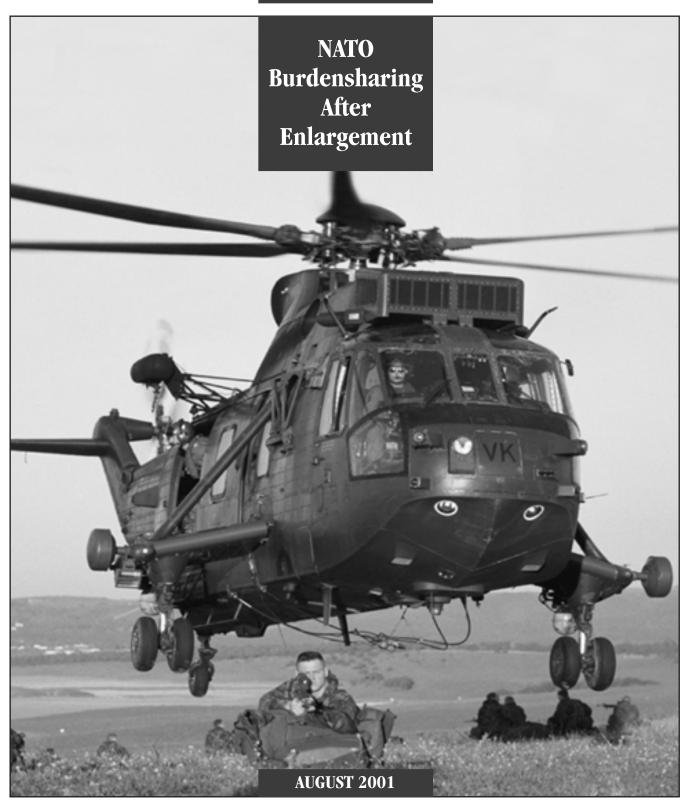
CONGRESS OF THE UNITED STATES CONGRESSIONAL BUDGET OFFICE

A CBO PAPER



NATO BURDENSHARING AFTER ENLARGEMENT

The Congress of the United States Congressional Budget Office

NOTES

Numbers may not add up to totals because of rounding.

The cover photo was provided courtesy of the North Atlantic Treaty Organization.

PREFACE			

For more than 50 years, the United States has pledged to help its European allies defend themselves against outside aggression under the Washington Treaty of 1949. The 1998 debate over enlarging the North Atlantic Treaty Organization (NATO) to include three Central European democracies reignited the longstanding debate as to whether the United States bears an unfair share of the burden of the common defense. This Congressional Budget Office (CBO) paper examines several measures of defense burdensharing to determine how much the United States contributes to the collective defense relative to what other NATO allies contribute. It looks at traditional measures of defense budgets as well as military personnel and other metrics that measure countries' efforts to enhance collective security.

The paper was requested by the Chairman and Ranking Member of the Senate Foreign Relations Committee. In keeping with CBO's mandate to provide objective and nonpartisan analysis, it makes no recommendations.

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Director

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SUMMARY			

Since 1949, the United States has committed itself to defending its European allies in the North Atlantic Treaty Organization (NATO), regarding any attack on those countries as an attack on itself. But some Members of Congress have questioned whether this country has borne an unfair share of the burden of the common defense. Over the past 50 years, the United States has maintained as many as 300,000 military personnel in Europe and has consistently devoted more of its gross domestic product (GDP) to defense than have most of its allies. With the end of the Cold War and the demise of the Soviet threat, the United States cut its force presence in Europe to about 100,000 and sharply reduced its defense budget. But the European allies have also cut their defense spending over the past decade, leaving the United States still bearing the largest financial burden among the NATO allies.

The question of burdensharing gained renewed prominence in the late 1990s as the Senate debated whether to admit three Central European democracies to NATO. Senators on both sides of that debate were concerned that the United States not bear an unfair share of the costs of enlargement. But the burdensharing issue is not a new one. It dates back to the first days of the alliance, when the United States agreed to provide economic and military aid to the countries of Western Europe to help them rebuild after World War II and to station troops in Europe to defend those nations. As Europe grew more prosperous, the Congress increased its calls for the Europeans to provide a greater share of their own defense, calls that have continued up to the present.

This report examines burdensharing among the allies within the context of NATO's post-Cold War mission, which includes elements—such as peacekeeping and humanitarian operations—that were not core missions during the Cold War. It considers standard measures of burdensharing, such as:

- o Defense spending as a proportion of GDP,
- o Defense spending per capita, and
- o The proportion of the labor force in the military.

It also examines other measures of burdensharing that apply to the post-Cold War environment, including:

o Contributions to NATO's rapid reaction forces,

- o Contributions to peacekeeping forces in Bosnia and Kosovo, and
- o Economic assistance to Central and Eastern Europe.

In addition, this paper examines projections of future military spending and personnel strength in the allied countries through 2003, as well as the European Union's defense plan. Finally, it looks at the three common budgets the alliance operates to pay the costs of its civil headquarters, military command, and infrastructure projects.

STANDARD MEASURES OF BURDENSHARING

NATO and the Department of Defense commonly use several measures of burdensharing to gauge the contributions of the European allies. Those measures include defense spending as a share of GDP, defense spending per capita, and the proportion of the workforce in the military.

Defense Spending as a Percentage of GDP

Defense spending as a percentage of GDP, which measures the share of a country's national income devoted to defense, is a widely cited measure of defense burdensharing. Throughout NATO's 50-year history, the United States has spent a larger share of its GDP on defense than have most of its allies. In 1985, at the height of the Cold War arms buildup, the United States spent 6.7 percent of its GDP on defense, compared with the European allies' 3.5 percent of their collective GDP spent on defense. By 1999, those figures declined to 3.0 percent and 2.3 percent, respectively.

Two conclusions can be drawn from those figures. First, with the exception of Greece and Turkey, Europeans on the whole spend considerably less on defense than does the United States. Second, the spending gap has narrowed since 1985. All of the NATO allies came closer to matching the U.S. defense commitment in 1999 than they did in 1985.

Per Capita Defense Spending

The United States also spends more per capita on defense than do any of its allies. In 1999, the United States spent \$947 per person on defense (measured in 1995 dollars), more than twice the average of the European allies. Among the major allies, France spent \$780 per person on defense that year, whereas Britain spent \$534, Italy spent \$350, and Germany spent \$490. That gap may reflect both the global nature

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of American security interests and the United States' leadership role in European security.

Proportion of the Labor Force in the Military

Personnel remains one area in which several European allies make a larger proportional contribution to the common defense than does the United States. In 1999, 1.6 percent of the U.S. workforce was employed in the defense sector, compared with 1.7 percent for the European allies. Conscription—which many European allies continue to use—may be one explanation: manpower is cheaper for the Europeans in budgetary terms. However, some countries as a matter of policy do not deploy draftees outside of their borders, limiting their contribution to the "out-of-area" conflicts that have become the focus of NATO's post-Cold War operations.

OTHER MEASURES OF BURDENSHARING

The standard measures of burdensharing capture the overall expenditure of resources for the military, but they may not indicate how willing and able the allies are to contribute to NATO missions. As the threat of a massive assault from the East subsided, NATO's focus has shifted to ensuring stability in Europe. As NATO's strategic concept notes, the new security environment brings many varied challenges. Conventional warfare on the periphery of the region is a potential threat, but so is the instability that transitions between regimes and economic adjustment may continue to bring to Eastern Europe and Russia. Contributions to NATO's rapid response forces and peacekeeping missions, as well as economic assistance to the newly democratic states of Europe, are additional gauges of burdensharing.

Contributions to NATO's Reaction Forces

NATO's strategic concept calls for the development of reaction forces that can be deployed to potential crisis zones that threaten stability on the periphery of the alliance. The United Kingdom has been in the forefront of those efforts, and France, although it still does not participate in NATO's common military command structure, has also developed forces that augment the alliance's capability. Germany plans to develop a significant reaction force.

^{1.} The full text of NATO's strategic concept is available at www.nato.int/docu/pr/1999/p99-065e.htm.

Contributions to Peacekeeping Missions

Many of the European allies bear more than their proportional share of the burden of the peacekeeping operations in Bosnia and Kosovo. Denmark and Luxembourg, for example, have contributed large shares to those operations relative to their populations, providing 123 troops and 63 troops per million of population, respectively, to the Bosnia peacekeeping mission in 1999. France and Britain also have contributed disproportionately. Although the United States contributed a relatively small 19 troops per million of population in 1999, it has consistently supplied the largest contingent to the stabilization force in Bosnia.

The European allies also took on a large share of the burden of the Kosovo Force peacekeeping mission (KFOR). The United States maintains the largest national presence in Kosovo, but the majority of the troops on the ground are European. As of June 2000, there were 5,600 U.S. troops in KFOR, compared with 4,550 French troops, 4,200 German troops, 4,750 Italian troops, and 3,200 British troops. When adjusted for size of population, however, all of the NATO allies except Canada and Turkey are contributing more personnel to KFOR than is the United States.

Economic Aid to Former Warsaw Pact Countries

Another indicator of the contribution that NATO countries are making toward the common goal of European security is the economic assistance they provide to Central and Eastern Europe (including the former Soviet Union). Once again, many of the European allies shoulder at least a proportional share of that cost. From 1991 to 1997, Germany provided more aid to that region than any other country—over \$15 billion in grants and loans. Denmark also made substantial contributions for its size, providing nearly \$600 in aid per million dollars of GDP, compared with the United States' contribution of \$245 per million dollars of GDP.

