

Statement of
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before the
Defense Burdensharing Panel
Committee on Armed Services
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Madam Chairwoman and members of the Defense Burdensharing Panel, I am pleased to appear today to discuss some of the issues surrounding defense burdensharing. I will first discuss various measures of the defense burden. Those measures generally show that, relative to its economic strength, the United States is doing more to contribute to the common defense than most of its allies. Next, I will discuss possible actions the United States and its allies might take to reduce the cost of U.S. defense commitments.

I should note that, by themselves, the quantitative measures of burdensharing presented in my testimony are not an adequate basis for judging what degree of burdensharing would be fair. That judgment is a political one that must weigh not only the contributions to allied defense, which is what I can measure for you, but also the benefits realized by the United States and its allies, which cannot be reliably quantified. For this reason I will leave to others the task of judging. I will first review and explain the quantitative indicators of burdensharing and then discuss options for altering the sharing of defense costs.

COMMON MEASURES OF BURDENSARING

Burdensharing measures fall into two classes--economic measures and measures of military forces. The economic measures compare each country's defense expenditures with measures of its ability to pay, while the

military measures suggest the defense capability that each country provides.

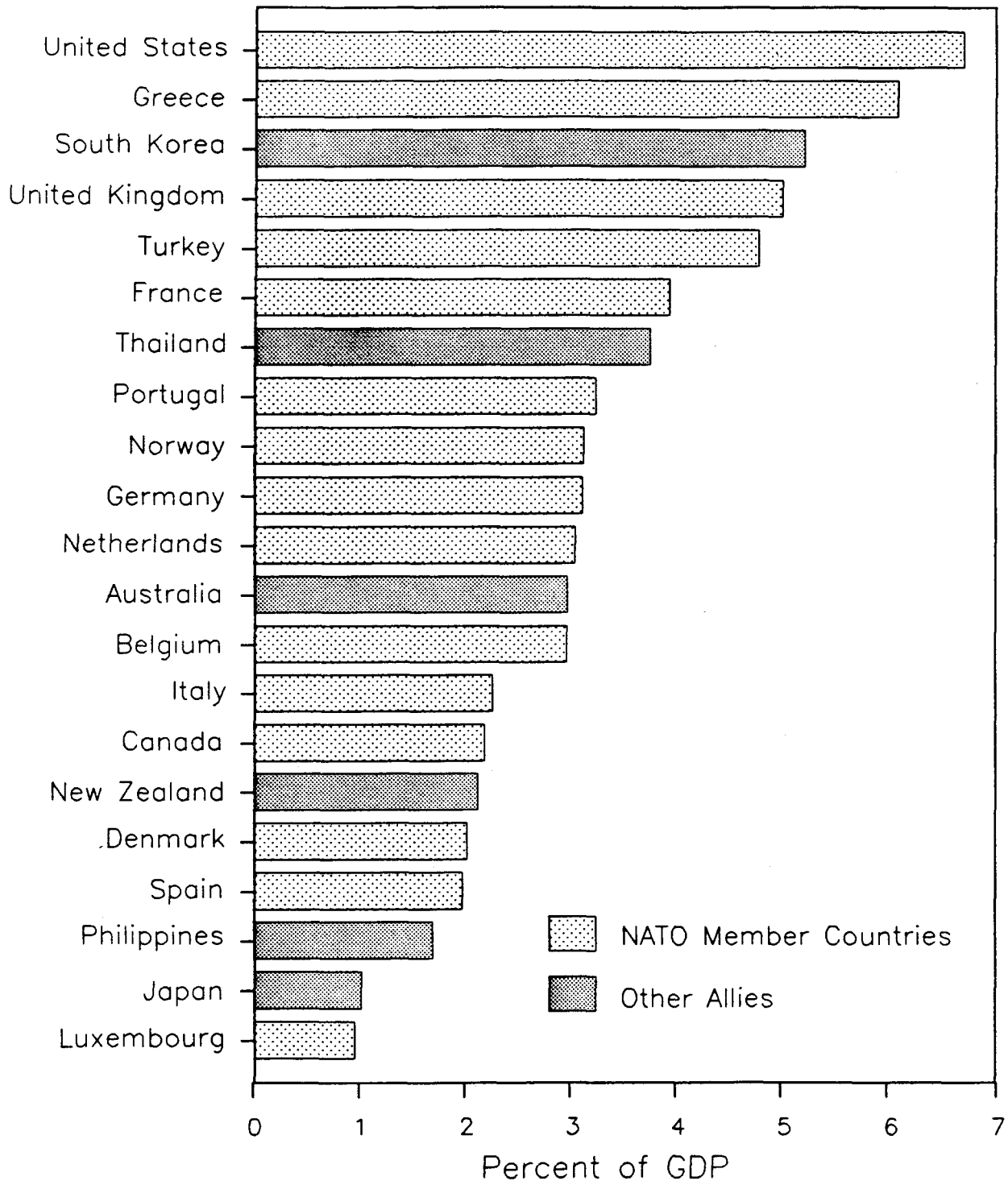
Economic Measures

Figure 1 shows the most commonly accepted measure of a country's defense burden--defense expenditures expressed as a percentage of gross domestic product (GDP). ^{1/} This measure indicates what share of its economic resources a nation spends on security; because it is expressed as a percentage of total national GDP, the measure permits comparisons among nations that vary in size and level of economic development. Figure 1 shows these percentages for all the NATO allies plus selected other U.S. allies.

