

# European Defense Trends

Budgets, Regulatory Frameworks,  
and the Industrial Base

An Annotated Brief

CSIS Defense-Industrial Initiatives Group

PROJECT DIRECTORS

Guy Ben-Ari  
David Berteau

AUTHORS

Joachim Hofbauer  
Roy Levy  
Gregory Sanders  
Matthew Zlatnik

May 2010



# European Defense Trends

## Budgets, Regulatory Frameworks, and the Industrial Base

### An Annotated Brief

- Introduction
- European Defense Spending
- The Regulatory Framework for the European Defense Market
- Financial Health of the European Industrial Base Supporting Defense
- Trend Analysis: Budgets, the Regulatory Framework, and the Industrial Base

#### PROJECT DIRECTORS

Guy Ben-Ari  
David Berteau

#### AUTHORS

Joachim Hofbauer  
Roy Levy  
Gregory Sanders  
Matthew Zlatnik

CSIS Defense-Industrial Initiatives Group  
©CSIS May 2010



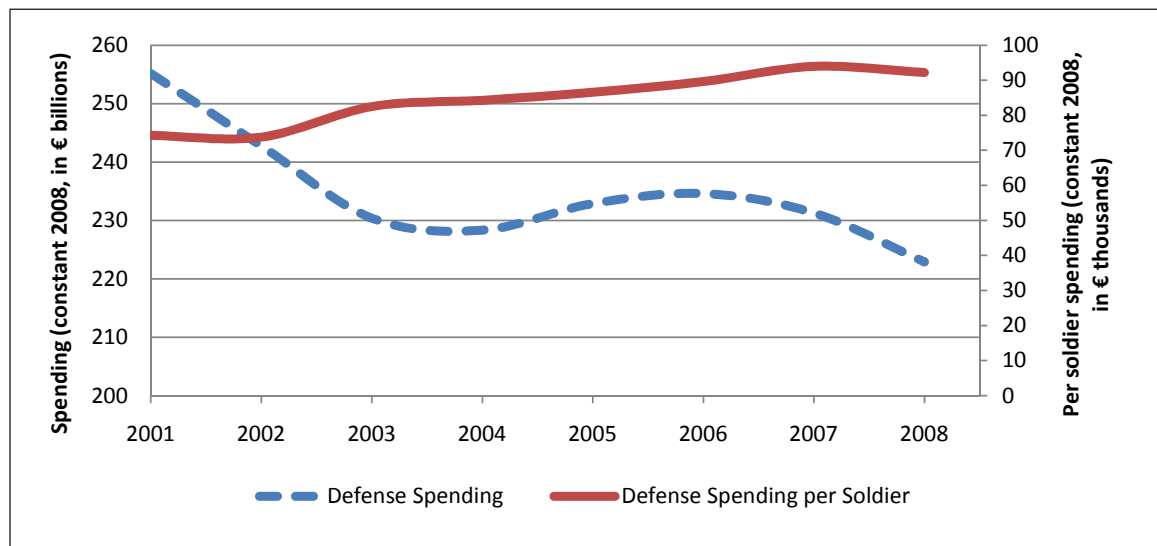
# Introduction

An in-depth understanding of the supply and demand sides of the European defense market and the regulatory framework that governs it is critical for evaluating broader European defense policies and capabilities. This annotated briefing assesses defense budgets in 2001–2008 for 37 European countries (the demand side), developments in the regulatory framework governing European defense trade, and the financial health of the European defense and security industrial base (the supply side). It then integrates the analysis from these three elements to generate a new way of looking at the European defense market.

This briefing continues the CSIS research on European defense spending originally published in 2008. The full report on which this briefing is based will be published in summer 2010.

