

UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY

WORLD MILITARY EXPENDITURES 1966-67

| This report is the third in a series issued annually by the Economof ACDA. The data in many cases are subject to qualifications an approximate orders of magnitude; they should therefore be used v | d represent |
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UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY ECONOMICS BUREAU

WORLD MILITARY EXPENDITURES AND RELATED DATA CALENDAR YEAR 1966 AND SUMMARY TRENDS, 1962-1967

RESEARCH REPORT 68-52

December 1968

INTRODUCTION

For the third year the United States Arms Control and Disarmament Agency has compiled information from all sources in order to assess the size and impact of the world's military expenditures. The survey covers 120 countries, all those for which factual data exist or for which there is some reasonable basis for estimation.

Although there are a number of cases in which information is incomplete, three years ago ACDA made the decision to publish the available data in the belief that this would help to focus attention on the subject and lead (1) to a better understanding of the economic and social significance of the arms competition and (2) to improvement of the statistics. The ACDA report was the first to provide world-wide coverage with a breakdown of national figures, as well as a world total converted to dollar equivalents. The report also compares military expenditures with certain other public expenditures and with gross national product. As a reference tool it has attracted considerable interest internationally, and among public officials as well as scholars.

I hope this compilation will not only meet the needs of scholarship, however, but will also serve as the annual "reminder" which we intend it to be.

William C. Foster Director

William C. Fratu

December 1968

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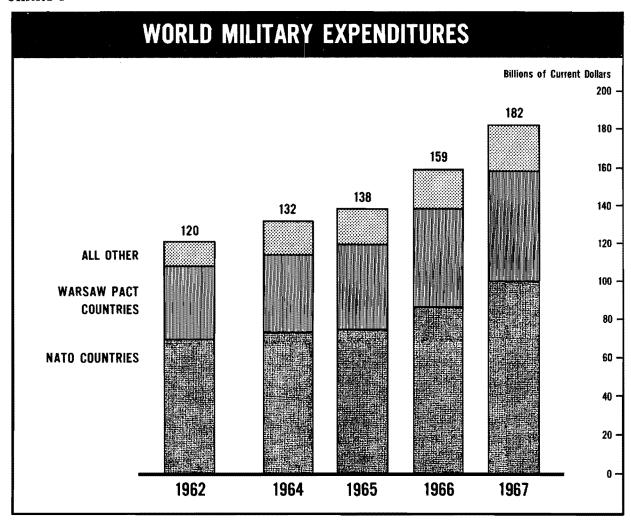
HIGHLIGHTS OF THE DATA

This third annual survey of military expenditures by the U. S. Arms Control and Disarmament Agency (ACDA) covers 1967 insofar as preliminary data permit estimates on a regional or global basis. The statistical tables which provide figures for 120 countries are for 1966, the latest year for which the detailed figures are available.

Global expenditures for military purposes have reached a new record high level. From \$132 billion in 1964, they rose to \$138 billion in 1965, \$159 billion in 1966 and an estimated \$182 billion in 1967. Preliminary data suggest a continued rise in 1968. Since 1962, when UN experts estimated world military outlays at \$120 billion, the increase has been more than 50 percent. (The foregoing figures are in current dollars.)

Military spending today exceeds that of any prior period except the peak fighting years of World War II. Global military expenditures now take more than 7 percent of the world's gross product. In money terms they are equivalent to the total annual income produced by the one billion people living in Latin America, South Asia and the Near East. They are greater by 40 percent than world-wide expenditures on education by all levels of government and more

CHART I



than three times world-wide expenditures on public health.

Very rough estimates indicate that since 1900 more than \$4,000 billion have been spent on wars and military preparedness. If the current level of military spending should continue, this total will be doubled in only 20 years. If the recent rate of <u>increase</u> in military spending continues, the arms race will consume another \$4,000 billion in only 10 years.

The Trend of Military Expenditures

World military expenditures surged sharply upward in 1966 and 1967, after two years of comparatively small changes overall (Chart I). Spending in 1967 was \$44 billion greater than in 1965, an increase of almost one-third.

The dominant influence of the NATO and Warsaw Pact powers on the world's arms race became more pronounced. The two major military alliances accounted for nearly nine-tenths of the rise in expenditures in 1966 and 1967. The increased outlays of the two leading powers in the alliances, the United States and the Soviet Union, made up \$35 billion of the \$44 billion increase from 1965 to 1967 in world military spending.

Although ACDA's two earlier surveys had found indications of a somewhat more rapid rise in expenditures in developing than in developed countries, this tendency was no longer evident in 1966 and 1967. Compared with the competition between the bigger powers, the trend in the less developed countries (LDC's) appeared relatively moderate. Increases in military expenditures from 1965 to 1967 were 35 percent for the NATO countries, 29 percent for the Warsaw Pact and 24 percent for the rest of the world including the LDC's.