LIKELY TRENDS IN BURDENSHARING

The European allies are developing the reaction forces needed to carry out new NATO missions while modernizing equipment that is generally less sophisticated than U.S. equipment. That simultaneous push is likely to strain current defense budgets. One solution is to increase defense budgets, but there appears to be little sentiment in Europe for such a step. Instead, the major European militaries are restructuring existing forces to perform new out-of-area missions without substantial increases in defense spending.

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The gap in military capability between the United States and its European allies concerns some analysts. A failure by many of NATO's European members to keep up with technological advances could render them incapable of operating alongside U.S. forces in future military conflicts. Some analysts fear that the disparity could lead to a situation in which the United States would be the only country in NATO capable of bringing sophisticated military power to confront a crisis.

Effects of European Integration on Burdensharing

The European allies plan to consolidate modernization efforts within the European Security and Defense Plan (ESDP). ESDP would create, in the words of European Union (EU) leaders, a "separable but not separate" organization from NATO that would enable Europe to engage in peacekeeping and other activities without U.S. participation. ESDP, however, is being developed within the framework of the European Union rather than NATO, arousing some concerns that it will weaken the Atlantic alliance.

Another factor potentially affecting European defense spending is the European Monetary Union. Twelve members of the European Union have established a joint currency, the euro. In doing so, they have transferred control of their monetary policy to a European Central Bank and have accepted restrictions on their fiscal policy—in particular, the ability to run budget deficits. That could potentially restrict defense spending. Among those countries are nine NATO members: Belgium, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Portugal, and Spain (the others are Austria, Finland, and Ireland).

It is too early to determine what effect European integration will have on NATO. The increasing political integration of Europe could speed the development of European forces capable of carrying out the EU's defense policy, resulting in a stronger European component of NATO and more equitable burdensharing. Conversely, it could weaken the role of NATO as the European countries downplay the importance of the Atlantic alliance and seek a more independent security policy of their own.

Economic growth in the region may allow European defense budgets to rise enough to pay for the replacement and modernization of necessary equipment. Yet static or declining defense budgets are expected in most NATO countries. That may further diminish their ability to make a meaningful military contribution to the common defense, signaling a greater reliance on the larger allies to provide actual military capability while they focus on the "soft" aspects of security, such as foreign assistance and peacekeeping.

NATO'S COMMON COSTS

Most allied defense resources are allocated by national governments to their own militaries. Some costs, however, are borne by the alliance as a whole. NATO maintains three common budgets:

- o A civil budget for the alliance's political offices, international staff, and economic and scientific programs;
- o A military budget to pay for NATO's military headquarters in Mons, Belgium, and its activities; and
- o An infrastructure budget, known as the NATO Security Investment Program (NSIP), to pay for projects to improve military readiness and capability.

For 1999, the civil budget was \$161 million; the military budget, \$496 million; and the NSIP budget, \$458 million. For each of those budgets, cost shares are determined by consensus among the allies and are periodically renegotiated, particularly when new members join the alliance. The United States has historically paid about 25 percent of each budget.

In general, the NSIP pays for operational facilities that fulfill a commitment to NATO; those facilities are above and beyond a country's national requirements for defense. Previous NSIP allocations have funded pipelines that would have delivered fuel across Germany to supply forces facing a Warsaw Pact invasion and improvements to air bases that NATO aircraft would use. Nearly all European bases that house U.S. forces are eligible for NSIP projects. U.S. officials estimate that such facilities received improvements from the NSIP valued at \$4.1 billion from 1989 to 1999; over that 10-year period, the United States contributed \$2.7 billion to the program.

Because little change is expected in the size of the civil or military budgets as a result of NATO's enlargement, the addition of three new paying members (Poland, Hungary, and the Czech Republic) is likely to reduce slightly the burden of those budgets for the existing allies. Enlargement will increase the cost of the NSIP, however; NATO headquarters estimates that increase at \$1.5 billion over 10 years, approximately \$400 million of which will be paid by the United States.

In addition to covering the cost of the alliance's military headquarters, the common NATO military budget funds the operation and modernization of the 18 aircraft and facilities that constitute NATO's Airborne Early Warning and Control program. Some U.S. and allied officials believe that this program provides a model for coordinating other common programs that would provide the alliance with a

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capability outside of those possessed by national militaries. The development of additional common capabilities could be a way to improve the alliance's effectiveness while reducing the cost to its members.

PAST AND PRESENT TRENDS IN BURDENSHARING

For half a century, the North Atlantic Treaty Organization (NATO) has bound together the United States and Western Europe in an effective and longstanding military alliance. NATO has both defended Western Europe against the menace of Soviet expansionism and provided the framework within which World War II adversaries could reconcile.

The U.S. Congress authorized the stationing of American troops at European bases and appropriated the money needed to fulfill the United States' commitment to help defend Europe. But debates over the sharing of defense burdens characterized NATO's earliest years. Dean Acheson, the Secretary of State who oversaw the creation of NATO, wrote of the problems he faced in persuading the Europeans to undertake greater responsibility for their own defense. Acheson also faced Congressional determination that the United States not be stuck with the bill for the endeavor.

Burdensharing remained an issue of contention throughout the Cold War and persisted even after the collapse of the Soviet Union. Although the demise of the Soviet threat allowed Western democracies to reduce the resources they devoted to defense, instability on the periphery of the alliance and the uncertain nature of developments in Russia have persuaded the NATO allies that the alliance retains a useful role in European security.

NATO's 1991 strategic concept refocused the alliance on threats outside its borders, a mission that was reaffirmed at its Washington Summit in April 1999. Crises like those in Bosnia and Kosovo underlined the changed nature of European security and burdensharing. No longer was the primary concern the number of divisions a country offered to block a Soviet invasion of West Germany; rather, it was the division of labor and risk associated with missions outside NATO territory.

STANDARD MEASURES OF BURDENSHARING

A gap persists between U.S. defense spending and European defense spending by many measures. This paper explores that gap by examining several indicators of contributions to the common defense. To provide historical context, it first looks at trends in standard indicators of burdensharing, including:

- o Defense spending as a percentage of gross domestic product (GDP),
- o Defense spending per capita, and
- o The percentage of the labor force in the military.

It also considers other measures of burdensharing that may be significant given NATO's post-Cold War operations, including:

- o Contributions to rapid reaction forces designed for out-of-area missions,
- o Contributions to peacekeeping missions in Bosnia and Kosovo, and
- o Economic assistance to the former Eastern Bloc countries.

Because each measure of burdensharing has its limitations, this paper presents a range of measures to provide a more complete picture. For example, the percentage of a nation's GDP devoted to defense fails to account for differences in the purchasing power of those resources and how efficiently they are spent. Likewise, defense spending on a per capita basis does not account for differences in income levels among countries. And counting the number of men and women in a country's armed forces fails to consider the investment made in weaponry or the effect of conscription on the true capability of a country's military.

Despite their limitations, those measures of burdensharing are among the most important for two reasons. First, military strength is the ultimate currency in which an alliance's capability is measured; second, those measures are used in studies by NATO and the U.S. Department of Defense (DoD). The Defense Department's annual *Report on Allied Contributions to the Common Defense* details the relative and absolute contributions of the United States' allies to the common defense. That study measures many of the same factors presented here, but this paper also examines common NATO budget issues and European defense plans, and it provides a historical look at burdensharing.

Defense Spending as a Percentage of Gross Domestic Product

Defense spending as a percentage of gross domestic product measures the portion of a country's overall economy that it devotes to defense. It indicates the burden that defense places on the economy of each country, automatically adjusting for differences in national income. The percentage of GDP spent on defense also measures a country's overall level of effort, regardless of how it allocates its defense budget—some countries may spend more on personnel and have larger troop

strength, whereas others may focus on training, equipment modernization, or research.

The United States has consistently spent a greater share of its national income on defense than have its allies, except for Greece and Turkey. In general, spending as a percentage of GDP by the United States and its allies rose through NATO's first decade but fell in the 1960s and 1970s. In the Europeans' case, some of that spending pattern is attributable to their rapid economic growth in those years, which reduced the burden defense spending placed on their economies.

In the early 1980s, alliancewide defense spending climbed again, though the increases of the Reagan Administration were not matched to the same degree by the allies. As a result, by 1985 the United States spent 6.7 percent of its GDP on defense, compared with 5.3 percent spent by the United Kingdom, 4.1 percent by France, 3.2 percent by Germany, and 2.7 percent by Italy. Only Greece, a relatively poor country, spent a greater share of its GDP on defense in 1985 than did the United States, 7.1 percent (see Figure 1; for additional information, see Table A-1 in Appendix A).