In 1986, the United States devoted 6.7 percent of its GDP to defense compared with an average of 3.3 percent for the non-U.S. NATO allies and about 1 percent for Japan. (Because of delays in compiling foreign data, 1986 is the latest year for which consistent data are available for all

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1. NATO has adopted a common definition of defense expenditures to assure comparability among its members. All actual budgetary outlays to meet the needs of the country's armed forces are included. Also included in defense expenditures are such items as the cost of domestic security forces that fall under military authority in wartime, such as the U.S. Coast Guard. Military assistance payments and government contributions to military pension systems are also included. Items that are not included are costs for veterans' benefits, civil defense, and indirect costs, such as forgone revenue associated with unreimbursed use of government facilities. Defense spending figures for countries not part of NATO, as well as for Spain which recently joined the alliance, are those reported in national budgets and may not be fully comparable to NATO figures.

Figure 1. DEFENSE EXPENDITURES
(As Percent of GDP)



Source: Congressional Budget Office computations based on NATO Press Service, "Financial and Economic Data Related to Nato Defense" (December 1987)

countries.) Spending varied widely among the allies in 1986, but of all the countries shown in Figure 1, none devoted a larger percentage of its GDP to defense than the United States.

Per capita defense spending comparisons reveal similar conclusions. Though this measure suffers from some limitations not present when defense spending is expressed as a percent of GDP, it does show how much an average citizen devotes to defense. ^{2/} In 1986, the United States spent \$1,155 per person on defense, compared with an average of \$318 among non-U.S. NATO countries and \$163 for Japan (see Appendix Table A-1). This gap has narrowed somewhat since 1986 because of the decline in the value of the dollar, but remains substantial.

Effects of Omitted Costs. Certain of our European allies question whether these data accurately describe our relative defense burdens. For example, countries that draft personnel into their military (which include all of our NATO allies except Canada, Luxembourg, and the United Kingdom) pay limited wages that hold down their defense costs. If their recruits were paid market wages, the defense expenditures of those countries would be higher. Examples of other omitted costs that could distort comparisons of the defense burden include: (1) the rent-free use of land and facilities by U.S.

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2. Per capita defense spending adjusts a nation's defense effort only for population size and does not adjust for differences in average income. It also is sensitive to exchange rate variations.

forces stationed abroad, (2) the social and economic effects of having high concentrations of military forces stationed in densely populated areas, and (3) differing levels of funding for foreign assistance.

While these omitted costs may understate spending by our European allies, other omitted factors may lead to an understatement of the U.S. defense burden. For example, conscription does reduce the defense budgets of some allies, but it also results in a less experienced military that may not be as productive or as well trained as a volunteer military. Some European allies do bear the problems associated with U.S. forces being stationed in their countries, but some U.S. military personnel experience extended periods of family separation because of our policy of forward deployment.

Moreover, where the omitted costs cited by our European allies can be quantified, it does not appear that including them alters the conclusion that the United States bears a larger defense burden. CBO estimated the additional cost for the Federal Republic of Germany (FRG) of three frequently-cited omitted factors: eliminating conscription and paying market wages to all recruits, forgone rent on land and facilities used by U.S. forces, and economic support provided by the FRG to Berlin. Including the value of all three of these items would raise the German share of GDP devoted to defense in 1986 from 3.1 percent to about 4.1 percent, still below the comparable U.S. figure of 6.7 percent. CBO did not have the data to perform this calculation for all U.S. allies. But this adjustment is likely to

be most important for Germany because of the number of foreign forces stationed in that country.

Nor is the fundamental conclusion about U.S. and allied shares altered by including funds for economic assistance--formally known as official development assistance (ODA). These funds support a variety of training and construction projects designed to help developing countries improve their physical capital and the quality of their labor force. ODA funding is not used to assist a country's military forces directly. But ODA may indirectly aid a country's defenses by allowing it to spend more of its own resources on defense or by helping its economy grow. Measured as a percent of GDP, the United States spends substantially less on official development assistance than many of our allies (see Table A-2 in the Appendix). Since ODA spending is small relative to defense spending, however, adding it to defense spending does not reverse the finding that the United States devotes more to national security efforts than its allies.

Probably the only way to make the U.S. portion of the NATO burden appear roughly equal to that of our allies is to exclude costs that some believe are unrelated to the defense of NATO. There is no good way to measure the proportion of the U.S. defense budget spent on the NATO alliance. With some misgivings, the Department of Defense (DoD) estimated in 1985 that about 60 percent of the U.S. defense budget paid for forces committed to the defense of NATO. Applying this estimate would reduce the U.S. share of GDP spent for NATO to 4.0 percent, close to the

average of 3.3 percent for the non-U.S. NATO allies. (The latter number should be adjusted to eliminate spending for allied forces not committed to NATO, but this adjustment would certainly be much less important for the allies than it is for the United States.)

But there are good arguments against eliminating non-NATO spending. Strategic nuclear forces, though excluded from direct NATO costs in DoD's calculation of the 60 percent, play a key role in deterring a Soviet attack on NATO. U.S. forces not directly committed to NATO also play an important part in overall alliance defenses. As trading nations, our allies depend on secure shipping and free trade throughout the world. Thus U.S. forces stationed in the Persian Gulf and Indian Ocean protect vital interests of the NATO member countries, as do U.S. forces in the Pacific. Perhaps for these reasons, DoD always uses total U.S. and allied defense spending--not just the NATO portion--in its assessment of burdensharing.