Regional totals of military outlays turned higher in most cases from 1965 to 1966, the greatest relative increases being in North America, Europe and Asia. The only regional total which appeared to have dropped slightly was that for Africa. The expenditure total for South Asia was lower in 1966 than in 1965 in dollar equivalents (Table I) but this was largely a reflection of a new official exchange rate for India; India's military expenditures rose in terms of purchasing power equivalents (Table V).

Comparisons with Economic Growth

Since 1964, the year of ACDA's first survey of world military expenditures, there has been a

steady and substantial rise in the aggregate gross national products (GNP) of the world, as well as in military outlays. However, not only in absolute but also in relative terms (that is, in comparison with the broader economic base represented by a larger GNP) the <u>burden</u> of the arms race was heavier for the world as a whole in 1967 than in 1964.

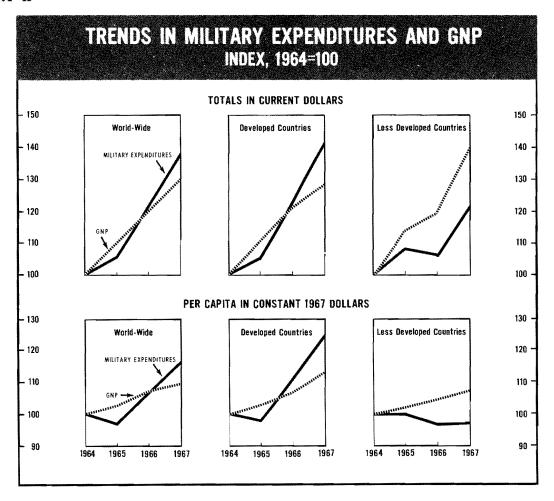
Chart II on page 3 and the summary table on page 8 show the relative trends in GNP and military expenditures and their implications in per capita terms, taking into account the rise in population and in prices between 1964 and 1967. The following conclusions are indicated:

- 1. The increase in world-wide outlays for defense is considerably larger than the increase in population, a 38 percent rise in military expenditures comparing with a 7 percent increase in population. This means that per capita military expenditures in current dollars* were 30 percent higher in 1967 than they were in 1964—a world average of \$53 per person per year compared with \$41 in 1964.
- 2. If the world-wide inflation of prices is taken into account, the increase in military expenditures in <u>real</u> terms (that is, in constant dollars*), although less pronounced, is still a substantial 23 percent in total and 16 percent per capita.
- 3. The relative rise in military expenditures from 1964 to 1967 has been more rapid than the growth of world GNP. While military expenditures per capita expressed in constant prices rose 16 percent, GNP per capita increased only 9 percent, suggesting that a significant share of the increment in real product did not contribute to the improvement of living standards but went instead to heavier military expenditures.

Variations in Pattern

The 1964-1967 period shows striking variations in national and regional trends in both military outlays and in comparative measures

^{*} Figures in current dollars reflect the prices and exchange rates of the respective years to which they apply. Figures in constant dollars have been adjusted for changes in both prices and exchange rates to show real values in terms of 1967 dollars. (See discussion of prices in Appendix).



of economic change. For summary purposes, Chart II illustrates these differences in terms of two general categories of countries, the developed and less developed.

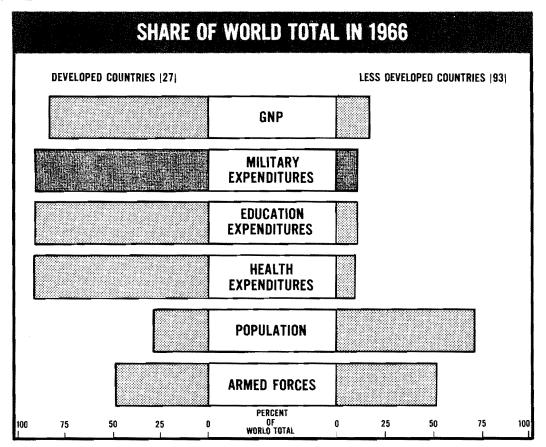
In the developed countries the sharpest rise in military outlays occurred after 1965 and by 1967 had pushed this index above the GNP trend. In constant dollars per capita, military expenditures in these countries in 1967 averaged 24 percent higher than in 1964, compared with the 16 percent rise world-wide. The relative gain in real GNP per capita was only half as great, indicating that a growing proportion of the total product in these countries went to military programs. In 1967 the ratio of military expenditures to GNP in the developed countries averaged 8 percent compared with 7 percent in 1964.

In the less developed countries the trend of military expenditures relative to GNP was somewhat more restrained. The rise in military spending appeared to taper off in 1966. Although a new spurt developed in 1967, the index stayed below that for GNP. In real terms, per capita outlays in 1967 averaged slightly less

than in 1964, while GNP was slightly higher. The ratio of military expenditures to GNP diminished somewhat over the period; by 1967 it was about 4 percent. This compared with 8 percent in the developed countries.