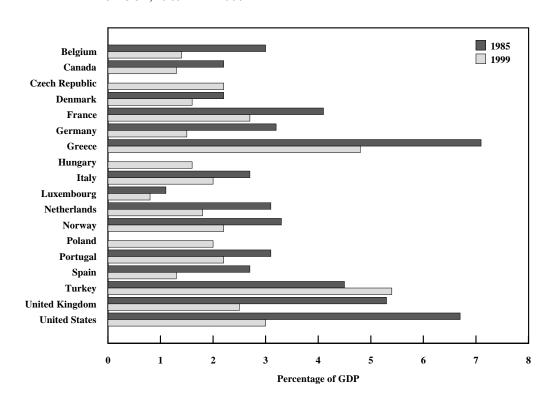
After the end of the Cold War, the NATO countries dramatically cut their defense spending. British defense spending fell to 3.0 percent in 1995; French to 3.1 percent; German to 1.7 percent; Italian to 1.8 percent; and U.S. to 3.8 percent. Since 1995, defense spending in the alliance has remained relatively flat. Among the major allies, France, Britain, and Germany have seen small decreases that mirror that of the United States; only Italy has had a small increase.

Those dramatic reductions in defense budgets have not changed one central fact: the United States spends more of its income on defense than do its major allies. In 1999, the U.S. defense budget was 3.0 percent of GDP, compared with 2.7 percent in France, 2.5 percent in Britain, 2.0 percent in Italy, and 1.5 percent in Germany. The only NATO countries that spent a greater share of their GDP on defense were Turkey (5.4 percent) and Greece (4.8 percent). As for the other smaller allies, all but the Czech Republic, Norway, Poland, and Portugal spent less than 2.0 percent of their GDP on defense in 1999.

When measured against the percentage of GDP that the United States spent on defense in 1999, European contributions ranged from 27 percent of the U.S. commitment (Luxembourg) to 90 percent of the U.S. commitment (France). However, that gap has narrowed since the height of the U.S. arms buildup in 1985 (see Table 1). All of the NATO allies came closer to matching the U.S. defense commitment in 1999 than they did in 1985. The United States cut its percentage of GDP devoted to defense by more than half; the European allies cut somewhat less. One could argue that the Europeans have been more cautious in their reductions than the United States, but they began from a measurably lower base.

The percentage of GDP spent on defense, however, does not reflect how efficiently a country allocates its resources. For example, a country that subsidizes its domestic defense industry by purchasing equipment that is inferior or in excess of what it may need will contribute less to alliance security than that percentage indicates. That number also does not reflect whether countries are structuring their forces to carry out the new missions envisioned in NATO's strategic concept; for instance, a country spending more on heavy forces designed for territorial defense may contribute less to NATO's capability than one that is developing lighter, more mobile forces that can respond to threats outside the territory of alliance members.

FIGURE 1. DEFENSE SPENDING AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT, 1985 AND 1999



SOURCE: Congressional Budget Office based on data from the North Atlantic Treaty Organization (NATO).

NOTES: For additional information, see Table A-1 in Appendix A.

Iceland is excluded because it has no armed forces.

No data are available for Poland, Hungary, and the Czech Republic in 1985 because those countries did not join NATO until 1999.

TABLE 1. ALLIED DEFENSE SPENDING COMPARED WITH U.S. DEFENSE SPENDING, 1985 AND 1999 (As a percentage of GDP)

		1985		1999	
		Percentage of		Percentage of	Difference (in
	Defense	U.S. Defense	Defense	U.S. Defense	percentage
	Spending	Spending	Spending	Spending	points)
Belgium	3.0	45	1.4	47	2
Canada	2.2	33	1.3	43	10
Czech Republic ^a	n.a.	n.a.	2.2	73	n.a.
Denmark	2.2	33	1.6	53	20
France	4.1	61	2.7	90	29
Germany	3.2	48	1.5	50	2
Greece	7.1	106	4.8	160	54
Hungary ^a	n.a.	n.a.	1.6	53	n.a.
Italy	2.7	40	2.0	67	27
Luxembourg	1.1	16	0.8	27	11
Netherlands	3.1	46	1.8	60	14
Norway	3.3	49	2.2	73	24
Polanda	n.a.	n.a.	2.0	67	n.a.
Portugal	3.1	46	2.2	73	27
Spain	2.7	40	1.3	43	3
Turkey	4.5	67	5.4	180	113
United Kingdom	5.3	79	2.5	83	4
United States	6.7	100	3.0	100	0
NATO Average NATO European	3.6	54	2.6	77	23
Average ^b	3.5	52	2.3	77	25

SOURCE: Congressional Budget Office based on data from the North Atlantic Treaty Organization (NATO).

NOTES: n.a. = not applicable.

Calculations are based on weighted averages.

Iceland is excluded because it has no armed forces.

- No data are available for Poland, Hungary, and the Czech Republic in 1985 because those countries did not join NATO until 1999.
- b. Excludes the United States and Canada.

Per Capita Defense Spending

Per capita defense spending measures how much a country devotes to defense relative to the size of its population. Residents of wealthier countries generally contribute more to the alliance's total defense spending even though they may devote a smaller portion of their income to that purpose.

Americans contribute more to defense than residents of any other NATO country. The United States spent \$947 per person on defense in 1999 (measured in 1995 dollars), more than twice the average of the European allies. The only ally whose spending approached the U.S. level was Norway, which spent \$831 per person. As for the major allies, France spent \$780 per person on defense, while the United Kingdom spent \$534, Italy spent \$350, and Germany spent \$490. Turkey, which spends a greater percentage of its national income on defense than any other ally, spent only \$123 per person in 1999, reflecting its status as one of the poorer NATO countries.

That difference in per capita spending between the United States and Europe is part of a longstanding pattern. In 1985, the United States spent \$1,467 per capita on defense (in 1995 dollars), 64 percent more than Germany, the second-leading contributor. Among the European allies, France, the United Kingdom, and Norway have generally spent the most per capita on defense. Italian per capita spending has remained relatively flat since 1985, whereas German spending has decreased dramatically since reunification in 1990 (see Figure 2; for additional information, see Table A-2 in Appendix A).

Military and Civilian Personnel as a Percentage of the Labor Force

Dividing the number of military and civilian personnel by the size of a country's labor force measures each country's relative labor contribution to the common defense. All of the NATO allies except Greece have cut the size of their armed forces since 1985. Nonetheless, this remains one area in which several European allies contribute proportionately more to the common defense than does the United States (see Table 2).

In 1999, military and civilian personnel constituted 1.6 percent of the American workforce, the average for NATO as a whole. The European allies, taken as a whole, had 1.7 percent of their workforce in defense. France, Greece, Italy,

NATO uses average exchange rates for each year to calculate dollar values for other countries' defense spending. NATO is considering using "purchasing power parity" (PPP) to calculate defense expenditures. The PPP method applies international dollar price weights based on actual purchase prices to the quantities of goods and services produced in a given economy.

Norway, Portugal, and Turkey all had proportionately more of their labor force in defense than did the United States.

Historically, Europe has consistently had a slightly greater share of its labor force in defense than has the United States, perhaps because of its greater reliance on conscription. Some European countries, particularly Greece and Turkey, rely heavily on conscription. Other countries—such as Spain, Portugal, Italy, and France—are following the lead of the United Kingdom, Belgium, and the Netherlands in switching to an all-volunteer force. Although conscription is declining, several NATO countries plan to retain some form of compulsory military service, which inflates Europe's percentage of its labor force in the military relative to that of the United States.

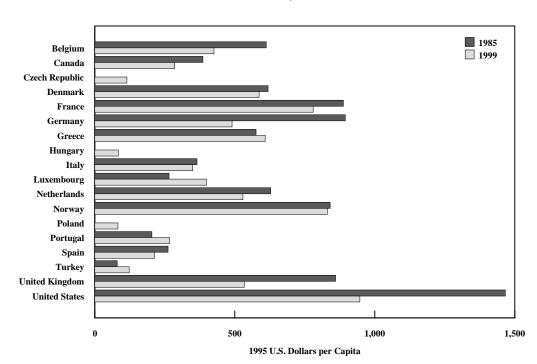


FIGURE 2. DEFENSE SPENDING PER CAPITA, 1985 AND 1999

SOURCE: Congressional Budget Office based on data from the North Atlantic Treaty Organization (NATO) and the International Monetary Fund.

NOTES: For additional information, see Table A-2 in Appendix A.

Iceland is excluded because it has no armed forces.

No data are available for Poland, Hungary, and the Czech Republic in 1985 because those countries did not join NATO until 1999.

TABLE 2. MILITARY AND CIVILIAN PERSONNEL AS A PERCENTAGE OF THE LABOR FORCE IN SELECTED YEARS, 1980-2000

	1980	1985	1990	1995	1996	1997	1998	1999	2000ª
Belgium	2.9	2.8	2.8	1.3	1.2	1.1	1.1	1.1	1.1
Canada	1.0	0.9	0.9	0.7	0.6	0.5	0.5	0.5	0.5
Czech Republic ^b	n.a.	1.4	1.3						
Denmark	1.6	1.4	1.4	1.3	1.3	1.2	1.2	1.3	1.2
France	3.0	2.9	2.7	2.4	2.3	2.2	2.1	2.0	1.9
Germany	2.4	2.3	2.6	1.3	1.2	1.2	1.2	1.1	1.1
Greece	6.1	6.1	5.7	5.6	5.6	5.5	5.2	5.1	5.1
Hungary ^b	n.a.	1.6	1.7						
Italy	2.4	2.5	2.4	2.2	2.1	2.1	1.9	1.9	1.8
Luxembourg	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8
Netherlands	2.5	2.4	2.1	1.4	1.3	1.1	1.1	1.0	1.0
Norway	2.6	2.3	2.9	2.3	2.2	1.9	1.8	1.8	1.8
Poland ^b	n.a.	1.4	1.4						
Portugal	2.5	2.8	2.3	1.9	1.8	1.8	1.7	1.7	1.7
Spain ^c	n.a.	2.5	2.0	1.6	1.6	1.5	1.4	1.2	1.2
Turkey	4.3	4.6	3.9	3.8	3.8	4.0	3.8	3.6	3.5
United Kingdom	2.2	1.9	1.7	1.3	1.2	1.2	1.2	1.1	1.1
United States	2.8	2.9	2.6	1.9	1.8	1.7	1.6	1.6	1.5
NATO Average NATO European	2.7	2.7	2.5	1.9	1.8	1.8	1.7	1.6	1.6
Averaged	2.8	2.8	2.6	2.0	2.0	1.9	1.9	1.7	1.7

SOURCE: Congressional Budget Office based on data from the North Atlantic Treaty Organization (NATO).