Trends in Burdensharing. The United States not only spends more of its resources on defense than most of its allies today; it has done so for many years. Table 1 shows the portion of GDP devoted to defense since 1955 by the United States and others. The United States' percentage declined from 10 percent in 1955 to 5.1 percent in 1980, then rose to 6.7 percent in 1986. The average for non-U.S. NATO allies has been steadier but has never exceeded 4.5 percent. Compared with Japan, the U.S. fraction of GDP devoted to defense has been up to 10 times larger over the same period.

TABLE 1. DEFENSE SPENDING IN PERCENTAGES OF GROSS DOMESTIC PRODUCT (Based on data in national currencies)

Country	1950	1955	1960	1965	1970	1975	1980	1986
United States	4.7	10.0	8.9	7.4	7.7	6.0	5.1	6.7
NATO Allies								
Belgium	2.6	4.0	3.6	3.2	2.9	3.1	3.3	3.0
Canada	2.6	6.3	4.2	2.9	2.3	2.0	1.9	2.2
Denmark	1.7	3.2	2.7	2.8	2.5	2.5	2.4	2.0
France	4.7	6.4	6.5	5.2	4.2	3.8	4.0	3.9
Germany	n.a.	4.1	4.0	4.3	3.3	3.7	3.3	3.1
Greece	5.0	5.1	4.9	3.5	4.8	6.8	5.7	6.1
Italy	3.3	3.7	3.1	3.1	2.5	2.5	2.4	2.2
Luxembourg	0.9	3.2	1.0	1.4	0.7	0.9	1.0	0.9
Netherlands	3.6	5.7	4.1	4.0	3.4	3.2	3.1	3.0
Norway	2.5	3.9	2.9	3.8	3.5	3.2	2.9	3.1
Portugal	3.5	4.2	4.2	6.2	7.1	5.3	3.5	3.2
Turkey	5.7	5.6	5.1	5.0	4.4	6.3	4.7	4.8
United Kingdom	6.0	8.1	6.4	5.8	5.1	5.2	5.0	5.0
Non-U.S. NATO								
Weighted Avg. <u>a/</u>	n.a.	4.5	4.1	3.8	3.1	3.2	3.0	3.3
Japan <u>b/</u>	n.a.	1.0	1.1	0.9	0.8	0.9	0.9	1.0

SOURCES: Congressional Budget Office based on NATO definition of defense expenditures and GDP data from the International Monetary Fund.

NOTES: n.a. = not available.

- a. Averages use 1986 national GDP shares as weights. Spain was not included, because historical data consistent with that of the other NATO nations were lacking.
- b. Defense expenditures for Japan use the national, not NATO definition, as reported in International Institute for Strategic Studies, The Military Balance 1987-1988 (London: IISS, 1987).

The recent downward trends in U.S. defense budgets will narrow these gaps only slightly.

Military Measures

In addition to economic measures, the annual Department of Defense (DoD) publication, Report on Allied Contributions to the Common Defense, presents several measures of U.S. and allied military capability. To summarize the military comparisons, CBO combined several measures in the DoD report and added two new ones. The measures that appear in my testimony include:

- o Defense personnel--measured by total numbers of defense personnel (including civilians);
- o Ground forces--measured by division-equivalent firepower, a measure both of size of forces and of the quality of their equipment;
- o Naval forces--measured by tonnage of all naval forces (excluding strategic submarines);
- o Air forces--measured by numbers of tactical combat aircraft in each country's air force as well as its naval and marine aviation forces;
- o Strategic nuclear forces--measured by total numbers of strategic warheads;

- o Airlift forces--measured by numbers of military airlift aircraft; and
- o Sealift forces--measured by numbers of militarily useful sealift ships. 3/

Table 2 shows each of these measures expressed as a percentage of total forces in the United States, the non-U.S. NATO allies, and Japan. Table 2 also shows two measures of a country's ability to contribute--gross domestic product and total population--again expressed as a percentage of the total for NATO and Japan.

These data show that, in relation to its size and economic wealth, Japan makes a low contribution by any measure. The non-U.S. NATO allies, as a group, do make substantial contributions. In several categories--notably total defense personnel, ground forces, and sealift ships--these allies contribute capability that matches or exceeds their ability to contribute as measured by gross domestic product and population.

These same data, however, show a U.S. contribution that matches and often exceeds its ability to contribute. The U.S. share roughly matches its ability to contribute in three areas (total defense personnel, ground forces,

3. These ships are mainly privately owned and operated, but can be requisitioned for military use in an emergency.

TABLE 2. SELECTED INDICATORS OF MILITARY CONTRIBUTION AND ABILITY TO CONTRIBUTE (In percents of total)

Indicator	United States	Non-U.S. NATO	Japan
Military Contribution			
Total Defense Personnel <u>a/</u>	38	60	2
Ground Forces	39	58	3
Tactical Combat Aircraft <u>b/</u>	53	44	3
Naval Ship Tonnage <u>c/</u>	64	33	3
Strategic Nuclear Warheads <u>d/</u>	97	3	0
Airlift Aircraft <u>d/</u>	64	33	3
Sealift Cargo Ships <u>e/</u>	37	63	n.a.
Ability to Contribute			
Share of GDP <u>f/</u>	39	40	21
Share of Population	32	52	16

SOURCE: Except as noted, Department of Defense, Report on Allied Contributions to the Common Defense (April 1988).

