ARMS INDUSTRY AND THE GLOBALISATION PROCESS

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Summary

This Chapter outlines the changes experienced by the world's defense industries ranging from disarmament following the end of the Cold War to technical change and the emergence of new threats from international terrorism. It describes the world's defense industries, especially in the USA and Europe, their economics and the impact of technical change and e-commerce. It concludes by predicting that the future defense industries will be radically different.

1. Introduction

Defense markets and defense industries are changing. They have been adjusting to disarmament following the end of the Cold War, to "revolutions" in both military and financial affairs, *to further technical change affecting arms industries and to new threats from international terrorism.* The result of these changes has been reflected in plant closures, job losses, exits from the arms industry, mergers, re-structuring and rationalization. New forms of industrial organization have emerged as defense companies have developed their prime contracting and systems integration capabilities for a range of air, land and sea equipment, and changed from national to international (global) companies.

Globalization means world-wide markets, large transnational corporations, intense competition, together with the globalization of finance and investment, and the emergence of global labor markets. Globalization has already affected civil industries such as computers, electronics, information technology, jet airliners, motorcars, pharmaceuticals, telecommunications, drinks, food products and restaurants (e.g. Airbus, Boeing, Coca Cola, McDonald's, Microsoft). To be competitive, defense companies are following the example

of the civil global corporations, seeking markets throughout the world and suppliers from overseas countries able to provide skills and components at least-cost. Global companies can achieve economies of scale and scope from supplying world markets rather than a small national market, and they locate their various research and production activities in nations where costs are lowest. Arms industries have the economic characteristics of global industries, but traditionally they have relied on their home market and sales to their national armed forces.

2. The World's Arms Industries

The world's arms industries employed 8.1 million people in 2000, with 57% located in industrialized nations and 43% located in developing countries. The three largest arms industries were located in China, the USA and Russia. Table 1 provides some of the "stylized facts," including trends, for the world's arms industries. It can be seen that since the end of the Cold War in 1990, there have been substantial employment reductions in *Eastern Europe, the former Soviet Union and Africa*.

	Index 2000=100		
	1990	Employment in 2000 (000s)	
World	201	8,080	
Industrialised	246	4,590	
Developing	143	3,490	
Africa	222	90	
Asia	140	3,480	
West Asia	161	120	
East Europe	491	1,320	
West Europe	174	650	
NATO	148	3180	
Soviet Union/CIS	506	1,170	
China	148	2,700	
USA	135	2,300	
Russia/Soviet Union	296	850	
United Kingdom	160	275	
France	147	260	

India	100	250
Ukraine	na	220

Note: Countries ranked by employment with 220 000 or more; all other nations had under 220,000 employees in 2000. **Source:** BICC (2002).

Table 1: Employment in World's Arms Industries, 1990-2000

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Biographical Sketch

Keith Hartley is Professor of Economics and Director of the Centre for Defence Economics, University of York, UK. He is a defence economist with interests in procurement policy, defence industries, alliances, arms exports and conflict. He is founding editor of the journal, Defence and Peace Economics and has been consultant to the UN, EC and various UK Government Departments. Recent publications include (with Todd Sandler) Political Economy of NATO, CUP, 1995; Economics of Defence (eds), Elgar, 2001; and Economics of Conflict (eds), Elgar, 2003(forthcoming).