NOTES: n.a.= not applicable.

Iceland is excluded because it has no armed forces.

Calculations are based on weighted averages.

- a. Estimated by NATO based on available data.
- b. Poland, Hungary, and the Czech Republic did not join NATO until 1999.
- c. Spain did not join NATO until 1982.
- d. Excludes the United States and Canada.

It is difficult to compare conscript militaries with all-volunteer forces in terms of either cost or quality. Conscription usually reduces the budgetary costs of maintaining a military force by shifting some costs from taxpayers to conscripts, who serve for lower wages than volunteers. Although such forces are less costly, they are generally less capable. Also, because of their shorter term of service, conscripts are unlikely to develop the same skills as professional soldiers.

Some NATO allies with conscripted forces prohibit the deployment of draftees outside the national territory. Given Europe's acknowledged need to develop more rapidly deployable units for out-of-area operations, maintaining conscription may not only create a less skilled military but also divert resources necessary to modernize the force structure to fit NATO's new missions.

OTHER MEASURES OF BURDENSHARING

The measures discussed above ignore other contributions to European security that some Europeans argue are more significant in the post-Cold War world. Countries facing criticism for their failure to spend enough on defense or maintain a strong enough military can point to other areas in which they contribute to the security of the North Atlantic region (see Box 1). For example, some of the European allies offset some costs to support U.S. forces based in their territory. Also, some countries with small militaries devote a large share of their defense resources to the peacekeeping missions that are becoming increasingly frequent. Others have offered financial aid and technical assistance to countries in transition from communism to market democracy, perhaps recognizing that stable, satisfied neighbors can contribute to national security.

This section examines three alternative measures of burdensharing: contributions to NATO's rapid and immediate reaction forces, participation in the Bosnia and Kosovo peacekeeping missions, and assistance to formerly communist countries. The Congressional Budget Office (CBO) also considered involvement in the Partnership for Peace program as a potential indicator, but a lack of consistent data degraded the usefulness of that measure.

Contributions to Reaction Forces

NATO's 1991 strategic concept, its first review of the post-Cold War environment, emphasized the development of lighter, more mobile forces that could respond quickly to crises outside the territory of NATO member states. As part of that concept, NATO divided the forces of its member countries into three classes. "Reaction forces" are those that can be rapidly transported to remote crisis areas; "main defense forces" provide the bulk of the capability to defend the territory of the

BOX 1. EUROPEAN RESPONSES TO AMERICAN CRITICISMS OF EUROPEAN BURDENSHARING

Although the gap has narrowed, a persistent difference exists between European and U.S. defense spending by many standards. European political leaders could argue that this gap is largely illusory on the basis of the following points:

- Europe does not have the same global commitments as the United States. European nations should not be expected to devote the same percentage of their gross domestic product (GDP) to defense because European interests and military budgets are geared to regional contingencies. The United States has a much broader set of global security interests, so its overall defense expenditures should naturally be larger.
- Europe provides direct and indirect support to U.S. forces. Many U.S. operations in the Persian Gulf and other regions are conducted from bases in Europe. Those bases are provided and their costs subsidized by the host country. In addition, NATO's common budget pays for many improvements to those bases.
- o By measures more appropriate to the post-Cold War environment, the European allies are contributing a fair share to the common defense. Europe contributes proportionate numbers of troops to the Bosnia peacekeeping mission and NATO's rapid reaction forces.
- o The European allies devote more of their GDP to providing economic assistance to the former Eastern Bloc countries. Economic and political stabilization of the region is important to prevent the social tensions that could lead to civil unrest or open conflict.

alliance; and "augmentation forces" provide reinforcement capability. Reaction forces comprise both immediate reaction forces—the first units to deploy—and rapid reaction forces, which would deploy a few days later.

Reaction forces are maintained in a high state of readiness because they provide the units on which the alliance would draw for the out-of-area missions it is more likely to undertake in the current environment. They include national units, units that are pledged to multinational NATO units like the Allied Rapid Reaction Corps (ARRC), and units that are part of other multinational formations, like the Eurocorps, which is made up of forces from France, Germany, Spain, Luxembourg, and Belgium.

Because reaction forces would be used for the most likely alliance missions, those units might be said to contribute more to the common defense than units intended for defense of the national territory. Thus, examining each ally's contribution to reaction forces may provide a more accurate measure of burdensharing than total military personnel levels. When viewed in light of the size of a country's

economy, that measure provides another basis of comparison among members of the alliance.

The U.S. Department of Defense has compiled broad figures on each ally's contribution to NATO's reaction forces in 1998. Those data represent the percentage of the alliance's reaction forces on land (measured in maneuver brigade equivalents), sea (principal surface combatants), and air (combat aircraft) that each ally contributed.

Belgium, Denmark, Greece, Portugal, Turkey, and the United Kingdom contributed a larger share to NATO's reaction forces across all three services than their share of the NATO countries' total GDP (see Table 3). France, Italy, Luxembourg, and Spain contributed more to ground forces than to NATO-wide GDP

TABLE 3. MEMBERS' CONTRIBUTIONS TO NATO'S REACTION FORCES AND TO GROSS DOMESTIC PRODUCT IN 1998 (In percent)

	Share of	Share of		
	Land Forces	Naval Forces	Air Forces	NATO's GDP ^a
Belgium	3.0	1.7	3.7	1.5
Canada	0.7	3.4	1.5	3.5
Denmark	2.3	3.4	1.2	1.0
France ^b	18.6	10.3	0	8.5
Germany	7.4	5.2	10.2	12.7
Greece	7.4	7.8	0.8	0.7
Italy	13.6	8.6	2.9	7.0
Luxembourg	0.2	0	0	0.1
Netherlands	2.2	6.9	5.6	2.2
Norway	0.7	4.3	0.8	0.9
Portugal	2.3	0.9	1.7	0.6
Spain	7.6	3.4	3.1	3.3
Turkey	6.7	7.8	6.2	1.2
United Kingdom	20.0	14.7	13.2	8.1
United States	7.4	21.6	49.0	48.6
NATO Total	100.0	100.0	100.0	100.0

SOURCE: Congressional Budget Office based on information from the U.S. Department of Defense.

NOTES: NATO = North Atlantic Treaty Organization.

Iceland is excluded because it has no armed forces.

Poland, Hungary, and the Czech Republic are excluded because they did not join NATO until 1999.

a. NATO's GDP is the total gross domestic product of all of the member countries.

b. France maintains its reaction forces separately from NATO's integrated command structure.

in 1998; France, Italy, the Netherlands, Norway, and Spain met or exceeded that benchmark in naval forces; and the Netherlands and the United States met or exceeded it in contributions of combat aircraft. Only Canada's and Germany's alliance militaries fell short in all three services.

Germany, however, plans to develop a Crisis Reaction Force of as many as 150,000 troops. Currently, one airborne unit in southern Germany is fully capable of deploying outside of NATO territory, and some other units are maintained at high readiness. German plans call for 80,000 troops to be available on very short notice and the remainder to be maintained at lower readiness levels. German defense planners are working to improve the mobility of their forces, focusing on transport aircraft and helicopters. Plans call for six combat aircraft squadrons, six maneuver brigades, and a naval contingent; currently, only three brigades are pledged to the ARRC.

In its 1998 Strategic Defense Review, the United Kingdom committed to developing joint rapid reaction forces, which will comprise high-readiness forces across all services, including four army brigades. The United Kingdom provides most of the logistical and administrative support to the ARRC as well as the largest share of its combat forces. In addition, British forces make up a sizable part of the maritime and air components of NATO's reaction forces.

France does not contribute to NATO's reaction forces because it chooses not to participate in the integrated military command. It maintains its own reaction forces, however, which include four army divisions and a carrier battle group. The land and naval units have operated with NATO's forces in the former Yugoslavia and the Adriatic Sea, so some French forces are included in NATO's totals. The French defense plan calls for reaction forces that include 50,000 troops, about 100 combat aircraft, one carrier battle group, and several nuclear attack submarines.

Participation in Peacekeeping Missions

NATO has conducted peacekeeping missions in the Balkans since 1995. As a measure of burdensharing, the number of ground troops deployed to Bosnia and Kosovo may indicate a country's willingness to commit its forces to enhance European security. When adjusted for a country's population, that measurement provides a basis for comparing each member's relative willingness to share the burden of carrying out alliance missions.

