</td>
<td>11.6%</td>
<td>4.6%</td>
<td>9.6%</td>
<td>0%</td>
<td>8.3%</td>
<td>5.7%</td>
<td>0%</td>
<td>45.4%</td>
</tr>
<tr>
<td>Unweighted total (EU)*</td>
<td>8.2%</td>
<td>12%</td>
<td>11%</td>
<td>6.1%</td>
<td>5%</td>
<td>12%</td>
<td>2%</td>
<td>4.7%</td>
<td>0.8%</td>
<td>38.2%</td>
</tr>
<tr>
<td>Weighted total (EU)**</td>
<td>5.3%</td>
<td>2.2%</td>
<td>15%</td>
<td>4.8%</td>
<td>6.9%</td>
<td>0.5%</td>
<td>2.1%</td>
<td>4.8%</td>
<td>0.4%</td>
<td>58.1%</td>
</tr>
<tr>
<td>USA</td>
<td>0.8%</td>
<td>0%</td>
<td>1%</td>
<td>0.1%</td>
<td>1.7%</td>
<td>0.1%</td>
<td>2.3%</td>
<td>54.4%</td>
<td>5.2%</td>
<td>34.4%</td>
</tr>
</tbody>
</table>

Table 2: Nationality of shareholders

Others UE*: Switzerland (34.8%), Norway (14%), Netherlands (12.4%), Belgium (6.7%) and others.

Others USA*: Switzerland (48.6%), Netherlands (12.8%), Norway (12.8%) and others.

References

5 Percentage of shares for which we have no information about shareholder nationality and which most often represents companies' floating capital.

6 Each country has the same weight, whatever the turnover of its companies in the defense industry.

7 The weight of a country in the total depends on the turnover of its companies in the defense industry.


Belin J., 2015. La R&D des entreprises de défense dans le système national d'innovation français. Défense & Industries: N.3, FRS


Dimitropoulou D., McCann P., Burke P., 2013. The determinants of the location of foreign direct investment in UK regions. Applied Economics 45: 3853–3862