# European Defense Spending

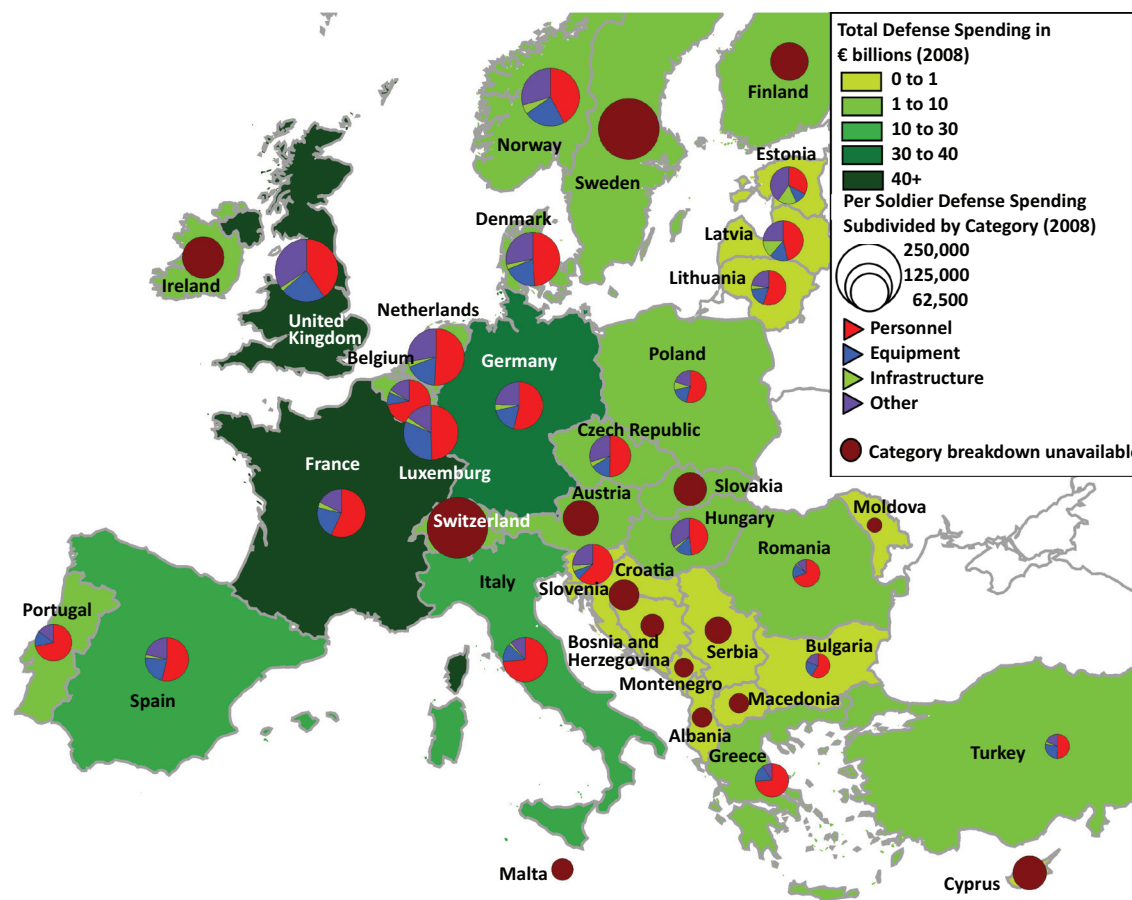
## Total European Defense Spending and Defense Spending Per Soldier (2001–2008)



Sources: NATO Defense Expenditures; SIPRI Military Expenditure Database, IISS Military Balance; analysis by CSIS Defense Industrial Initiatives Group.

Assessing European defense budgets from 2001 to 2008 reveals two key trends. First, total defense spending in Europe is in decline, from €255 billion in 2001 to €223 billion in 2008 (a negative compound annual growth rate of 1.9 percent). This trend cuts across all budget categories analyzed in this report. Second, aggregate European defense spending on a per-soldier basis during this period exhibits significant growth, from €74,000 in 2001 to €92,000 in 2008 (a compound annual growth rate of 3.1 percent). This trend also extends to all budget categories.

## European Defense Spending By Category (in euros, 2008)



Note: Switzerland's per-soldier defense spending is inflated as that country's troop numbers only include career military personnel.