NOTES: n.a. = not applicable

- a. Includes active-duty military, civilian personnel, and committed reserves.
- b. Computed by the Congressional Budget Office to include both air force and naval tactical aircraft.
- c. All naval forces except strategic submarines.
- d. Computed by the Congressional Budget Office based on data in International Institute for Strategic Studies, The Military Balance 1987-1988 (London: IISS, 1987).
- e. Figures based on Maritime Administration, "NATO Sealift Ship List"; Japan is not included in the total.
- f. Compiled by the Congressional Budget Office based on 1987 exchange rates.

and sealift cargo ships) and exceeds those measures--sometimes substantially--in four others (tactical aircraft, naval ship tonnage, strategic nuclear warheads, and airlift aircraft).

Moreover, some of these measures may understate the U.S. contribution. Most of the measures simply count weapons. Often, however, the U.S. weapons are more modern. For example, the 1988 DoD report states that only 28 percent of the air force aircraft in non-U.S. NATO countries are considered new-generation aircraft. The 1988 DoD report does not show a comparable percentage for the United States, but the 1987 report put it at 45 percent.

These data do not adjust for differences among the allies in the quality and quantity of military training nor for other variations that could influence the wartime readiness of forces. The measures available to CBO do not appraise the quality of U.S. forces relative to those of our allies. Thus, the measures do not capture reported gains in the readiness and quality of U.S. forces resulting from increased spending in recent years.

DATA THAT PROVIDE A PERSPECTIVE ON BURDENSARING

The panel also requested that CBO compile other data which, though not themselves direct measures of defense burdensharing, provide a perspective on this topic. These data reflect economic strengths and weaknesses, important elements in a broad definition of national security, and illustrate some of the choices countries make through their budget decisions.

Budget Deficits

Budget deficits have been important to the debate over the U.S. defense budget and may have prompted concerns over burdensharing. In 1987, the U.S. federal budget deficit amounted to about 3.4 percent of this country's gross domestic product. That is substantially lower than levels in recent years but still much higher than average levels in earlier decades.

Deficits among some of this country's major allies have been smaller than that of the United States. But other allies face similar economic and budgetary problems. For example, in 1985 Belgium, Greece, and Italy had central government budget deficits higher--as a percentage of their gross domestic products--than that of the United States (see Appendix Table A-3). Moreover, with some exceptions, U.S. allies already claim a larger fraction of their citizens' income in taxes than does the United States (see Appendix Table A-4).

Trade in Defense Products

U.S. allies sometimes contend that the United States benefits from its dominance of the free world's arms market. During the period from 1984 to 1986, U.S. exports of military equipment to its allies have averaged more than two and one-half times the value of imports from those allies (see Table A-5 in the Appendix). The result was an annual export surplus for the United States of over \$4 billion, which reduced the overall U.S. trade

deficit. In recent years, however, the trend has been toward a more even balance of arms trade.

Overall U.S. Trade Deficit

Notwithstanding the dramatic decline in the value of the dollar, the U.S. trade deficit continued at record levels in 1987. Overall, the U.S. merchandise trade deficit was \$171.2 billion. Of this amount, \$38.3 billion represented the deficit in trade with our NATO partners, while another \$70.6 billion was the trade deficit recorded with our Pacific allies, mainly Japan and South Korea (see Table 3). Thus, producers in allied countries were the chief beneficiaries of the U.S. trade imbalance.

Trade with Soviet-bloc Countries

Concerns have been expressed before this panel that our allies trade actively with Soviet-bloc countries and provide financing that allows them to import high-technology products that aid their defense establishment. Relative to their total trade volume, however, Western nations' trade with the Soviet bloc is small, ranging from 0.7 percent of total U.S. trade to 5.1 percent for Greece; for our NATO allies, trade volume averages about 2.7 percent (see Appendix Table A-6). (Germany's figure of 4.1 percent does not include trade with East Germany or Berlin, which is considered intra-German trade by the Federal Republic of Germany.) These figures seem especially modest since many of the allies are geographic neighbors of

TABLE 3. UNITED STATES TRADE WITH ALLIES, 1987
(In billions of U.S. dollars)

Country	Exports	Imports	Balance
NATO Allies	119.4	157.6	-38.3
Belgium	6.2	4.4	1.8
Canada	59.3	71.5	-12.2
Denmark	0.9	1.9	-1.0
France	7.9	11.2	-3.3
Germany	11.6	28.0	-16.5
Greece	0.3	0.5	-0.2
Italy	5.5	11.7	6.2
Luxembourg a/			
Netherlands	8.1	4.2	3.9
Norway	0.8	1.5	-0.7
Portugal	0.6	0.7	-0.1
Spain	3.1	3.1	b/
Turkey	1.3	0.9	0.4
United Kingdom	13.9	18.0	-4.1
Other Allies	44.8	115.4	-70.6
Australia	5.5	3.3	2.2
Japan	27.8	88.1	-60.3
New Zealand	0.8	1.2	-0.4
Philippines	1.6	2.5	-0.9
South Korea	7.7	18.0	-10.3
Thailand	1.5	2.4	-0.9

SOURCE: U.S. Department of Commerce, Bureau of the Census, Highlights of U.S. Export and Import Trade (1988).