The 4 percent share of the LDC's product, however, was taken out of a considerably smaller overall product and one that was growing more slowly. For these reasons the diversion of resources to military programs in these countries probably represented a greater strain on their economies in terms of the extent and urgency of unmet needs. Per capita GNP in the LDC's averaged less than \$200 in 1967, not even one-tenth that in the developed countries. A severe price inflation in many of the LDC's and a relatively large increase overall in population (8 percent compared with 3 percent in the developed countries) made the GNP growth rate per capita a very modest one. In real per capita terms the rate of growth in the less developed areas between 1964 and 1967 was only half that of the developed countries.

What these divergent trends signify for the distribution of resources between the richer



and poorer parts of the world is suggested by Chart III. By 1966 the 27 developed countries in this survey, representing 28 percent of the world's population, had 83 percent of its product and spent 89 percent of world military expenditures.

The 93 less developed countries, with 72 percent of the population, had only 17 percent of the world GNP. They spent 11 percent of world military expenditures. Although accounting for an increasing proportion of the world's population, the LDC's had not improved their relative economic position during the period under review.

Further comparisons between the developed and developing countries are discussed in the section following.

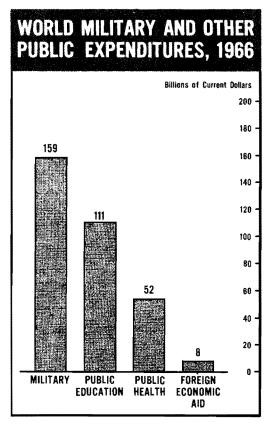
Other Public Expenditures

The dimensions of the military component of national budgets take on more significance when compared with other types of public outlays. The data available permit comparisons with public expenditures on education and health by all levels of government and with expenditures for official foreign economic assistance to LDC's (Chart IV). Unfortunately

the figures for education and health are not yet on as current a basis as military expenditures and GNP; therefore they do not lend themselves to comparisons of trends and should be used in a broad rather than precise way for comparisons of level.

Education — The size of the world's public education budget is about two-thirds the budget for military programs. Half the governments in the world spend more on defense than on education. The average annual expenditure per soldier, world-wide, is \$7,800. For the estimated one billion young people in the world school-age population (ages 5-19), public expenditures for education average \$100 a year.

Country-by-country comparisons of education expenditures must be made cautiously because of differences in national practices with respect to the financing of education. Communist countries support all education through the public budget while others do so through varying mixes of public and private funds. In the United States, for example, the Office of Education estimates private expenditures at \$7 billion in 1966, compared with national, state and local governmental expenditures of \$34 billion.



On average, developed countries spend a significantly higher proportion of their gross national product on public education (5 percent) than do LDC's (3 percent). This relative showing for the two groups of countries is roughly similar to the relative proportion of GNP going to military expenditures.

The contrasts between developed and developing are more marked when the differences in population are taken into account. (See Chart III.) LDC's have 72 percent of the world's population but their public expenditures on education represent only 11 percent of the world's expenditures. On a per capita basis this means that LDC's spend an average of \$5 annually for education and developed countries an average of \$100.

<u>Health</u> — The world's public health budget is \$52 billion, or one-third the size of its military budget. Only 36 countries, out of 120, spend as much on public health programs as on military programs.

As the figures quoted relate to current outlays only, they understate total public expenditures on health. In the countries for which recent data are available, national practices vary sharply, but on average reported capital outlays in 1966 and 1967 represented a 10 percent addition to public health budgets.

In the public health field the difference between the developed and developing countries is somewhat more extreme than it is in public education. Developed countries in 1966 accounted for more than 90 percent of world expenditures, LDC's for less than 10 percent. Public outlays for health care average \$50 per person annually in the developed countries, and \$2 per person in the LDC's.

Like education, health care is privately financed to varying degrees in different countries. Available evidence suggests that on the whole private spending is much more significant in this field than it is in education. In the United States, as an example, it is estimated that private spending for health is approximately 3 times public disbursements.

Foreign economic aid — Official foreign economic assistance provided to the LDC's was approximately the same in 1966 as in 1965. A world total of about \$8 billion in economic aid was less than one-half of one percent of the GNP of the donor countries and equivalent to 6 percent of their military expenditures. Aid given averaged \$8 per capita in the developed countries, as compared with \$170 per capita spent on military programs.

National receipts of foreign economic assistance as shown in the country tabulations amounted to \$7 billion, including multilateral as well as bilateral contributions, and receipts from Communist donors. (The difference in the total of aid given and aid received is explained in the Appendix, page 22). All aid received was equal to 2 percent of the LDC's gross product. The military expenditures of the LDC's were more than twice as large as their receipts of foreign economic aid.