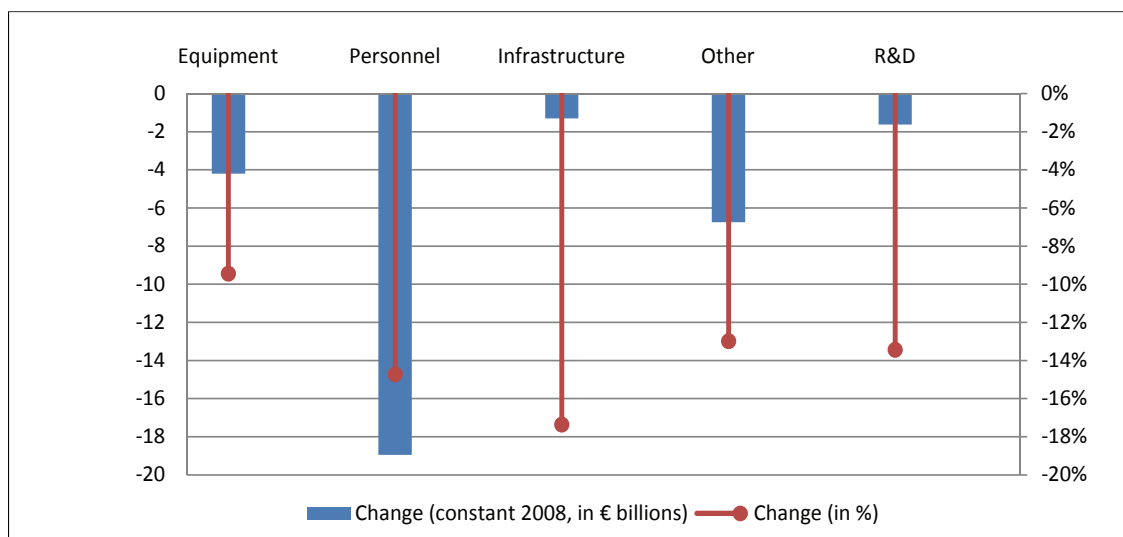
Sources: NATO Defense Expenditures; IISS Military Balance; analysis by CSIS Defense-Industrial Initiatives Group. Maps from Center for Disease Control and Maptitude.

A comparison of total defense spending in Europe reveals that France, Germany, and the United Kingdom collectively accounted for 53.3 percent of European defense spending in 2008 (€118.9 billion). Spain and Italy are a distant fourth and fifth, together accounting for 15.3 percent (€34.1 billion).

In defense spending on a per-soldier basis, a northwest-southeast divide is evident, with the United Kingdom distinctively leading this category ahead of northern Europe and a cluster consisting of France, Germany, and other western European countries. The southern and eastern European countries trail behind.

Examining defense spending by budget category for NATO countries shows that European defense budgets are personnel-heavy, with 54 percent of total European defense spending allocated to this category in 2008. Meanwhile, only 20 percent of defense budgets are spent on equipment (including research and development spending directly related to major equipment programs).

## Changes in European Defense Budget Categories (2001–2008)



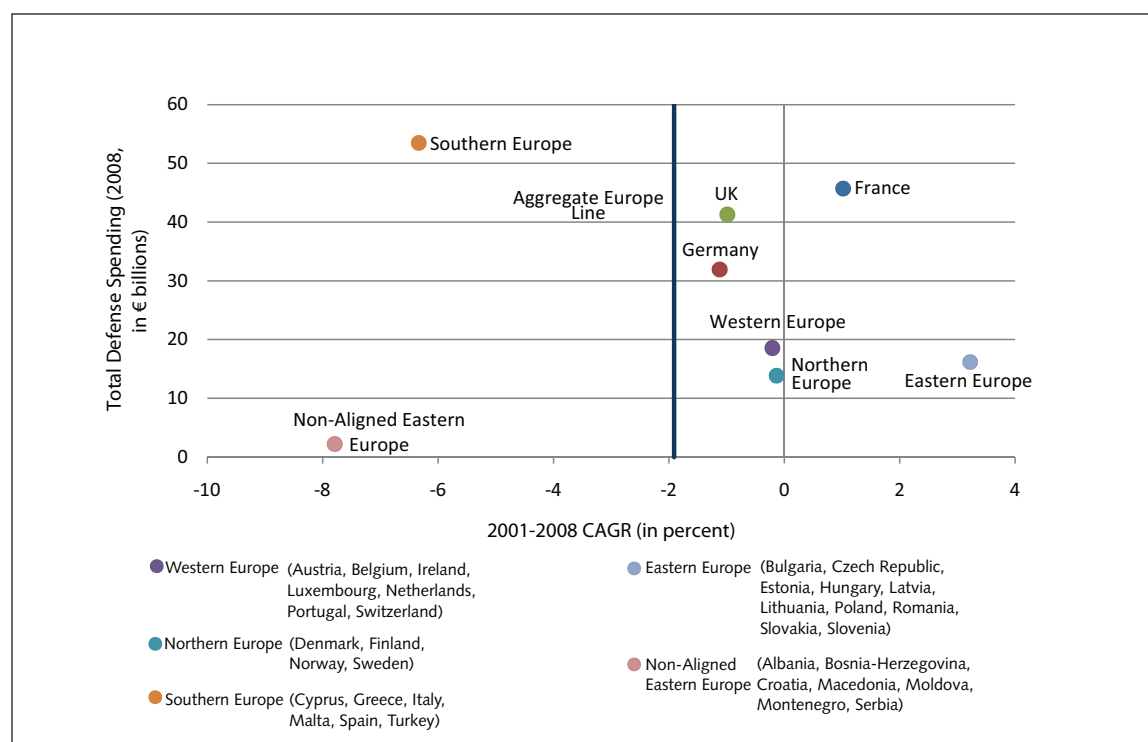
Note: Parts of R&D spending are also subsumed in the “equipment” and “other” categories, therefore influencing trends observed for these two categories. Only countries with complete time series data are included in the aggregates of the respective categories.

