What Happened to the Peace Dividend?

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Recent data on countries' military spending indicate that a sizable peace dividend has been achieved since 1985. How much have countries cut, and how have they allocated the resources this has freed up?

N IMF study published some years ago (Hewitt, 1991) found that world military spending declined by 1.3 percentage points of GDP between 1985 and 1990, with declines in all regions and for both industrial and developing countries. More recent data show that this downward trend continued during 1991-95. Utilizing WEO data for 130 IMF member countries, we estimated that worldwide military spending declined from 3.6 percent of world GDP in 1990 to 2.4 percent in 1995, with most of the savings taking place in the transition economies and the industrial countries (Chart 1). The reduction was widespread; 90 of the 130 countries included in the study trimmed the share of military outlays in GDP during the period, while only 40 maintained or increased them.

On a regional basis, military spending fell everywhere except in the Western Hemisphere; there were especially sharp cuts in the transition economies (5 percent of GDP) and the Middle East and Europe (1.7 percent of GDP), but more modest reductions (less than 1 percent of GDP) in the industrial countries, and in Africa and Asia.

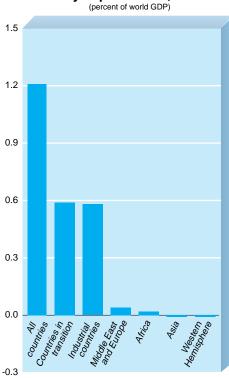
Overall, the WEO data indicate that in the decade since 1985, military spending 1.2 has declined by nearly 3 percentage points of GDP. This implies a "peace dividend" in 1995 of some \$345 billion, if actual military spending is compared with what it would have been if the 1990 ratio of military spending to GDP had prevailed, and as much as \$720 billion using the 1985 ratio.

Other sources, which exclude data from the former Soviet Union, showed similar results, although the magnitude of the decline was smaller because of differences in country coverage and definitions of military expenditure. These data are derived from the International Institute of Strategic Studies (IISS), the Stockholm International Peace Research Institute (SIPRI), and the United States Arms Control and Disarmament Agency (ACDA). Between 1990 and 1994, ACDA data for 103 coun- -0.3 tries show a decline in military spending of 0.7 percent of GNP; SIPRI data for 68 coun-

tries show a decline in spending of 0.6 percent of GDP; and IISS data for 90 countries show a decline of 0.4 percent of GDP.

Reduction in

military expenditures, 1990–95



Source: International Monetary Fund, World Economic Outlook database, 1996.

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The peace dividend

How have the resources saved by reducing military outlays been used in countries where military spending has declined? One might expect that at least some portion of the peace dividend would be used to increase nonmilitary spending, while the remainder would be returned to the private sector through a reduced fiscal deficit and/or lower taxes. For countries in which military spending has increased, the relevant issue is the extent to which higher military spending has crowded out other spending, increased the fiscal deficit, or led the countries to raise taxes.

Analysis by country group. Our study compared the experiences of a group of developing and transition countries during 1985–92. Out of 80 countries in the sample, 51 (of which 5 are economies in transition) reduced military spending during this period. Countries that reduced military outlays

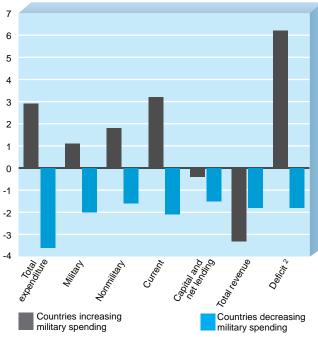
cut them by an average of 2 percent of GDP while simultaneously cutting nonmilitary outlays by 1.6 percent of GDP (Chart 2). Nonmilitary current outlays were cut by only 0.1 percent of GDP in these countries, with the remainder coming through cuts in capital expenditures and net lending. Because the decline in total expenditure exceeded the fall in revenues, these countries experienced a reduction in the central government's budget deficit as a share of GDP.