<u>Bosnia</u>. The first operational peacekeeping mission that NATO undertook outside the territory of its member states was in Bosnia-Herzegovina in December 1995. The implementation force (IFOR) was composed of roughly 54,000 ground troops in Bosnia from all NATO militaries and several non-NATO militaries. It was charged

with enforcing the military aspects of the Dayton Peace Agreement, including maintaining the cease-fire among the Bosnian Muslim, Croat, and Serb forces; ensuring the withdrawal and separation of those forces; and collecting heavy weapons from all sides. After the 12-month IFOR mission ended, it was replaced by a smaller stabilization force (SFOR), which remains in Bosnia today.

The United States has supplied the largest single national contingent to IFOR and SFOR, contributing about 16,500 ground troops to IFOR in 1996, 8,500 troops to SFOR in its first year in 1997, and 6,900 troops and 5,100 troops to SFOR in 1998 and 1999, respectively. The other NATO allies contributed a total of 38,850 troops to IFOR in 1996, nearly 19,000 in 1997, more than 20,000 in 1998, and 16,575 in 1999 (see Table 4). Of the European contingent, the United Kingdom supplied the largest number of troops, followed by France, Germany, and Italy.

Several of the smaller NATO allies, however, made a significant contribution from 1996 through 1999 for their relative size. When population is considered, Luxembourg, Norway, and Denmark have shouldered the greatest burden in Bosnia. France and Britain also made up a disproportionate share of IFOR, though both have reduced their commitments in SFOR. The Netherlands, Greece, and Portugal also contributed significantly to IFOR but have since scaled back their peacekeeping forces.

When adjusted for population differences, all NATO allies bore a greater personnel burden in the Bosnian peacekeeping mission than did the United States in 1999. For every 1 million citizens, there were 19 Americans stationed in Bosnia that year, compared with 123 Danes, 60 Britons, and 49 French. Yet the United States contributes more troops to Bosnia than any other country and provides overall command of the operation. The U.S. Congress appropriated \$8.6 billion to cover the costs of U.S. participation in Bosnia from 1996 to 1999 (costs for other countries' SFOR contingents are not readily available).

<u>Kosovo</u>. NATO has conducted two operations in Kosovo. In March 1999, NATO began an air campaign against Serbia (Operation Allied Force) in response to that country's treatment of ethnic Albanians in the Serbian province of Kosovo. When Serb forces pulled out of the province in June 1999, NATO and several additional countries provided the Kosovo peacekeeping force (KFOR).

The European allies contributed both troops and equipment to Operation Allied Force. However, a lack of stealth capabilities, precision-guided munitions, and sophisticated communications equipment prevented the European allies from taking on a large percentage of the air strikes. More than 700 of the 1,100 aircraft flown during Operation Allied Force were American, and U.S. pilots delivered approximately 80 percent of all munitions. Allied air forces were relegated to a supporting role, collectively flying less than half of all sorties.

The European allies took on a greater share of the burden in KFOR's peacekeeping mission. Although the United States maintains the largest presence in Kosovo, the majority of troops on the ground are European. As of June 2000, there were 5,600 U.S. troops in KFOR, compared with 4,550 French, 4,200 German, 4,750

TABLE 4. NATO FORCES IN BOSNIA IN TOTAL AND PER MILLION OF POPULATION, 1996-1999

	1996			1997		1998		1999	
	<u> </u>	Per Million		Per Million		Per Million	1	Per Million	
	Total	Population	Total	Population	Total	Population	Total	Population	
	200	20	120	12	750	7.4	500	40	
Belgium	300	29	120	12	750	74	500	49	
Canada	1,000	34	1,200	40	1,250	41	1,050	34	
Denmark	800	151	700	132	747	141	650	123	
France	10,000	171	2,500	43	2,500	42	2,900	49	
Germany	4,000	49	2,000	24	2,470	30	1,700	21	
Greece	1,000	95	250	24	250	24	250	24	
Italy	2,100	37	1,800	31	2,000	35	1,900	33	
Luxembourg	300	750	30	75	18	45	25	63	
Netherlands	2,000	129	1,200	77	1,084	69	950	60	
Norway	1,000	227	750	170	615	140	150	34	
Portugal	900	91	330	33	323	32	300	30	
Spain	1,250	32	1,300	33	1,556	39	1,100	28	
Turkey	1,200	20	1,500	24	1,500	24	1,600	25	
United									
Kingdom	13,000	221	5,319	90	5,000	85	3,500	60	
United States	16,500	62	8,500	32	6,900	25	5,100	19	
NATO									
Average	3,690	140	1,833	56	1,798	56	1,445	43	
NATO									
European									
Averagea	2,912	154	1,369	59	1,447	60	1,194	46	
<u> </u>									

SOURCE: Congressional Budget Office based on information from the International Monetary Fund, the Congressional Research Service, and the U.S. Department of Defense.

NOTES: NATO = North Atlantic Treaty Organization.

Iceland is excluded because it does not contribute military forces to the Bosnia peacekeeping mission.

No data are included for Poland, Hungary, and the Czech Republic because those countries did not join NATO until 1999.

a. Excludes the United States and Canada.

Italian, and 3,200 British troops. When adjusted for size of population, however, all of the NATO allies except Canada, the Czech Republic, and Turkey are contributing more personnel to KFOR than does the United States (see Figure 3).

Economic Assistance to Central and Eastern Europe

Economic assistance can have many purposes, from promoting development to encouraging changes in the recipients' foreign policy. The effectiveness of such aid is debatable, but economic assistance to Central and Eastern Europe may have helped smooth the transition from communism to market democracy.² Foreign aid to Russia, Ukraine, and Belarus may have helped reduce the risk that nuclear weapons could fall into the hands of rogue states or terrorist groups that would target the United States and its allies. Economic assistance is an additional indicator of a willingness to pursue common goals.

From 1991 to 1997, Germany provided more aid to the countries of Central and Eastern Europe and the newly independent states of the former Soviet Union—over \$15 billion in grants and loans—on both an absolute and relative level than any other NATO country. The United States was the second-largest contributor in absolute terms, with \$11.7 billion in aid to the region, followed by France (\$2.1 billion), Canada (just over \$1 billion), Italy (\$840 million), and the United Kingdom (\$814 million). In addition, Turkey has provided \$600 million in loans to Russia and a \$20 million export credit to Albania.

When economic assistance is measured relative to GDP, however, the leading contributors to the countries in transition were Germany, Denmark, Norway, and Canada (see Figure 4; for additional information, see Table A-3 in Appendix A). Out of every million dollars produced by the German economy from 1991 to 1997, \$1,130 was contributed to Central and Eastern Europe and the former Soviet Union. Germany was followed by Denmark (\$598), Norway (\$432), and Canada (\$252). Among the other major allies over that period, the United States contributed \$245 per million dollars of GDP; France, \$219; Italy, \$110; and the United Kingdom, \$107.

But economic assistance should be viewed in context. The amount of foreign direct investment in Central and Eastern Europe totaled more than \$18 billion in 1997 alone, dwarfing the flow of economic aid. In addition, NATO is primarily a military alliance, so one could argue that contributions to the combat capabilities of the alliance should be weighed more heavily than financial aid contributions when considering burdensharing.

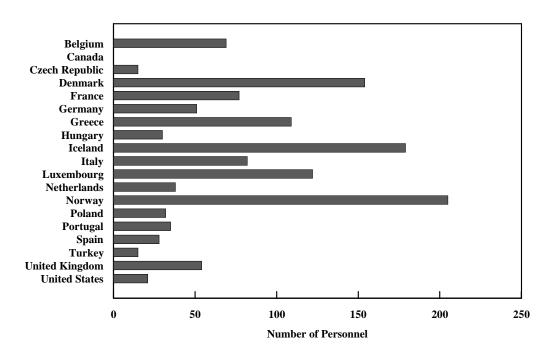
^{2.} For a detailed study of the effectiveness of economic assistance, see Congressional Budget Office, *The Role of Foreign Aid in Development* (May 1997).

ASSESSING THE CONTRIBUTIONS OF INDIVIDUAL ALLIES

The relative contributions of the individual European allies vary widely. Among the major allies, the United Kingdom and France maintain significant military forces and fund them at a level approaching that of the United States in terms of the percentage of GDP. Most of the other allies, however, have cut their defense spending to historic lows. Despite that trend, many are still contributing proportionately to NATO's rapid reaction forces and restructuring their militaries to be more capable of undertaking out-of-area operations.

By the measures reported in this paper, the United Kingdom is making a strong contribution to the common defense of the alliance. Britain spent 2.5 percent of its GDP on defense in 1999, an amount midway between the 2.3 percent spent by the other European allies on average and the 3.0 percent spent by the United States. Britain has also played a leading role in commanding NATO's rapid reaction forces and is working to reconfigure its military to become more mobile and more capable of performing out-of-area missions. Its contribution to the alliance's reaction forces is more substantial than its share of GDP devoted to defense would indicate.