Sources: NATO Defense Expenditures; OECD Main Science and Technology Indicators; analysis by CSIS Defense-Industrial Initiatives Group.

The downward trend in total defense spending affects all the budget categories, though to varying degrees. The shifts in relative allocations are not driven by resource transfers between the different categories, with increases in one area caused by decreases in another. Instead, they are a function of distributing budget cuts disproportionately among the categories.

The equipment category suffered the lowest relative declines in spending, thereby increasing its relative share of the smaller defense budget pie from 19.1 percent in 2001 to 19.9 percent in 2008. It is worth noting that this increase occurred in parallel to the overall decreases in total defense budgets, indicating that Europeans are committed to maintaining as much stability as possible in their investment accounts. By comparison, U.S. trends since the 1960s have shown that in times of declining defense budgets, defense investment spending decreases at a faster rate than overall defense spending.

## Total Defense Spending By Region



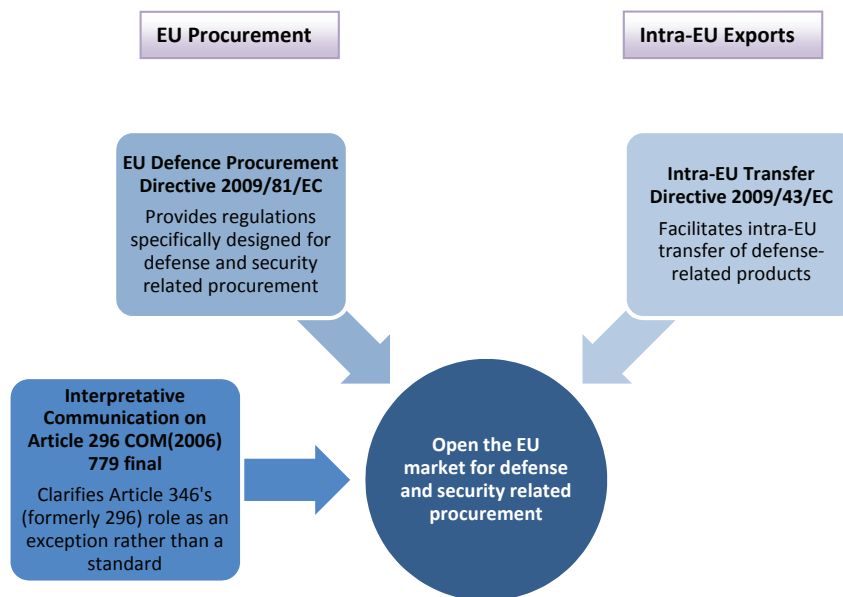
Note: The CAGR for Eastern Europe does not include Bosnia-Herzegovina and Montenegro.

Sources: NATO Defense Expenditures; analysis by CSIS Defense-Industrial Initiatives Group.