Manpower

One additional measure of the resource costs of military programs is the manpower which they absorb. This includes not only the armed forces themselves but also the civilians employed in supplying military goods and services directly to the armed forces and in producing the raw materials, equipment and other goods and services that are needed indirectly in the production of military goods and services.

The data available on a world-wide basis cover only active-duty armed forces. In 1966 these numbered over 20 million men and women. UN experts in 1962 estimated that in addition to 20 million in the armed forces well

over 30 million persons might be directly or indirectly engaged in productive activities resulting from military expenditures. Totals of this order of magnitude are also suggested by recent studies of U.S. manpower utilization.

A total armed forces and military-related employment of over 50 million is larger than the total population of France. It is about 4 percent, or one in twenty-five, of the economically-active population of the world. Although in absolute numbers this employment may be larger in the developed than in the less developed countries, it is in the latter, where trained and educated manpower are relatively limited, that the diversion of skills from the civilian economy may represent the more serious factor affecting economic progress.

DEFINITIONS OF TERMS*

<u>Gross National Product</u> (GNP) represents an economy's total output of goods and services, valued at current market prices paid by the ultimate consumer. Methods of conversion to U.S. dollars are outlined in the Appendix.

Military Expenditures are current and capital expenditures to meet the needs of the armed forces, including expenditures of national defense agencies for military programs, and expenditures for the military components of such mixed activities as atomic energy, space, research and development, paramilitary forces, and military assistance to foreign countries.

Foreign Economic Aid Received by less developed countries (LDC's) comprises official bilateral grants and loans (gross of repayments) disbursed by Development Assistance Committee (DAC) countries and net aid received from multilateral agencies. Aid Given by DAC countries includes official bilateral aid and net contributions to multilateral agencies. Aid Given by communist countries represents gross drawings by all non-communist LDC's, and excludes intracommunist aid. Aid from private sources and military assistance are excluded.

<u>Public Education Expenditures</u> include current and capital expenditures for pre-school, primary, secondary and university-level education. Wherever possible, expenditures by all levels of government are covered. Private spending is not included.

<u>Public Health Expenditures</u> represent current expenditures by all levels of government for the provision of medical services. Public health capital outlays are excluded here since they are not consistently available. Private spending is also excluded.

<u>Armed Forces</u> refer to military personnel actually on duty, including paramilitary forces where significant, and excluding reserve forces.

Less Developed Countries (LDC's), 93 in number, are the countries listed under Latin America, the Far East except Japan, South Asia and the Near East, and Africa except the Republic of South Africa, and also include, in Europe, Albania, Bulgaria, Greece, Portugal, Spain, Turkey and Yugoslavia.

Developed Countries, 27 in number, are all countries listed under North America, Oceania, European NATO except Greece, Portugal and Turkey, the Warsaw Pact except Bulgaria, and include Austria, Ireland, Finland, Sweden, Switzerland, Japan and South Africa.

^{*} For further discussion of terms as used in this report, see Appendix, pages 21-24.

STATISTICAL TABLES

The summary table below presents world-wide trends in military expenditures and GNP in the 1964-1967 period, based on preliminary estimates for 1967 and previous reports for earlier years, as well as the data presented in the present report.

Table I is the basic table for calendar year 1966, the latest period for which adequate coverage of 120 countries is available. It shows military expenditures and various other economic data (GNP, foreign aid, public education expenditures, public health expenditures, population and armed forces), all values being expressed in 1966 prices and official exchange rates. Regional summaries of the 1966 data are shown for all countries in Table II and for LDC's in Table III.

In addition, trends in military spending and GNP for 34 selected LDC's in the 1961-1966 period are presented in Table IV in terms of constant 1966 prices and exchange rates. These trends are also measured in Table V at estimated purchasing power equivalents rather than official exchange rates (and at current prices) for 63 individual countries.

Table VI shows how the world ranking of the 30 countries with the largest total GNP compares with their ranking in terms of per capita GNP and military expenditures.