- a. Data for Luxembourg included in figures for Belgium.
- b. Less than \$50 million.

Soviet-bloc countries. The small percentages reflect the limited appeal of many products from the Soviet bloc (most imports from the bloc are raw materials and fuels) and its lack of the hard currency needed to pay for imports.

CBO was unable to obtain information on the amount of financing provided by individual allied countries to Soviet-bloc countries. It is clear that debts owed to allied countries by Soviet-bloc countries are a small fraction of total debts owed to the allies.

OPTIONS TO REDUCE THE DEFENSE BURDEN OF THE UNITED STATES

If one concludes that the U.S. defense burden is too high relative to that of its allies, what can be done? In requesting CBO's testimony, Madam Chairwoman, you asked that we estimate the effects on costs of a variety of options that would alter defense burdensharing in favor of the United States, either by increasing allied payment of U.S. costs related directly to overseas commitments or by reducing U.S. forces deployed in allied countries. The options were chosen to illustrate a wide range of actions that vary in their scope and in their effects on U.S. and allied capability.

All of these options would involve important policy changes. Some could adversely affect defense capabilities in NATO or elsewhere, which might be especially important in a period when the United States is negotiating with the Soviet Union over arms control. Others anticipate actions by U.S. allies that might not be acceptable to them.

CBO has estimated the effects of these options on U.S. defense costs, and we have briefly discussed their advantages and disadvantages. But, because these options are meant only as illustrations of possible actions, we have not undertaken an extensive analysis of any one approach. In keeping with our mandate to provide neutral and nonpartisan analysis, we make no recommendations regarding the options. I also note that your letter to us stated that the panel does not necessarily support any of these options.

Increased Allied Support of U.S. Forces

The first set of options illustrates ways that U.S. allies might increase the financial support that many of them already provide to U.S. forces stationed within their borders. The options include having the allies pay for: (1) all military construction at U.S. bases overseas, (2) the salaries and benefits for indirect-hire foreign civilian personnel working on those bases, (3) cost-of-living supplements paid to U.S. personnel abroad, (4) base operation and support costs for U.S. bases overseas, and (5) travel costs for U.S. troops making permanent change-of-station moves to and from their countries.

When fully carried out, these options would help reduce the U.S. defense burden. Estimates of savings for individual options range from \$960 million to over \$2.6 billion per year (see Table 4). (All estimates of savings are expressed in terms of fiscal year 1989 budget authority.)

From the perspective of the U.S. military, the major drawback associated with these actions would be the potential loss of control over base operations. Allied nations might refuse to support base activities at levels desired by U.S. commanders, which could result--from their perspective--in a loss of military capability.

The options might also be infeasible since they would depend on allied agreement that might not be forthcoming. CBO could not readily estimate the effects of the options on allied budgets; effects might be more or less than the savings to the United States, depending on such factors as foreign

TABLE 4. ANNUAL SAVINGS FROM ACTIONS TO REDUCE U.S. BASING COSTS (In millions of dollars)

Action	Annual Savings
Allies pay for all military construction at foreign bases.	960
Allies pay salaries and benefits for indirect hire of foreign personnel.	2,620
Allies fund cost-of-living supplements paid to U.S. personnel abroad.	1,330
Allies pay base operating support costs for U.S. bases abroad.	1,470
Allies pay travel costs for U.S. personnel making permanent change-of-station moves to and from their countries.	1,360

SOURCE: Compiled by the Congressional Budget Office from data supplied by the Department of Defense.

procurement and wage practices, exchange rates, costs in subsidized or government-operated industries, and tax rates. All of these options, however, would require increased payments by our allies at a time when many face budget difficulties of their own. The burden might be particularly significant for our less developed allies, who currently receive U.S. economic and military assistance in return for hosting U.S. forces. At a minimum, carrying out these options would add to the already complex task of negotiating rights to use foreign bases.

Sharing Costs for Out-of-Area Activities

U.S. allies could also increase their defense efforts by taking a more active role in defense activities outside the NATO geographic area, such as the current effort to protect shipping in the Persian Gulf. The United States has some 20 ships deployed to the Persian Gulf for this mission. In addition, a carrier battle group of about seven ships is deployed in the Indian Ocean to provide protection for these forces. Many of our allies--including the United Kingdom, Italy, France, Belgium, and the Netherlands--have also deployed forces to the Gulf. But others have not, even though most Persian Gulf oil is exported to U.S. allies rather than to the United States. If those countries that benefit from U.S. protection--but do not themselves contribute forces--were to pay for the added cost of maintaining U.S. ships in this area, the defense budget could be reduced by at least \$180 million annually (see Table 5).

U.S. allies in NATO could also agree to share the cost of the C-17 airlift aircraft, as they have for other forces in the past. Improving airlift capability during a major European war is an important reason for the purchase of this aircraft. In recognition, the non-U.S. members of NATO could collectively agree to pay 60 percent of the acquisition and operating costs of the C-17 fleet. Once the full fleet of 210 C-17 aircraft was in operation, this option would reduce U.S. operating expenses by \$950 million a year. If allies also paid 60 percent of the acquisition costs of the C-17, larger savings would occur between 1988 and the year 2000; this action would reduce U.S. costs by \$19.4 billion. Although more far-reaching, this approach would be analogous to the current NATO plan for acquiring and operating AWACS surveillance aircraft stationed in Europe.