Analyzing European defense spending by region reveals additional insights. Between 2001 and 2008, most regions experienced shrinking defense budgets. Southern Europe and Non-Aligned Eastern Europe showed the sharpest declines, with negative compound annual growth rates of 6.5 and 6.3 percent, respectively. Likely reasons for this are overall economic and budgetary challenges in the regions, as well as considerable inflation rates in certain countries. The Eastern Europe region, on the other hand, and to a lesser extent France, did not follow the European trend of declining defense budgets and show eight-year compound annual growth rates of 3.2 and 1.0 percent, respectively. In the case of Eastern Europe, the desires to close the gap with western European partners as well as security concerns vis-à-vis Russia likely constitute the main impetus behind this trend.

# The Regulatory Framework for the European Defense Market

## Key Regulatory Reforms in EU Defense Procurement (2006–2009)



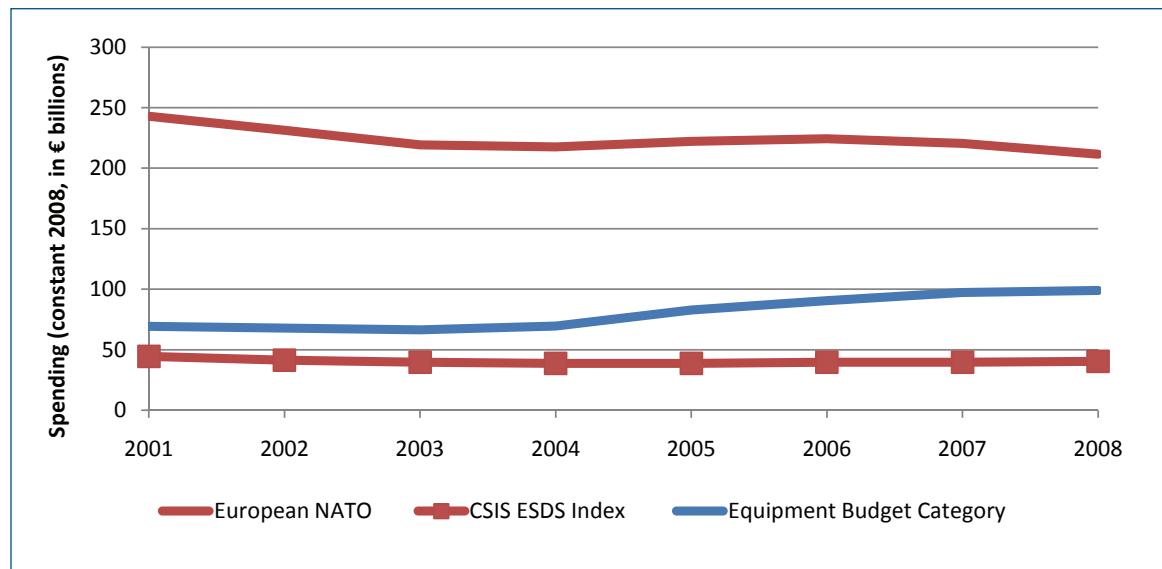
Source: Analysis by CSIS Defense-Industrial Initiatives Group.

New EU-level initiatives have the potential to dramatically change the European defense market. First, the European Commission in 2006 issued an Interpretative Communication on the application of Article 346 (formerly 296), clarifying that Article 346 applies only to procurement of equipment specifically designed for military purposes and only if the exemption is required for the protection of essential security interests of the respective member state, with the burden of proof on the member state. Second, Directive 2009/81/EC on defense and security procurement provides new regulations aimed at opening the EU defense market to EU-wide competition. Third, Directive 2009/43/EC on intra-EU transfers of defense-related goods introduces general and global licenses as the new standard governing intra-EU transfers. These new types of licenses aim to provide a pre-approved authorization framework and should apply to the majority of intra-EU transfers in the future. It is noteworthy that neither of the two new directives includes any explicit European preference with regard to the industrial base.