SUMMARY TABLE:
TRENDS IN MILITARY EXPENDITURES AND GNP, 1964-1967

| | тот | AL (Bill | ione of l | Dollare) | DEB | CAPITA | Δ (Dolla | re) |
|---------------------------------------|-------------------|-----------------------|---|---------------------------------------|--|-------------------------|---------------------------|--|
| | 1017 | ALI (DIII | TOUS OF I | Juliars) | PEN | CAFIII | A (LOITA | |
| | 1964 | 1965 | 1966 | 1967 | 1964 | 1965 | 1966 | 1967 |
| | | | | -In Curre | $ent^{ig }_{Dollar_{i}}$ | 5 | | |
| MILITARY EXPENDITURES | | | | | | | | |
| World-wide Developed Less developed | | $\frac{138}{120}$ 18 | $\frac{159}{142}$ | $\frac{182}{162}$ 20 | $\frac{41}{125}$ | $\frac{42}{128}$ | $\frac{47}{149}$ | 53 170 8 |
| GNP | | | | | | | | |
| World-wide Developed Less developed | 1,589 | $\frac{2,120}{1,743}$ | $\frac{2,311}{1,916}$ $\frac{395}{395}$ | $\frac{2,500}{2,040}$ $\frac{460}{2}$ | $ \begin{array}{r} 597 \\ 1,715 \\ 145 \end{array} $ | $\frac{642}{1,847}$ 160 | $\frac{687}{2,020}$ 164 | $\frac{729}{2,141}$ |
| | | | In C | onstant 19 | 967 Dollar | S | | |
| MILITARY EXPENDITURES | | | | | | | | |
| World-wide | $\frac{147}{128}$ | $\frac{148}{128}$ | 164 145 19 | $\frac{182}{162}$ 20 | 46 138 9 | | | _ <u>53</u> 170 8 |
| GNP | | | | | | | | |
| World-wide | 1,761 | 2,264 1,847 417 | 2,403 1,966 437 | 2,500 2,040 460 | $ \begin{array}{r} 671 \\ 1,901 \\ 174 \end{array} $ | $\frac{688}{1,958}$ 177 | $\frac{715}{2,073}$ 181 | $\begin{array}{r} 729 \\ 2,141 \\ 186 \end{array}$ |

TABLE I. MILITARY EXPENDITURES AND RELATED DATA, BY COUNTRY, 1966 (Amounts in U.S. dollars at current prices and exchange rates $\frac{1}{2}$)

| REGION AND | GROSS NAT | | MILITARY EXPENDITURES | | FOREIGN ECON. AID REC'D/ | TINY CAL TITOLE | PUBLIC HEALTH | POPULATION | ARMED FO | RCES |
|--|--|---|--|--|-----------------------------|---|---|--|--------------------------------------|-------------------------------|
| COUNTRY | | \$ Per | | % of | GIVEN 2/ | EXPENDITURES 2/ | EXPENDITURES4/ | (MID-YEAR) | | % of |
| | Mil \$ | Capita | Mil \$ | GNP | 14111 d | Mil \$ | Mil \$ | Thousands | Thousands | Pop. |
| World Total | \$2,311,077 | \$ 687 | <u>\$158,976</u> | 6.9% | \$7,135 7,865 | \$110,801 | <u>\$52, 183</u> | 3, 363, 414 | 20, 305 | <u>. 6%</u> |
| North AmericaUnited States | 800, 900 747, 600 53, 300 | 3, 696 3, 796 2, 658 | 64, 883 63, 283 1, 600 | 8. 1 8. 5 3. 0 | 4,248 4,011 237 | 37, 347 34, 308 3, 039 | 13,737 12,188 1,549 | 216, 970 196, 920 20, 050 | 3, 201 3, 094 107 | 1.5 1.6 |
| Europe | 1, 037, 324 | 1, 455 | 76, 479 | 7.4 | 574 3, 075 | 58, 483 | 33, 545 | 712, 904 | 7,836 | 1.1 |
| NATO, European Belgium | 466, 621 18, 130 11, 140 | 1, <u>570</u> 1, <u>903</u> 2, 322 | 21, <u>335</u> 530 310 | 4.6 2.9 2.8 | 264 2,524 81 26 | 18, 761 868 584 | 6, <u>070</u> 37 376 | 297, 075 9, 528 4, 797 | $\frac{2}{107}$ | 1.0 1.1 |
| France5/Germany, West 5 | 101, 380 119, 580 6, 579 | 2, 052 1, 990 764 | 5,300 4,950 240 | 5. 2 4. 1 3. 6 | 823 595 54 | 3, 439 3, 832 100 | 350 1,547 47 | 49, 400 60, 076 8, 614 | 523 450 159 | 1, 1 . 7 1, 8 |
| Iceland · · · · · · · · · · · · · · · · · · Italy · · · · · · · · Luxembourg · · · · · · · · · · · · · · · · · · · | 556 61, 440 676 | 2,837 1,182 2,018 | 0 2,125 10 | 0 3.5 1.5 | NA 247 NA | 15 3, 112 29 | 7 384 10 | 196 51,962 335 | 0 376 3 | 0 . 7 . 9 |
| Netherlands Norway Portugal | 20, 750 7, 590 4, 070 | 1,666 2,022 436 | 775 260 240 | 3. 7 3. 4 5. 9 | 94 13 35 | 1,045 373 49 | 220E 127 37 | 12, 455 3, 753 9, 335 | 130 34 162 | 1.0 .9 1.8 |
| Turkey | 9, 420 105, 310 | 295 1,924 | 445 6, 150 | 4.7 5.8 | 210 610 | 221 5, 094 | 108 2,820 | 31,880 54,744 | 440 424 | 1.4 |
| NATO Total | 1,267,521 | 2,466 | 86,218 | 6.8 | 264 6, 772 | 56,108 | 19,807 | 514,045 | 6,054 | 1.2 |
| Warsaw Pact | 478, 500 7, 600 23, 800 | $ \begin{array}{r} 1,434\\ \hline 918\\ 1,671 \end{array} $ | 52,290 210E 1,400 | $\frac{NA^{6}}{2.8}$ 5.9 | 4 <u>30</u> E | 36 <u>, 294</u> 255 1, 087 | 25, 519 180 989 | 333,689 8,257 14,240 | 4, 25 <u>3</u> 15 <u>6</u> 220 | $\frac{1}{1}$, $\frac{3}{9}$ |
| Germany, East Hungary Poland Romania Soviet Union. | 28, 300 12, 000 33, 200 16, 600 357, 000 | 1,658 1,179 1,047 867 1,531 | 1,100 300 1,750 530 47,000 | 3. 9 2. 5 5. 3 3. 2 ₆ / NA ⁶ | 330 E | 1, 364 524 1, 699 765 30, 600 | 1,100E 323 1,396 531 21,000 | 17, 067 10, 179 31, 698 19, 143 233, 105 | 1 22 109 280 201 3, 165 | .7 1.1 .9 1.0 |
| Other European | 92, 203 700E 10, 020 | | 2,854 70E 135 | $\frac{3}{10}$, $\frac{1}{0}$ 7/1.3 | 310 -121 - ÑA - 56 | 3, <u>428</u> 87 338 | 1, <u>956</u> 12 282 | 82,140 1,914 7,290 | 78 <u>0</u> 38 40 | 1.0 2.0 .5 |