FIGURE 3. PERSONNEL IN THE KOSOVO FORCE PER MILLION OF POPULATION, JUNE $2000\,$

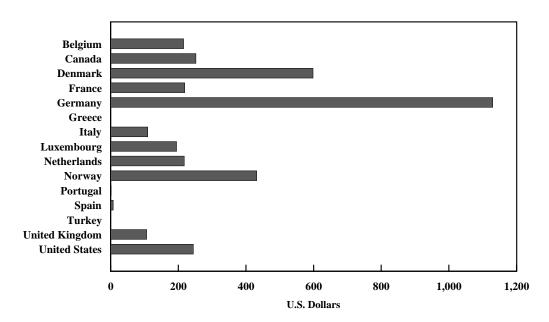


SOURCE: Congressional Budget Office based on data from the Congressional Research Service and the International Institute for Strategic Studies.

France is also making a strong effort toward the common defense, but that contribution is hindered by France's continued refusal to participate in NATO's integrated military command. Although France spends 2.7 percent of its GDP on defense and has four mobile divisions, its failure to integrate with the other alliance militaries reduces the contribution that its forces can make alongside those of other allies.

By most measures, Germany's contribution to NATO is not on the same level as the other major allies'. Even though Germany has contributed large amounts of economic assistance to the formerly communist countries, it spends only 1.5 percent of its GDP on defense, about half the share of the United States. Germany has also been slow to develop the reaction forces needed for military operations outside its territory.

FIGURE 4. NATO MEMBERS' TOTAL ECONOMIC AID TO CENTRAL AND EASTERN EUROPE PER MILLION DOLLARS OF THEIR GROSS DOMESTIC PRODUCT, 1991-1997



SOURCE: Congressional Budget Office based on data from the Organization for Economic Cooperation and Development.

NOTES: For additional information, see Table A-3 in Appendix A.

No data are available for Poland, Hungary, and the Czech Republic because those countries did not join NATO until 1999. Data for Iceland also are unavailable.

Germany recently completed a defense review that could provide the basis for a reorganization of German defense. The review proposed reducing the number of conscripts in the military from 130,000 to 30,000 and building a professional rapid reaction force. The German government has chosen a somewhat smaller reduction in the active-duty force, cutting the total number of conscripts to 80,000 and postponing other reforms. If the review's proposals are enacted, Germany may be able to correct the deficiencies that keep it from contributing proportionally to the alliance.

The midsized allies present a mixed picture. Italy has halted its decline in defense spending and is making a notable contribution to the alliance's reaction forces. It also contributes a central position for operations in the Balkans (the air operations over Kosovo were conducted mainly from Italian air bases), but Italy's contribution to NATO's air forces is relatively minor. Spain has cut its defense budget but still makes a proportional contribution to NATO's reaction forces. Without an increase in defense spending, however, the future capabilities of Spain's forces may be constrained.

Most of the smaller or less wealthy allies have allowed defense spending as a share of GDP to fall to historic lows over the past decade. Only Greece and Turkey spend more than the United States by that measure. As two of the poorest members of the alliance, however, their absolute contribution is modest, and much of the spending of each seems to be with an eye toward containing the other in the Aegean region. Belgium, Canada, Denmark, Luxembourg, and the Netherlands have seen their defense spending fall below 2.0 percent of GDP. Norway spends slightly more than the regional average on defense. Portugal's defense budget is in line with the regional average, and it makes a proportionate contribution to reaction forces, as do Belgium, Denmark, and the Netherlands. Iceland has no military, so it is not considered in this context. Among the new allies, Poland and the Czech Republic have increased their defense spending to 2.0 percent and 2.2 percent of GDP, respectively. Hungary currently spends less but is projected to spend 1.8 percent of its GDP on defense in 2001.

The United States continues to spend more on defense than any other country in absolute terms, and its forces are central to the alliance. As a share of its income, the United States spends more than any other major ally, although that gap has narrowed since 1985. At 7.4 percent, the American contribution to NATO's reaction ground forces might appear relatively small, but virtually all U.S. armed forces are designed to perform missions outside of U.S. territory. With more than 1.3 million active-duty military personnel, the U.S. contribution to a NATO military mission could be tremendous, if needed.

LIKELY TRENDS IN BURDENSHARING

Several European countries plan to undertake major modernization programs over the next several years. In terms of air forces, Britain, Germany, Italy, and Spain have undertaken a \$30 billion program to procure 620 Eurofighter aircraft beginning in 2002, with options for 90 more. France plans to begin taking delivery of the Rafale fighter in 2002, as well as upgrading the Mirage fighter. As for land forces, Germany plans to upgrade its tank inventory, and France has near-term plans to procure new tanks and develop an armored personnel carrier. In the longer term, the United Kingdom plans to procure two new aircraft carriers around 2012, each carrying 50 new fighter aircraft.

At the same time they plan to modernize existing forces, several of the European allies plan to develop a rapid reaction capability requiring significant investment in airlift and sealift. That capability would enable those countries to deploy forces rapidly to a crisis area and keep those forces supplied while conducting out-of-area operations. Much of the airlift capability is to be met through development of the Airbus A-400M, a transport plane designed to fill the niche between the long-range C-17 that is part of the U.S. strategic fleet and the smaller C-130, which is designed for transport within a theater of operations. After many delays, the project is now moving forward. Seven European allies plan to purchase 225 of the A-400 aircraft by 2007.

Paying to modernize existing forces while procuring additional mobility capabilities is likely to strain European defense budgets. Increasing those budgets could ease that strain, but there appears to be little sentiment in Europe to take that step. Instead, the major European militaries are restructuring their forces to perform new out-of-area operations without substantially increasing defense spending.

For example, Britain's 1998 Strategic Defense Review restructures the military away from territorial defense of the alliance to units that can be deployed outside alliance territory, and it emphasizes "jointness" among military services to increase the capability of existing forces. The review also relies on savings from defense business reforms to help underwrite the cost of those new capabilities. French officials have held up the British example as one they hope to follow in developing a more mobile force capable of projecting power.

A key part of restructuring across Europe is reducing the size of the armed forces. Many allies are eliminating or severely restricting conscription and instead developing all-volunteer forces. France is abolishing conscription and cutting the

size of its armed forces from 500,000 to about 375,000 personnel, including the paramilitary gendarmarie. Belgium and the Netherlands also have abolished the draft, and Germany plans to drastically reduce its number of conscripts. Those changes are intended to produce better trained, professional militaries that are more suited to NATO's post-Cold War mission.

Over the past decade, the member states of the European Union (EU) have ceded important national powers to EU institutions. Fiscal policy, control of borders, trade policy, and environmental regulation are some of the most prominent areas in which the EU's power has expanded at the expense of that of the national governments. That increasing transfer of power will likely affect European defense spending and burdensharing. Most important is the development of the European Security and Defense Policy (ESDP), which aims to provide the EU with an autonomous defense capability outside of NATO.

During the course of Operation Allied Force in Kosovo, the European allies were struck by the wide divergence between the United States' and Europe's respective capabilities in precision bombing, stealth aircraft, intelligence, and airlift. The European allies were also frustrated by their inability to take action in Kosovo without U.S. leadership. As a result, in December 1999 the member states of the European Union declared their intention to build by 2003 a multinational force of 60,000 troops capable of deploying rapidly and remaining in place for up to one year. The ESDP is intended to develop European capabilities in those areas so that the Europeans can undertake peacekeeping and other military operations outside of, but not necessarily independently of, NATO.

Some analysts view the ESDP as a positive development that will assist the European allies in shouldering more of the burden of the common defense. They argue that the United States has long encouraged its European partners to develop greater capabilities, and that the policy is simply the necessary organizational prelude to the European fulfillment of that longstanding goal.

Other observers, however, are skeptical of the ESDP's potential. They argue that unless overall defense spending increases dramatically, funding for the ESDP is likely to drain assets that would otherwise go toward NATO. The main issue that relegated Europe to a relatively minor role in Kosovo was the lack of stealth aircraft, precision-guided munitions, and other sophisticated items. Boosting procurement to

^{1.} The members of the European Union are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. All except Austria, Finland, Ireland, and Sweden are NATO members. All NATO members except Canada, the Czech Republic, Hungary, Iceland, Norway, Poland, Turkey, and the United States are members of the European Union.

fill that gap will be expensive, and there are no plans in the near term to raise defense spending significantly in Europe.

U.S. officials question the intentions of the European allies in building a force outside of NATO when defense capabilities could be developed within NATO. The strategic concept developed at the April 1999 Washington NATO Summit outlined a "European Security and Defense Identity" subordinated to, and developed within, the NATO framework. Yet a few months later in a meeting of the European Union's member states, the ESDP was declared to be a means of endowing the European Union with a military capability independent of NATO. That sparked controversy in the United States as some analysts and Members of Congress believed that it was an attempt to weaken the Atlantic alliance. Although the European allies have assured the United States that the ESDP is complementary and not competitive with NATO, some U.S. officials question the necessity of a new institution outside of NATO to meet European security needs.

Another factor that potentially affects European defense spending is the establishment of the European Monetary Union in January 1999. Twelve members of the European Union have established a joint currency, the euro. In doing so, they have transferred control of their monetary policy to the European Central Bank and have accepted restrictions on their fiscal policy—in particular, the ability to run budget deficits. Among those countries are nine NATO members: Belgium, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Portugal, and Spain (the others are Austria, Finland, and Ireland).