# Financial Health of the European Industrial Base Supporting Defense

## CSIS ESDS Index Revenue and European NATO Defense Spending (2001–2008)

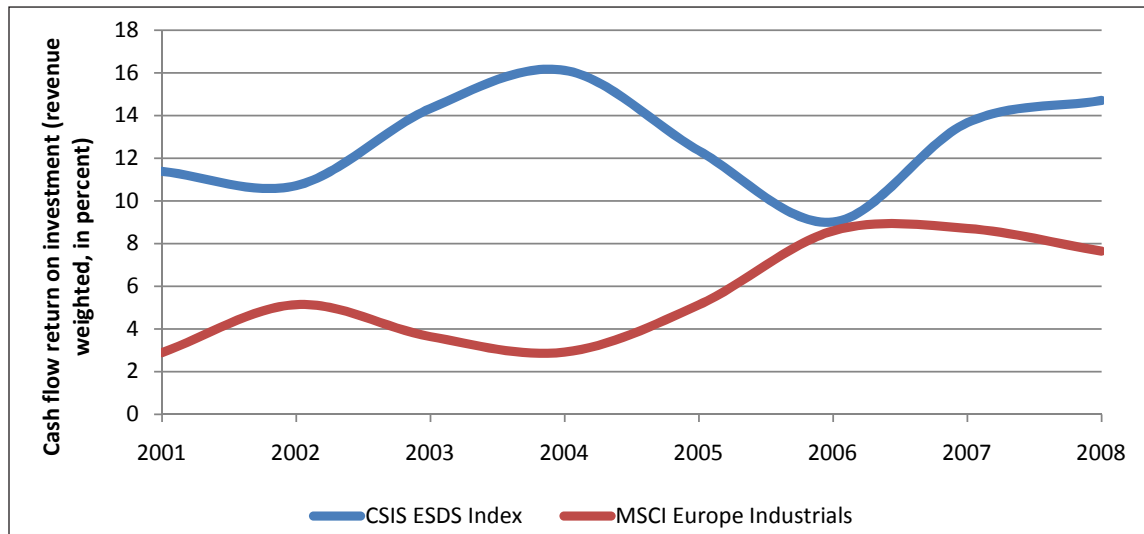


Sources: Bloomberg; NATO Defense Expenditures; analysis by CSIS Defense-Industrial Initiatives Group.

We now shift the discussion to assessing the supply side of the European defense market by analyzing the financial health of the European defense and security industrial base. To assess the industrial base, CSIS created the European Security, Defense, and Space (ESDS) Index, composed of 22 publicly traded companies across Europe with substantial defense and security activities. In 2008, their revenues ranged from €12 million to €21 billion. Companies in the Index represent both the equipment and professional services sectors and include both established and emerging defense businesses. Many operate non-defense businesses. The CSIS ESDS Index is evaluated against the industrial sector of the MSCI Europe Index.

From 2001 to 2008, revenue for the companies in the CSIS ESDS Index grew by 43 percent, from €69 billion to €99 billion (in constant 2008 euros). Two factors may explain the growth in revenue despite falling defense spending. (1) Internally, after the terrorist attacks earlier in the decade, European countries increased domestic-security spending. (2) Externally, exports, especially to the United States, provided a major source of revenue growth, expanding from 35 percent of total revenue to nearly 50 percent.