The process by which a country determines its levels of military and other spending is complex, making it difficult to isolate the impact of the peace dividend on other fiscal variables. Nevertheless, based on the available data, it appears that reductions in military spending have not been primarily associated with increases in other spending. Rather, the peace dividend has been largely returned to the private sector through lower deficits and, in some cases, lower taxes. If military spending had not declined in these countries, other spending would presumably have declined even more than it actually did and/or there would have been greater crowding out of private sector activity, either through higher taxes or increased fiscal deficits.

The 29 developing countries in the sample that increased their military spending



(percent of GDF)



Source: International Monetary Fund, World Economic Outlook (WEO) database, 1996. ¹ Unweighted average for those countries in WEO sample without missing data. ² Change in total expenditure *less* change in total revenue.

as a share of GDP behaved in the opposite way to those that cut military outlays: military spending rose in the context of higher nonmilitary and total spending, and there were sharp increases in the deficit. This suggests that military spending may have crowded out private sector investment. Also, despite higher total spending, capital spending and net lending declined, suggesting that higher military spending may have crowded out public investment as well. The decline in investment is broadly consistent with a number of studies (for example, Knight and others, 1996) indicating that military spending may retard economic growth over the medium term.

Individual country experiences. Additional insight into the impact of changes in military spending can be gained by looking at the experiences of individual countries. We examined data for 2 groups of 10 developing countries that had the largest increases and decreases (in terms of percentages of their GDPs), respectively, in military spending during 1985–92. Comparable data were examined for two smaller groups of industrial countries with large percentage increases or decreases.

We can infer how the peace dividend was used by looking at changes in the composition of countries' spending. Most of the 10 developing countries with the largest cuts in military spending were able to maintain their levels of social spending (social security, health, education, and housing), even in the face of sharp declines in total expenditure. In fact, on average, such spending rose 2.1 percentage points of GDP during 1985-92 for the seven countries for which data are available. Some economists have argued that there is scope for raising social spending in many countries and that such spending can have a high social rate of return. Our analysis suggests that reducing military spending may have allowed countries to maintain or increase social spending, despite the need for sharp overall spending cuts. Of course, it is impossible to say-at this level of aggregation and without a detailed sectoral analysiswhether a shift from military to social spending improved the efficiency and equity of public spending in these countries.

In addition, fiscal deficits declined in 7 of the 10 develop-

ing countries with the largest cuts in military spending, despite the fact that revenue-to-GDP ratios fell by an average of 7 percentage points for the group as a whole. In this way, the cutback in military spending may have encouraged private investment.

The results are mixed for the industrial countries. Of the five industrial countries with the largest cuts in military spending during 1985–92, three increased both their nonmilitary and total spending, while in two others, cuts in military outlays were accompanied by cuts in total expenditures. All three countries that increased their nonmilitary spending also increased their spending on health, education, and housing, suggesting that there was some diversion of military spending to the social sector as part of the peace dividend. Disaggregated data are not available for countries that reduced total expenditures.

The 10 developing countries with the largest increases in military spending during 1985–92 had an average increase of 2.7 percentage points of GDP in such spending. In 6 of the 10 cases, both the shares of total spending and nonmilitary spending in GDP rose. For those countries, military spending accounted for an average of 18 percent of the total increase in spending. In each of the three cases for which data are available,

Resilience of military spending, 1985–92¹

	Countries	Change in expenditure as share of GDP ²		Change in expenditure as share of total spending ²	
		Total	Military	Military	Social
Countries increasing total spending	22	6.3	0.1	-1.9	0.4
Countries decreasing total spending	29	-6.1	-1.7	-1.5	6.4
Total	51	-0.8	-0.9	-1.7	3.8

Sources: International Monetary Fund, World Economic Outlook and Government Finance Statistics databases. ¹ Covers 15 industrial countries, 35 developing countries, and 1 transition country.