TABLE I. Continued

| | | | | | ADDE 1. Continue | | | | | |
|--|------------------------------------|--------------------------------|---|--|-----------------------------|---------------------------|--------------------------|--|------------------------|------------------------|
| REGION | 1 | IATIONAL CT (GNP) | MILIT EXPEND | | FOREIGN ECON. AID REC'D/ | TATALICA MILON | PUBLIC HEALTH | POPULATION | ARMED FO | DOFE |
| AND COUNTRY | Mil \$ | \$ Per Capita | Mil \$ | % of GNP | GIVEN ² Mil \$ | EXPENDITURES 3/ | EXPENDITURES- Mil \$ | (MID-YEAR) Thousands | Thousands | % of |
| Other European (Cont'd) Finland. Ireland Spain | 2, 943 1, 020 37 1.3 NA 92 | | 92 | \$ 284 33 277E | 4, 639 2, 884 31, 871 | 43 `9 291 | . 9% . 3 . 9 | | | |
| Sweden | 21, 340 14, 990 9, 020 | 2, 733 2, 499 457 | 924 388 406 | 4. 3 2. 6 4. 5 | 57 8 197 | 1,278 494 414 | 600 265 203 | 7, 808 5, 999 19, 735 | 70 25 264 | . 9 . 4 1. 3 |
| Latin America Argentina Bolivia | 102, 411 16, 240 661 | 415 716 156 | 2,135 279 17 | 2. <u>1</u> 1. 7 2. 6 | 1, 377 84 33 | 2,510 590 23 | 1,623 33 25E | 246, 909 22, 691 4, 235 | 814 118 15 | .3 .5 .4 |
| Brazil | 25, 790 4, 867 5, 457 | 310 556 293 | 798 _{8/} 113 _{8/} 92- | 3. 1 2. 3 1. 7 | 354 167 127 | 381 130 120 | 499E 104 39 | 83, 175 8, 750 18, 650 | 220 46 48 | . 3 . 5 . 3 |
| Costa Rica | 631 5,000E 996 | 405 638E 266 | 3 250E 34 | 5. 0-7/ 3. 3 | 18 1 54 | 21 226 22 | 57 150E 23E | 1,558 7,833 3,750 | 0 121 19 | 0 1.5 .5 |
| Ecuador | 1, 245 845 1, 388 | 237 284 292 | 25 10 15 | 2. 0 1. 2 1, 1 | 31 23 10 | 34 20 21 | 13 11 11 | 5, 250 2, 978 4, 761 | 19 6 9 | . 4 . 2 . 2 |
| Guyana Haiti Honduras Jamaica Mexico | 220 334 536 946 21,770 | 328 74 227 516 493 | 1 8E 7 5 | .5 ₇ / 2.4- 1.3 .5 .8 | 10 4 11 13 166 | 8 4 11 21 365 | 6 3 6 15 240 | 670 4, 485 2, 363 1, 833 44, 145 | 1 5 5 2 62 | * .1 .2 .1 .1 |
| Nicaragua | 600 698 463 | 350 542 221 | 9 1 ₈ / | 1.5 .1 1.7 | 18 27 14 | 9 23 7 | 16 12 2 | 1, 715 1, 287 2, 094 | 7 3 11 | . 4 . 2 . 5 |
| Peru | 3,547 672 1,565 7,940 | 295 669 569 890 | 83 ⁸ / 3 ₈ / 26 ⁻ 182 | 2.3 .4 1.6 2.3 | 94 12 13 94 | 100 16 18 340 | 61 15 16E 266 | 12, 012 1, 004 2, 749 8, 921 | 50 1 17 30 | . 4 * . 6 . 3 |
| Far East Burma Cambodia | 218, 734 1, 700E 875E | 185 67E 139E | 9, 454 113 54 | 4.3 6.6 6.2 | 1,156 390 17 11 | 8, 030 39 31 | 1,484 18 8 | 1, 180, 638 25, 246 6, 277 | 5,929 110 30 | . 5 . 4 . 5 |
| China, Mainland | 80,000E 3,138 10,740E | 104E 235 100E | 350 | 8.1 ⁷ / 11.2 1.5 | 80 E 65 87 | 2,800E 78 92 | 1,080E 8 21 | 772, 000E 13, 326 107, 431 | 2,500 544 350 | . 3 4. 1 . 3 |