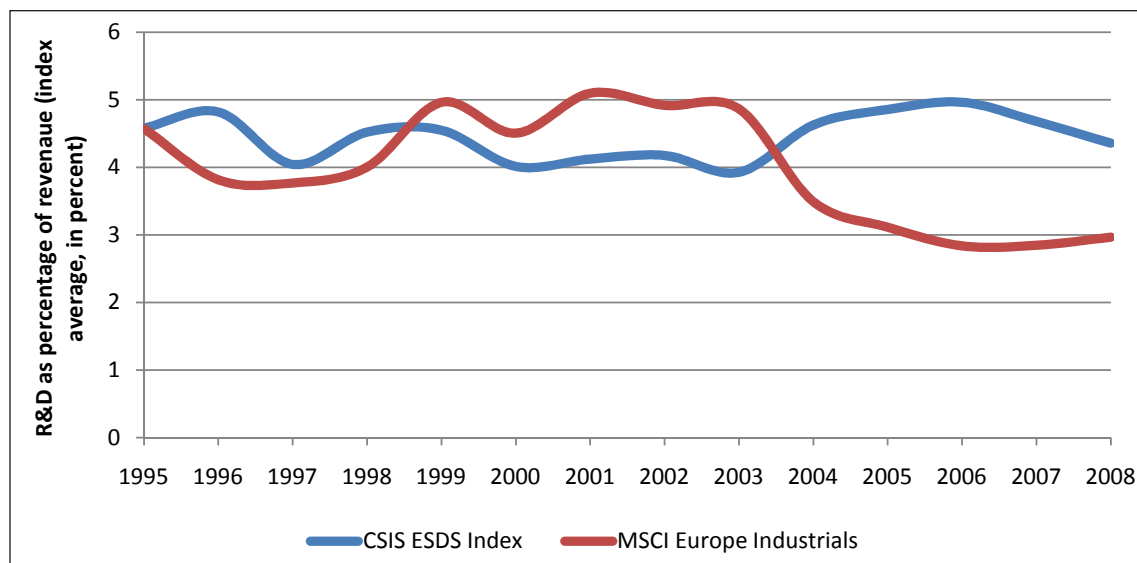
### CSIS ESDS and MSCI Europe Industrials: Cash Flow Return on Investment (2001–2008) (revenue weighted; current euros)



Sources: Bloomberg; analysis by CSIS Defense-Industrial Initiatives Group.

Cash flow return on investment compares the cash flow available after expenses have been paid and sufficient investment has been made to continue current operations, to the total investment in the company. Based on this metric—a crucial indicator of profitability that often drives investment decisions—ESDS Index companies were collectively more profitable than their industrial peers. Within the defense and security sector, on average, smaller companies reported better results than larger companies. Other measures of profitability, including gross margin and operating income, are discussed in the full report.

### CSIS ESDS and MSCI Europe Industrials: R&D as Percentage of Revenue (1995–2008) (average of index companies; current euros)



Sources: Bloomberg; analysis by CSIS Defense-Industrial Initiatives Group.

While profitability gauges how attractive an industry sector is to investors, the investment accounts—research and development and capital expenditures—show the extent to which the industry itself views its market opportunity. Growing investment suggests that industry executives see greater opportunity, with the opposite suggesting pessimism about longer-term prospects.

On average, ESDS Index companies have spent 4 to 5 percent of revenue on research and development, a level roughly comparable to that of their counterparts in the industrial sector of the MSCI Europe Index. This suggests a consistent effort to develop new technologies and capabilities.

The ratio of capital expenditures to sales has been similar for companies in the ESDS Index and the MSCI Europe Industrials. This comparable performance, regardless of changes in revenue or overall economic conditions, suggests ESDS Index and MSCI Europe Industrials companies took similar views on the longer-term prospects of their respective industries. More information on the investment accounts of the CSIS ESDS Index is included in the full report.

# Trend Analysis: Budgets, the Regulatory Framework, and the Industrial Base

1. The opposing trends of European defense spending in total terms versus spending per soldier indicate a movement within European armed forces towards **replacing quantity with quality**. The root cause for this development is the substantial troop reductions within the European armed forces.

2. **Changes to the structure of demand**, deriving from a tendency toward smaller, more expeditionary-capable forces, will shift relative spending toward investment accounts. The trend to acquire fewer units of more advanced and more expensive equipment will concurrently further increase pressure toward collaboration and drive consolidation of the European defense industry.

3. **To the extent the above trends change the demand structure, the European defense and security industrial base will face smaller orders for some items and pressure on margins and cash flow.** This will pose a challenge for national governments: **do they protect their industrial base or become more open to competition?** Companies may abandon the sector if cash flows fall to levels uncompetitive with other opportunities, resulting in an industrial base that offers fewer capabilities.

4. **The ways market participants—on the demand as well as the supply side—respond to regulatory reforms will determine their impact.** The market will drive more consolidation in the European industrial base supporting defense, but regulatory action will determine when, and under what specific circumstances, this consolidation will unfold.

5. **The changes unfolding in the European defense market—on the demand and supply side as well as in the regulatory domain—are creating opportunities to free up and reallocate defense resources.** In this sense, the evolving European defense market provides an enabling framework for European states to better respond to the most pressing defense challenges they face.

## Summary of Findings