It is too early to determine what effect European integration will have on NATO. The increasing political integration of Europe could speed the development of European forces capable of carrying out the EU's defense policy. In that case, Europe would gain both the confidence and the desire to take on a larger role in its own defense, leading to greater European defense spending. That could result in a stronger European component of NATO and more equitable burdensharing, or it could weaken the role of NATO as the European countries downplayed the importance of the Atlantic alliance and sought a more independent security policy of their own.

PAYING FOR NATO'S COMMON COSTS

In planning for the common defense of the alliance, NATO mainly relies on the national military capabilities of its members. But some common costs of the alliance must be apportioned among the allies, such as maintaining a professional civilian staff, a joint military headquarters, and pipeline systems to ensure the distribution of petroleum products needed for military use in times of crisis or war. To pay those costs, NATO has created three common budgets and has set shares that each member is to pay:

- o The civil budget pays the cost of the civil headquarters and personnel in Brussels.
- The military budget pays for the alliance's military headquarters and activities, including the Supreme Headquarters Allied Powers Europe in Mons, Belgium, as well as the NATO Airborne Early Warning and Control program.
- The infrastructure budget, known as the NATO Security Investment Program (NSIP), allows the alliance to underwrite the cost of support facilities, including command, control, communications, and intelligence facilities; transportation; and storage facilities.

Compared with the nearly \$470 billion that the NATO countries spend on defense each year, the common budgets represent a relatively minor expenditure. In 1999, the civil budget was \$161 million; the military budget, \$496 million; and the NSIP budget, \$458 million (see Table 5).

The cost shares that each member pays are determined by consensus among the allies and typically change only after the addition of members or as a result of new contingencies. The civil budget cost shares have remained relatively constant since 1955 and the military budget cost shares since 1966. The NSIP cost shares, however, have been reviewed more frequently because those funds are used for specific construction projects.

France, which does not participate in NATO's integrated military command, opts out of many activities funded through the common budgets. When France does not participate, other countries pay a prorated larger share of the military and the NSIP budgets. Spain joined the integrated command in 1998 and now pays more toward the common budgets. Countries can also negotiate changes in their shares.

For example, in 1994 Canada persuaded several allies to assume half of its NSIP share.

The U.S. share of the civil and military budgets has stayed around 25 percent since the budgets were established in 1951. The addition of Poland, Hungary, and the Czech Republic to NATO reduced the U.S. share of the civil budget from 23.3 percent to 22.5 percent and the military budget from 28.0 percent to 26.2 percent. The U.S. share of the NSIP budget fell from 28.3 percent to 25.2 percent.

TABLE 5. ALLIED CONTRIBUTIONS TO NATO'S COMMON BUDGETS IN 1999 (In millions of 1999 U.S. dollars)

	NSIP	Military	¹ Civil	Percentage of Total NATO Budget
Belgium	21.1	15.5	4.4	3.7
Canada	16.1	29.0	8.6	4.8
Czech Republic	0.2	3.8	1.4	0.5
Denmark	16.9	9.2	2.4	2.6
France	34.3	29.3	24.7	7.9
Germany	108.0	85.5	25.0	19.6
Greece	4.2	2.1	0.6	0.6
Hungary	0.1	2.7	1.0	0.3
Iceland	0	0.2	0.1	0
Italy	36.1	32.9	9.3	7.0
Luxembourg	0.9	0.5	0.1	0.1
Netherlands	25.0	15.5	4.4	4.0
Norway	13.2	6.4	1.8	1.9
Poland	0.5	10.3	4.0	1.3
Portugal	1.5	3.5	1.0	0.5
Spain	6.5	19.5	5.6	2.8
Turkey	4.6	8.8	2.6	1.4
United Kingdom	53.6	91.3	27.9	15.5
United States	<u>115.2</u>	129.7	36.2	<u>25.2</u>
Total ^a	458.0	495.7	161.1	100.0

SOURCE: Department of Defense.

NOTE: NATO = North Atlantic Treaty Organization; NSIP = National Security Investment Program.

a. Does not include contributions to NATO's Airborne Early Warning and Control program.

DETERMINING NATO'S INFRASTRUCTURE BUDGET

Whereas the military and civil budgets pay for the maintenance of NATO's bureaucracy and infrastructure, the NSIP budget may be spent on a variety of projects. The NSIP planning process begins with the head of one of NATO's two force commands, always an American flag officer, deciding what projects are needed for a given "capability package" to carry out a particular mission. The proposed projects are screened by NATO's senior resource board, which reviews the financial aspects. The program is then authorized by the North Atlantic Council, NATO's top decisionmaking body.

The size of the NSIP budget is proposed by NATO's military and civilian staff, but ultimately its scope is determined by the amount that the alliance members appropriate to it. In that regard, the U.S. Congress and its two appropriations subcommittees on military construction are significant players. In most years, the Congress appropriates less in NSIP funding than the President requests.

The NSIP funds operational facilities that fulfill a commitment to NATO that is beyond a country's national requirements for defense—for example, a radar facility that is part of NATO's common air-defense system. Because all U.S. operational facilities in Europe are part of the American contribution to NATO, they all are eligible for NSIP funding; many European countries' facilities are considered national requirements and hence are ineligible.

COMMON BUDGETS AFTER ENLARGEMENT

The addition of three new members to NATO in 1999 slightly reduced the financial burden for most of the allies. Of the new allies, Poland paid 1.3 percent of the common costs; Hungary, 0.3 percent; and the Czech Republic, 0.5 percent. NATO's senior resource board determined those shares largely on the basis of each country's gross domestic product. As a result of that reapportionment, most allies—including the United States, the United Kingdom, and Germany—saw a slight reduction in their cost shares.

The common costs of enlargement—which NATO has estimated at \$1.5 billion over 10 years—will be shared by the allies through the military budget and the NSIP. Of those costs, \$1.3 billion is for infrastructure improvements that are to be paid by the NSIP. The U.S. share of that cost will be approximately \$400 million—or roughly one-fourth—over 10 years.

The commonly funded improvements fall into four broad categories:

- O Communication links to the new allies. Those links are needed to connect the defense ministries and military headquarters in the Central European countries with one another and with those in the other allied capitals. Those links include fiber-optic cables and satellite links, the latter being particularly necessary in the case of Hungary, which does not border any other NATO member.
- o Air-defense systems, including radars on the ground and links to NATO's integrated air-defense system. Those improvements will help the alliance gain a complete picture of the skies over the enlarged NATO territory.
- Airfield improvements so that bases in the three new allied countries can accommodate other allies' aircraft. Improvements include lengthening runways and constructing reception areas so that transport aircraft can reinforce a new ally in a crisis. They also will enable the new allies, relying on other countries' lift capabilities, to move their forces to reinforce another ally facing a threat. In addition, some improvements—such as water pipe connectors and electrical sockets—are needed at Polish naval facilities to install compatible equipment that will allow them to unload and resupply NATO ships while they are in port.
- o Training ranges, to enable the new allies to conduct exercises with other NATO members.

The Clinton Administration's budget for fiscal year 2001 requested \$12 million for NATO's enlargement. The DoD enlargement study anticipated a request of \$32 million for enlargement costs in 2002, with those costs peaking in 2005 at about \$70 million and then decreasing through 2008. The Congress appropriates funding for the NSIP out of the Military Construction Appropriations Act and funding for the military budget out of the Army Operations and Maintenance account in the Defense Appropriations Act. The Congress appropriated \$172 million for the NSIP and \$119 million for the NATO military budget in fiscal year 2001.

Although enlargement is expected to cost \$1.5 billion over the next 10 years, it is not yet clear what its net effect will be on the overall common budgets. U.S. officials at the Pentagon and in Brussels have indicated that the NATO infrastructure budget could remain fairly constant over the next several years at about \$800 million a year. In 1993, NATO redirected NSIP funding toward projects that increase force mobility and flexibility, reducing the amount it spends on other projects. Because of that adjustment, it is unlikely that U.S. payments to the NSIP will increase in the near term.

NSIP FUNDING OF U.S. INSTALLATIONS IN EUROPE

As noted earlier, nearly all U.S. operational installations in Europe are eligible for NSIP funding because they are used to carry out the U.S. commitment to NATO rather than purely national military operations. The U.S. Mission to NATO estimates that in most years the United States receives greater funding for its activities in Europe than it pays into the infrastructure fund. For instance, the NSIP spent roughly \$685 million in 1999 on activities that benefited U.S. forces, compared with the American contribution of \$400 million. Over the 10 years ending in 1999, U.S. facilities received approximately \$4.1 billion from the NSIP, while the United States contributed \$2.7 billion to the program. U.S. officials calculate that this country received more money for its installations than it paid into the NSIP in every year of the past decade except 1994.

An example of the benefit the United States receives from the NSIP is improvements to the air base at Aviano, Italy, the main base for air operations over Kosovo and Serbia during the Kosovo conflict. NATO opted to pay for some nonoperational facilities that support U.S. forces and their families at the base that would not normally be eligible. American officials estimate that securing NSIP funding for those projects ultimately saved American taxpayers about \$190 million.