² Unweighted data.

social spending rose, by an average of 9.4 percentage points of GDP, suggesting that social spending was not substantially crowded out by higher military spending, while spending on economic services (to support central government activities in agriculture, energy, mining, transportation, communications, and other economic services) declined. In addition, the central government's deficit increased in five of the six countries whose shares of both total spending and nonmilitary spending in GDP increased, suggesting that higher military and social spending may have primarily crowded out private investment.

For the four remaining countries, however, large increases in military spending were associated with declines in the shares of nonmilitary and total spending. In each of these countries, total revenue declined sharply as a share of GDP, presumably contributing to the need to reduce spending. The brunt of the adjustment was borne by capital spending and net lending, which fell dramatically, by an average of more than 11 percentage points of GDP. Current spending, in contrast, increased on average. Thus, military spending appears to have crowded out public investment in these four countries, perhaps with negative consequences for future growth. In three of them, the deficit rose as well, with potential implications for private investment. Military spending as a share of GDP rose in only two industrial countries over the period. In both, the increases were small and were part of much larger increases in total spending and in the deficit that were driven largely by higher social spending.

Resilience of military and social spending. Focusing on a sample of countries experiencing large increases or decreases in total spending, our results indicate that military spending during 1985–92 has *not* been resilient to *either* fiscal tightening *or* expansion, contrary to the findings in the literature for earlier time periods. In particular, countries that have implemented fiscal adjustment appear to have largely protected the social sector, while their military spending has borne a substantial part of the burden of adjustment.

In the table, we see that in more than half of the 51 countries for which complete data on total, military, and social spending are available, total spending as a share of GDP declined over 1985-92. For these countries, military spending declined, on average, by 1.7 percentage points of GDP, contributing some 28 percent of their total budget cuts. Military spending declined by proportionally more than total spending, falling by an average of 1.5 percentage points of total spending over the period. This result contrasts with that for social spending, which increased its share of total spending by more than 6 percentage points of total spending. These results again suggest the existence of a peace dividend, as reduced international tension may have allowed countries to rely more heavily than in the past on cuts in military outlays to achieve fiscal tightening. For those countries that reduced military spending as a share of GDP during 1985-92, this reduction's contribution to achieving fiscal adjustment was even more significant. In these countries, total spending fell by an average of 3.6 percent of GDP, with falling military spending accounting for more than half of the decline. A fairly similar picture emerges for the developing countries with the 10 largest reductions in military spending as a share of GDP; in these countries, military spending fell, on average, by 6.7 percent of GDP, about half of the average reduction in their deficits.

Our results for countries increasing total spending are qualitatively similar to those found in previous research, with increases in spending going disproportionately to nonmilitary and, in particular, to social spending. For the 22 countries increasing their total expenditure, military spending was virtually unchanged as a share of GDP, leading to a decline in the share of military outlays in total spending of almost 2 percentage points. The share of social spending in total spending rose by 0.4 percentage points.

In short, during 1985–92, military spending became a somewhat lower priority for countries, declining, on average, by 1.7 percent of total spending, while social spending increased its importance in the budget, rising by an average of 3.8 percentage points of total spending. Countries increasing their total spending as a share of GDP only maintained military spending as a share of GDP, while those cutting their total spending as a share of GDP tended to reduce the share of military spending relatively sharply.

Conclusion

Recent data on military spending indicate a sizable peace dividend has been achieved since 1985. Results suggest that countries that have made sharp cuts in military spending typically have also reduced nonmilitary spending as well as their fiscal deficit, thereby potentially encouraging private investment. There is indirect evidence that military spending cuts have also allowed countries to maintain or increase their social spending in the face of total spending cuts. In contrast, countries that have increased their military spending have also increased their other spending and sharply increased their deficits. Higher military spending may also have crowded out private investment and, for some countries, public investment. These results underscore the role that reducing excess military expenditure can play in securing economic growth. **F**&D

This article is derived from the authors' paper, "Worldwide Military Spending, 1990–95," IMF Working Paper No. 96/64 (June 1996).

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