TABLE 5. SAVINGS FROM ACTIONS TO OFFSET OUT-OF-AREA COSTS
(In millions of dollars)

Action	Operating Savings	Investment Savings
Allies fund the incremental costs of deploying U.S. forces in the Persian Gulf and Indian Ocean.	180	n.a.
NATO allies share the costs of acquiring and operating the C-17 airlift aircraft fleet.	950	19,400
Total	1,130	19,400

SOURCE: Compiled by the Congressional Budget Office based on data supplied by the Department of Defense.

NOTE: n.a. = not applicable.

As with the previous set of options, the allies might not agree to these approaches, since savings in the U.S. defense budget would generally be matched by increases in their budgets. Moreover, sharing of costs could lead to sharing of decisions about procurement and operation of forces, which would limit U.S. flexibility.

Reductions in U.S. Forces

The first two sets of illustrative options required that U.S. allies agree to bear increased costs. The final set of actions involves reductions in U.S. forces deployed outside our borders and could be carried out unilaterally by the United States. In 1987, 524,000 U.S. military personnel--24 percent of U.S. active-duty forces--were deployed abroad (see Table A-7 in the Appendix for a comparison of numbers of U.S. and allied foreign troops deployed abroad). Reducing those forces could achieve substantial savings. But savings would be realized only if equipment and personnel were eliminated from U.S. forces. Simply withdrawing these forces and basing them in the United States would offer minimal savings. Indeed, rebasing overseas forces in the United States could actually increase defense costs for a period if new military facilities had to be constructed or if a decision was made to buy and preposition extra equipment overseas for the forces in order to meet wartime deployment schedules.

One possible reduction in overseas forces involves troops that operate nuclear weapons that would be eliminated under the pending treaty on

Intermediate Nuclear Forces (INF). About 10,000 U.S. military personnel are stationed in Europe to operate those weapons. Eliminating those forces and the operating costs associated with their units would eventually reduce the U.S. defense budget by \$480 million a year. Additional savings of as much as \$580 million a year could be achieved if forces that provide indirect support for these 10,000 troops--such as those that provide medical care, training, and administration--were eliminated (see Table 6). Reductions in

TABLE 6. SAVINGS FROM REDUCING U.S. FORCES DEPLOYED ABROAD (In millions of dollars)

Action	Annual Operating Savings			Investment Savings
	Direct	Indirect	Total	
Reduce European troop strength by amount of INF forces.	480	580	1,060	a/
Remove two Army divisions and two Air Force tactical fighter wings from Europe.	2,780	2,500	5,280	15,220
Reduce the size of the Sixth Fleet.	500	200	700	12,400
Reduce Pacific forces by 10,000 personnel.	b/	b/	310	c/
Total	3,760	3,280	7,350	27,620

SOURCE: Compiled by the Congressional Budget Office based on data supplied by the Department of Defense.

- a. The Administration has no plans for the eventual replacement of the Pershing II or Ground Launched Cruise Missiles (GLCMs).
- b. Detail is not available.
- c. Information is lacking to estimate eventual investment savings.

forces providing indirect support, however, would involve reductions in troops now based in the United States.

Another approach to reducing U.S. forces might be to reduce our naval presence in areas where allied navies operate. For example, the United States could reduce the size of the Navy's Sixth Fleet, which is stationed in the Mediterranean Sea, to compensate for the 21 ships (excluding minesweepers) that we have deployed to the Persian Gulf and Indian Ocean. Annual savings in direct costs would amount to \$500 million; including indirect costs would bring savings to \$700 million. In the long run, another \$12.4 billion would be saved because a smaller Navy would require the purchase of fewer ships.

This reduction would eliminate most of the U.S. Navy forces in the Mediterranean Sea. But the reduction would not eliminate all NATO presence in the Mediterranean. France, Italy, and Spain all maintain substantial naval forces, including carrier-based aircraft, that can be deployed to the Mediterranean.

An even more substantial withdrawal of European forces would involve eliminating from U.S. forces one of the armored and one of the mechanized infantry divisions, as well as two of the tactical fighter wings, now stationed in Europe. During peacetime this would leave two and two-thirds U.S. divisions and about seven and one-third fighter wings stationed in Europe. This action would involve withdrawing some 43,000 U.S. personnel now deployed in Europe and eliminating them from U.S. forces. Savings in

personnel and operating costs would amount to about \$2.8 billion a year. Another 61,000 U.S. personnel, some of whom are based in the United States, provide indirect support for these forces. Eliminating these indirect support forces would bring total savings up to \$5.3 billion a year. In addition, the United States would eventually realize budgetary savings of some \$15.2 billion that would otherwise be spent to replace the equipment of these forces.

Forces might also be withdrawn from theaters other than Europe. For instance, U.S. Pacific Forces number some 129,000 personnel. A reduction of 10,000 personnel would result in annual savings of about \$310 million.

Summary of Options

These three categories of options could substantially reduce the U.S. defense budget. Taken together, all three types could reduce operating and construction costs by as much as \$16.2 billion a year; acquisition savings would, over time, add substantially to that total. Allied spending would also increase, further equalizing the defense burden.