See footnotes on page 13.

TABLE I. Continued

| | | | | | IADDE I. CORE | ilaca | | | *************************************** | |
|--|---------------------------|---------------------|---------------------|---|-----------------------------|--|---------------------------|---------------------------------|---|-------------------|
| REGION | PRODU | ATIONAL CT (GNP) | | TARY DITURES | FOREIGN ECON. AID REC'D/ | PUBLIC EDUCATION EXPENDITURES ³ / | PUBLIC HEALTH 4/ | POPULATION | ARMED FO | |
| AND COUNTRY | Mil \$ | \$ Per Capita | Mil \$ | % of GNP | GIVEN 2/ Mil \$ | Mil \$ | EXPENDITURES 4/ Mil \$ | (MID YEAR) Thousands | Thousands | % of Pop. |
| Far East (Cont'd) Japan Korea, North Korea, Republic of | \$ 97, 480 | \$ 986 | \$ 933 1.0%/ | | \$ 310 | \$ 4, 111 | \$ 138E | 98, 865 | 246 | . 2% |
| | 2, 900E | 234E | 225E 7.8- | | NA | 90 | 17E | 12, 400 | 368 | 3. 0 |
| | 3, 822 | 131 | 150 3.9 | | 215 | 89 | 24 | 29, 086 | 572 | 2. 0 |
| Laos | 189E | 70 | 35 | 18.5 | 69 | 5 | 18 | 2, 700 | 60 | 2, 2 |
| | 3, 022 | 311 | 121 | 4.0 ₇ / | 50 | 1 18 | 56 | 9, 725 | 30 | , 3 |
| | 500E | 439E | 25E | 5.0- | NA | NA | 1E | 1, 140 | 30 | 2, 6 |
| Philippines | 5, 728 | 171 | 84 | 1.5 | 73 | 282 | 30 | 33, 477 | 42 | . 1 |
| | 4, 654 | 141 | 97 | 2.1 ₇ / | 59 | 86 | 26 | 32, 922 | 132 | . 4 |
| | 1, 500E | 77E | 300E | 20.0- | NA | 129 | 27E | 19, 500 | 350 | 1. 8 |
| | 2, 086E | 126E | 302 | 14.5 | 510 | 80 | 12 | 16, 543 | 565 | 3. 4 |
| South Asia | 54, 160 | 83 | 1, 919 | 3.5 | 1,853 | 1, 249 | 233 | 655, 782 | 1,399 | .2 |
| | 1, 355 | 88 | 15 | 1.1 | 54 | 12 | 2 | 15, 397 | 90 | .6 |
| | 1, 688 | 147 | 14 | .8 | 35 | 68 | 37 | 11, 491 | 10 | .1 |
| India-' Nepal Pakistan | 36, 895 772 13, 450 | 74 75 115 | 1, 400 7 483 | 3.8 1.0 3.6 | 1, 325 13 426 386 | 1,002 2 165 | 161 10E 23 | 501, 600 10, 294 117, 000 | 1,000 20 279 | . 2 . 2 . 2 |
| Near East | 24, 751 440 6, 423 | 284 730 252 | 1,868 8 328 | $\frac{7.5}{1.8}$ 5.1 | 22 6 58 | $\begin{array}{c} 972 \\ \hline 10 \\ 170 \end{array}$ | $\frac{614}{4}$ 97 | 87, 165 603 25, 500 | $\frac{668}{1}$ 180 | .8 .2 .7 |
| Iraq | 2, 235 | 268 | 207 | 9.3 | 9 | 111 | 22 | 8, 338 | 79 | . 9 |
| Israel | 3, 822 | 1, 454 | 400 | 10,5 | 134 | 169 | 36 | 2, 629 | 71 | 2. 7 |
| Jordan | 520 | 266 | 61 | 11.7 | 73 | 13 | 4 | 1, 954 | 40 | 2. 0 |
| Kuwait | 1,700 | 3, 462 | 55 | 3.2 | 1 | 47 | 32 | 491 | 3 | . 1 |
| Lebanon | 1,250 | 476 | 38 | 3.0 | 8 | 36 | 11 | 2, 624 | 12 | . 5 |
| Saudi Arabia | 1,670 | 380 | 202 | 12.1 | 21 | 89 | 38E | 4, 399 | 30 | . 7 |
| Syrian Arab Republic Yemen United Arab Republic | 1, 101 | 201 | 97 | 8. 8 | .6 | 72 | 64 | 5, 480 | 60 | 1. I |
| | 515 | 103 | NA | NA | 5 | 1 | 44E | 5, 000 | 2 | * |
| | 5, 075 | 168 | 461 | 9. 1 | 87 | 254 | 262E | 30, 147 | 190 | . 6 |
| Africa | 42, 532 2, 662 720 | 171 219 135 | 1, 053 99E 16 | 2.5 3.7 2.2 | 1,279 2 123 42 | 1, 245 118 17 | 459 11E 9 | 249, 129 12, 150 5, 350 | 326 60 3 | .1 .5 ,1 |
| Central African Republic Chad | 183 252 123 | 127 75 145 | 3E 5E 7E | $\begin{bmatrix} 1.67/\\ 2.07/\\ 5.77/ \end{bmatrix}$ | 16 20 19 | 5 5 3 | 3E 3 2E | 1, 437 3, 361 850 | 1 * 2 | . 1 * . 2 |