NATO'S AIRBORNE EARLY WARNING AND CONTROL PROGRAM

In addition to covering the cost of the alliance's military headquarters, the common NATO military budget funds the operation and modernization of the NATO Airborne Early Warning and Control program. Through this program, NATO jointly owns and operates a fleet of 18 E-3A airborne warning and control system (AWACS) planes and two Boeing 707 trainers. The main operating base for the program is at Geilenkirchen, Germany, with some planes stationed at bases in Italy, Turkey, Greece, and Norway. Those aircraft, which were used to support NATO operations in Bosnia and Kosovo, provide an early-warning system against low-level aircraft, manage air traffic, and assist close air support as well as search and rescue operations. The operation of the AWACS program is funded out of an annual common NATO budget that is divided among the participating countries; in 2000, the U.S. share was 40 percent (\$66 million) of the total \$166 million.

Proponents of the AWACS program point to it as a successful example of burdensharing within the alliance; the operating crews and support personnel are perhaps NATO's best-integrated international unit. Some U.S. and allied officials believe that it provides a possible template for coordinating other common assets.

Common assets could save money by avoiding unnecessary overlap in national capabilities, especially in support functions. That could prove particularly advantageous to the United States, which provides much of NATO's airlift; intelligence; and command, control, and communications capabilities. If the alliance as a whole provided those capabilities, the United States could realize some cost savings without diminishing NATO's capabilities.

Despite the potential cost savings, the United States may prefer to maintain a national capability in support functions. Common assets would require consensus in the alliance before they could be deployed, which could limit the United States' ability to act unilaterally. Under the Combined Joint Task Force (CJTF) concept, a "coalition of the willing," comprising a subset of NATO members, can use alliance assets for out-of-area missions with the consensus of all 19 member countries. While the CJTF concept dates only to 1996 and remains in large part theoretical, it appears that one ally could block use of alliance assets for a given mission. So even though common capabilities offer the benefit of cost savings, forgoing national capabilities could result in this country's ability to act being constricted by allied opposition.

APPENDIX A SUPPLEMENTARY DATA ON DEFENSE SPENDING AND ECONOMIC AID

The following tables present statistics on defense spending and on economic aid to the countries of Central and Eastern Europe. Some of these statistics are shown in graphic form in the text; the tables here provide supplemental detail.

TABLE A-1. DEFENSE SPENDING AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT IN SELECTED YEARS, 1980-2000

	1980	1985	1990	1995	1996	1997	1998	1999	2000 ^a
Belgium	3.3	3.0	2.4	1.6	1.6	1.5	1.5	1.4	1.4
Canada	1.9	2.2	2.0	1.5	1.4	1.2	1.3	1.3	1.2
Czech Republic ^b	n.a.	2.2	2.3						
Denmark	2.4	2.2	2.0	1.7	1.7	1.7	1.6	1.6	1.5
France	4.0	4.1	3.6	3.1	3.0	2.9	2.8	2.7	2.7
Germany	3.3	3.2	2.8	1.7	1.6	1.6	1.5	1.5	1.5
Greece	5.7	7.1	5.8	4.4	4.5	4.6	4.8	4.8	4.9
Hungary ^b	n.a.	1.6	1.7						
Italy	2.4	2.7	2.1	1.8	1.9	2.0	2.0	2.0	1.9
Luxembourg	1.0	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.7
Netherlands	3.1	3.1	2.7	2.0	1.9	1.8	1.7	1.8	1.6
Norway	2.9	3.3	3.2	2.4	2.2	2.1	2.3	2.2	1.9
Poland ^b	n.a.	2.0	2.0						
Portugal	3.5	3.1	3.1	2.6	2.4	2.4	2.2	2.2	2.2
Spain ^c	n.a.	2.7	1.8	1.5	1.4	1.4	1.3	1.3	1.3
Turkey	4.7	4.5	4.9	3.9	4.1	4.1	4.4	5.4	6.0
United Kingdom	5.0	5.3	4.0	3.0	3.0	2.7	2.7	2.5	2.4
United States	5.1	6.7	5.7	3.8	3.5	3.3	3.1	3.0	3.0
NATO Average NATO European	3.5	3.6	3.1	2.4	2.3	2.3	2.3	2.2	2.2
Average ^d	3.4	3.5	3.0	2.3	2.3	2.3	2.3	2.3	2.3

SOURCE: Congressional Budget Office based on data from the North Atlantic Treaty Organization (NATO).

NOTES: n.a. = not applicable.

Averages are weighted by GDP.

Iceland is excluded because it has no armed forces.

- a. Estimated by NATO on the basis of available data.
- b. Poland, Hungary, and the Czech Republic did not join NATO until 1999.
- c. Spain did not join NATO until 1982.
- d. Excludes the United States and Canada.

TABLE A-2. DEFENSE SPENDING PER CAPITA IN SELECTED YEARS, 1980-2000 (In 1995 U.S. Dollars)

	1980	1985	1990	1995	1996	1997	1998	1999	2000ª
Belgium	619	613	597	438	431	426	423	426	427
Canada	306	386	387	309	278	257	277	285	265
Czech Republic ^b	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	115	120
Denmark	613	619	641	596	591	595	594	587	567
France	821	888	910	822	803	802	776	780	785
	859	895	892	504	495	481	482	490	484
Germany Greece	452	576	504	484	516	542	587	609	633
								84	91
Hungary ^b	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Italy	324	365	387	338	340	336	343	350	343
Luxembourg	240	265	330	345	354	375	397	399	397
Netherlands	581	628	631	518	524	517	509	529	500
Norway	699	841	887	805	809	793	840	831	809
Poland ^b	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	83	85
Portugal	217	204	264	269	260	265	255	267	273
Spain ^c	n.a.	262	248	221	215	217	212	213	225
Turkey	83	80	106	107	113	117	119	123	136
United Kingdom	778	860	768	577	578	541	546	534	526
United States	1,144	1,467	1,423	1,061	1,002	985	950	947	968
NATO Average NATO European	758	905	886	670	645	634	621	582	589
Averaged	547	582	573	447	443	435	433	394	394

SOURCE: Congressional Budget Office based on data from the North Atlantic Treaty Organization (NATO).

NOTES: n.a. = not applicable.

Iceland is excluded because it has no armed forces.

Calculations are based on weighted averages.

- a. Estimated by NATO on the basis of available data.
- b. Poland, Hungary, and the Czech Republic did not join NATO until 1999.
- c. Spain did not join NATO until 1982.
- d. Excludes the United States and Canada.

TABLE A-3. NATO MEMBERS' ECONOMIC AID TO CENTRAL AND EASTERN EUROPE PER MILLION DOLLARS OF THEIR GROSS DOMESTIC PRODUCT IN SELECTED YEARS, 1991-1997

		1997			1991-1997	
	ODA			ODA		,
	Grants	Loans	Total	Grants	Loans	Total
Belgium	44.1	0	44.1	159.8	58.0	217.8
Canada	248.3	0	248.3	251.0	0	251.0
Denmark	486.4	85.1	571.5	490.3	108.6	599.0
France	217.8	3.3	221.1	213.4	5.6	219.0
Germany	184.6	23.6	208.2	1,078.1	51.5	1,129.5
Greece	0	0	0	0	0	0
Iceland	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Italy	22.3	11.9	34.2	98.4	11.1	109.5
Luxembourg	200.0	0	200.0	194.7	0	194.7
Netherlands	92.0	0	92.0	184.1	33.2	217.4
Norway	419.9	0	419.9	416.0	16.0	432.0
Portugal	2.5	0	2.5	1.3	0	1.3
Spain	5.4	-0.6	4.8	3.4	4.3	7.7
Turkey	0	0	0	0	0	0
United Kingdom	122.7	0	122.7	106.5	0	106.5
United States	166.0	6.9	173.0	225.4	19.2	244.6
NATO Average NATO European	147.5	8.7	156.2	228.2	20.5	248.7
Average ^a	138.3	9.5	147.8	226.6	22.2	248.8

SOURCE: Congressional Budget Office based on data from the Organization for Economic Cooperation and Development.

NOTES: N.A. = not available; ODA = official development assistance.

Poland, Hungary, and the Czech Republic did not join NATO until 1999.

a. Excludes the United States and Canada.

INFORMATION ABOUT DATA SOURCES

The data in this report are based on information from the North Atlantic Treaty Organization (NATO), the U.S. Mission to NATO, the U.S. Department of Defense (DoD), the International Institute for Strategic Studies (IISS), the Organization for Economic Cooperation and Development (OECD), the International Monetary Fund (IMF), the General Accounting Office (GAO), the Congressional Research Service (CRS), foreign governments, and the Congressional Budget Office's (CBO's) own projections and reports.

Data on defense spending and military personnel levels from 1975 to 1998 came from the NATO publication *Financial and Economic Data Relating to NATO Defense*. Earlier data came from a previous CBO paper on burdensharing—*Assessing Future Trends in the Defense Burdens of Western Nations* (April 1993)—as well as CBO testimony from 1998.

Figures on NATO's reaction forces came from DoD. Force levels in Bosnia for the implementation force and stabilization force missions came from CRS and DoD. Population figures came from the IMF publication *International Financial Statistics Yearbook 2000*. Figures on official assistance to Central and Eastern Europe were obtained from the OECD's Web site, and historical gross domestic product figures from 1991 through 1997 came from IISS.

Data on NATO's common budgets and cost shares came from the 1998 GAO report *NATO: History of Common Budget Cost Shares*, DoD, and the U.S. Mission to NATO. That mission also provided its estimate of the benefits provided to U.S. facilities.



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