I do not want to suggest, however, that these options could be undertaken without risk. Unless offset by increases in the capabilities of our allies, these options would reduce the ability of the West to defend itself in Europe and the Pacific at a time when some believe that, at least in Europe, the Soviets already have a military advantage. Nor is it clear that the allies would offset reductions in U.S. forces with increases in their own

forces. The added costs to them would be substantial. Some U.S. allies also face serious manpower problems; indeed, some face larger percentage decreases in their populations of military-age young people than that now occurring in the United States.

Moreover, these options illustrate only some of the many proposals to reduce U.S. defense spending. It is possible that other approaches--such as the termination of certain weapons systems or the elimination of selected military units based in the United States--might reduce U.S. defense spending with less obvious effects on this country's allies. If the U.S. defense burden is to be adjusted downward, one must consider how to do so without weakening the resolve of the allies to meet their own commitments.

CONCLUSIONS

Madam Chairwoman, the quantitative measures in my testimony show that, while allied contributions are sometimes substantial, the United States devotes a larger share of its resources to the common defense than most of its allies. By several measures, the United States also does more than its share in key categories of military capability. There are important limitations in using these measures to judge the fairness of burdensharing. The greatest limitation is that the measures capture only the contribution of various countries to defense. Those contributions must be judged against the security benefits to the United States that our allies provide.

If you judge that the United States should reduce its share of the defense burden, my testimony provides illustrative options. Taken together, they would make the economic burden of defense more equal. None, however, could be carried out without creating problems or incurring penalties. Many of the options would require substantial increases in allied defense spending, which might not be forthcoming. Others could weaken allied defense capability in Europe and the Pacific, unless U.S. allies increased their own capabilities.

In one sense, these options make your panel's deliberations more difficult in that they offer no easy answers to the dilemma of how to share defense costs among allies with widely varying economic resources and political goals. But I hope these options and the other information in my testimony will also help in your search for solutions to that difficult dilemma.

APPENDIX

TABLE A-1. PER CAPITA DEFENSE EXPENDITURES, 1986
(In U.S. dollars)

Country	Per Capita Defense Expenditures
United States	1,155
NATO Allies	318
Belgium	346
Canada	308
Denmark	322
France	511
Germany	453
Greece	232
Italy	235
Luxembourg	145
Netherlands	365
Norway	519
Portugal	90
Spain	113
Turkey	53
United Kingdom	488
Other Allies	137
Australia	673
Japan	163
New Zealand	610
Philippines	9
South Korea	121
Thailand	30

SOURCES: NATO Press Service, "Financial and Economic Data Related to NATO Defense" (December 1987), and International Institute for Strategic Studies, The Military Balance 1987-1988 (London: IISS, 1987) for defense expenditures; International Monetary Fund, International Financial Statistics Yearbook (1987) for exchange rates and population.

TABLE A-2. DEFENSE AND ECONOMIC ASSISTANCE COMBINED, IN PERCENTAGES OF GROSS DOMESTIC PRODUCT, 1986

Country	Defense Expenditures	Economic Assistance	Combined Expenditures	Index of Effort (U.S. = 100)
United States	6.7	0.2	6.9	100
NATO Allies				
Belgium	3.0	0.5	3.4	50
Canada	2.2	0.5	2.6	38
Denmark	2.0	0.8	2.9	41
France	3.9	0.7	4.6	67
Germany	3.1	0.4	3.5	51
Greece	6.1	--	6.1	88
Italy	2.2	0.4	2.6	38
Luxembourg	0.9	--	0.9	14
Netherlands	3.0	1.0	4.0	58
Norway	3.1	1.1	4.3	62
Portugal	3.2	--	3.2	47
Spain <u>a/</u>	2.0	--	2.0	28
Turkey	4.8	--	4.8	69
United Kingdom	5.0	0.3	5.3	77
Non-U.S. NATO Weighted Avg. <u>b/</u>	3.3	0.5	3.7	54
Japan <u>a/</u>	1.0	0.3	1.3	19

SOURCES: Congressional Budget Office computations using data from NATO Press Service, "Financial and Economic Data Related to NATO Defense" (December 1987) for defense expenditures; and data for gross domestic product from International Monetary Fund, International Financial Statistics (January 1988); and Organization for Economic Cooperation and Development, Development Assistance (December 1987).

NOTES: Detail may not add to totals because of rounding. Dashes indicate country does not provide economic assistance.

a. Defense expenditures for Spain and Japan use the national, not NATO, definition as reported in International Institute for Strategic Studies, The Military Balance 1987-1988 (London: IISS, 1987).

b. Using 1986 gross domestic product shares.

TABLE A-3. NATIONAL GOVERNMENT FISCAL POSITION
(As percent of GDP)

Country	Expenditures	Revenues	Surplus or Deficit (-)
United States	23.5	20.0	-3.5
NATO Allies			
Belgium	51.1	45.3	-5.9
Canada	17.5	19.1	1.6
Denmark	36.8	42.6	5.8
France	42.2	41.1	-1.1
Germany	28.5	29.4	1.0
Greece	44.1	35.5	-8.6
Italy	43.6	36.5	-7.2
Luxembourg	35.5	42.4	6.9
Netherlands	53.2	52.8	-0.4
Norway	38.7	47.5	8.8
Spain	27.5	25.1	-2.4
Turkey	17.5	18.1	0.6
United Kingdom	38.5	38.0	-0.5
Other Allies			
Australia	26.7	26.5	-0.2
Japan	15.0	12.7	-2.3
New Zealand	38.6	37.7	-0.8
Philippines	9.1	11.3	2.2
South Korea	14.8	18.2	3.3
Thailand	16.8	15.6	-1.2

SOURCE: Computed by the Congressional Budget Office based on data from the International Monetary Fund, Government Financial Statistics Yearbook (1987).

TABLE A-4. TAX REVENUES AS A PERCENT OF GROSS DOMESTIC PRODUCT

Country	Year	Tax Revenue	
		Central	General
United States	1985	18	27
NATO Allies			
Belgium	1985	43	46
Canada	1985	17	34
Denmark	1986	37	51
France	1985	39	43
Germany	1986	27	39
Greece	1985	32	n.a.
Italy	1986	38	n.a.
Luxembourg	1984	38	37
Netherlands	1986	45	46
Norway	1986	40	48
Portugal	1986	25	n.a.
Spain	1984	23	27
Turkey	1986	15	n.a.
United Kingdom	1985	34	37
Other Allies			
Australia	1986	24	29
Japan	1985	12	n.a.
New Zealand	1985	32	n.a.
Philippines	1985	10	n.a.
South Korea	1986	16	n.a.
Thailand	1985	14	15

SOURCE: International Monetary Fund, Government Finance Statistics Yearbook (1987).

NOTE: n.a. = not available.

TABLE A-5. U.S.-NATO SALES AND PURCHASES OF MILITARY
HARDWARE (In millions of current year dollars, fiscal years)

Country	U.S. Sales 1984-86 Average	U.S. Purchases 1984-86 Average	U.S. Balance 1984-86 Average
All NATO Allies	6,824.5	2,572.0	4,252.5
Belgium	198.7	118.4	80.2
Canada	964.3	972.1	-7.8
Denmark	120.9	31.2	89.7
France	162.3	129.1	33.3
Germany	1,077.6	371.1	706.5
Greece	148.3	9.2	139.1
Italy	250.7	112.7	137.9
Luxembourg	3.9	2.2	1.7
Netherlands	644.2	71.4	572.8
Norway	137.8	43.6	94.2
Portugal	95.2	17.3	77.9
Spain	258.2	41.4	216.9
Turkey	1,789.5	2.0	1,787.5
United Kingdom	972.7	650.1	322.6

SOURCE: Office of the Assistant Secretary of Defense for Production and Logistics.

TABLE A-6. TRADE WITH SOVIET-BLOC COUNTRIES AND TOTAL
TRADE, 1986 (In millions of U.S. dollars)

Country	Volume of Trade with Soviet-bloc Countries	Volume of Trade with World	Trade with Soviet-bloc Countries as a Percent of Total
United States	4,196	604,372	0.7
NATO Allies	48,600	1,784,984	2.7
Belgium	2,602	137,443	1.9
Canada	1,627	173,302	0.9
Denmark	1,163	44,002	2.6
France	7,223	254,345	2.8
Germany	17,723	434,383	4.1
Greece	874	17,010	5.1
Italy	7,214	197,752	3.6
Luxembourg ^{a/}			
Netherlands	3,002	156,288	1.9
Norway	541	38,550	1.4
Portugal	204	17,111	1.2
Spain	1,493	62,262	2.4
Turkey	840	19,123	4.4
United Kingdom	4,094	233,414	1.8
Other Allies	8,338	541,882	1.7
Australia	902	46,457	1.9
Japan	6,993	338,464	2.1
New Zealand	168	11,927	1.4
Philippines	41	10,000	0.4
South Korea	0	68,959	0
Thailand	234	18,079	1.3

SOURCE: International Monetary Fund, Direction of Trade Yearbook (1987).

NOTE: Soviet-bloc countries include the Warsaw Pact nations (Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, and the USSR), as well as Albania, Cuba, Mongolia, and North Korea.

a. Included in figures for Belgium (see above).

TABLE A-7. DEPLOYMENT OF MILITARY PERSONNEL ABROAD, 1987
(In thousands)

Country	Active-Duty Military Personnel	Number of Personnel Based Abroad	Percentage of Active-Duty Forces Abroad
United States	2,174	524	24.1
NATO Allies	3,354	258	7.7
Belgium	91	29	31.4
Canada	85	5	6.1
Denmark	29	0	0
France	547	84	15.4
Germany	495	0	0
Greece	209	3	1.2
Italy	388	0	0
Luxembourg	1	0	0
Netherlands	108	6	5.1
Norway	37	0	0
Portugal	67	0	0
Spain	325	19	5.8
Turkey	654	23	3.5
United Kingdom	319	90	28.1
Other Allies	1,319	0	0
Australia	71	a/	0.2
Japan	246	0	0
New Zealand	13	0	0
Philippines	105	0	0
South Korea	629	0	0
Thailand	256	0	0

SOURCES: Department of Defense, Military Manpower Statistics (September 30, 1987) for U.S. personnel; International Institute for Strategic Studies, The Military Balance 1987-1988 (London: IISS, 1987).

R.L. Sivard, World Military Expenditures 1987-1988 (Arlington: World Priorities, 1987).

a. Less than 500 personnel.