See footnotes on page 13.

TABLE I. Continued

| REGION | | NATIONAL CT (GNP) | | rary Ditures | FOREIGN ECON. AID REC'D/ | PUBLIC | PUBLIC HEALTH | POPULATION | ARMED FO | DOFE |
|--|----------|----------------------|--------|-----------------|-----------------------------|--------------|------------------|------------|-----------|------------|
| AND | PRODU | \$ Per | EAPENI | % of | GIVEN ² | EDUCATION 3/ | EXPENDITURES4/ | (MID-YEAR) | ARMED FO | % of |
| COUNTRY | Mil \$ | Capita | Mil \$ | GNP | Mil \$ | Mil \$ | Mil \$ | Thousands | Thousands | 1,0 |
| Africa (Cont'd) | | | | | | | | | | |
| Congo, Kinshasa | \$ 1,800 | \$ 111 | \$ 106 | 5.9% | \$ 89 | \$ 142 | \$ 33E | 16, 273 | 30 | . 2 % |
| Dahomey | 170 | 71 | 4 | 2.4 | 16 | 4 | 5 E | 2,410 | 1 | * |
| Ethiopia | 1,484 | 65 | 34 | 2.3 | 40 | 10 | 46E | 23,000 | 35 | . 1 |
| Gabon | 174 | 372 | 3 | 1.7 | 19 | 7 | 5 | 468 | 1 | . 2 |
| Ghana | 1,743 | 219 | 25 | 1.4 | 84 | 93 | 3 | 7,945 | 12 | . 2 |
| Guînea | 290 | 80 | 13 | 4. 5 | 16 | 14 | 7E | 3,629 | 5 | . 1 |
| Ivory Coast | 1,020 | 260 | 13 | 1.3 | 49 | 35 | 8E | 3, 920 | 4 | . 1 |
| Kenya · · · · · · · · · · · · · · · · · · · | 1, 114 | 116 | 12 | 1.1 | 68 | 3 5 | 19E | 9,643 | 3 | * |
| Liberia · · · · · · · · · · · · · · · · · · · | 226 | 207 | 3 | 1.3 | 53 | 5 | 3 | 1,090 | 4 | . 4 |
| Libya | 1, 361 | 812 | 27 | 2.0 | 1 | 22 | 3E | 1,677 | 8 | . 5 |
| Malagasy Republic | 665 | 110 | 11 | 1.7 | 46 | 41 | 11 | 6,055 | 3 | * |
| Malawi · · · · · · · · · · · · · · · · · · · | 207E | 51E | 1 | .5 | 32 | 111 | 3 | 4, 035 | 1 | * |
| Mali · · · · · · · · · · · · · · · · · · · | 325 | 70 | 5 | 1.5 | 21 | 14 | 9 | 4, 668 | 3 | .1 |
| Mauritania | 148 | 138 | 4 | 2.7 | 6 | 5 | 2 | 1,070 | 1 | . 1 |
| Morocco · · · · · · · · · · · · · · · · · · | 2,503 | 182 | 103 | 4. I | 94 | 99 | 27E | 13, 725 | 45 | . 3 |
| Niger · · · · · · · · · · · · · · · · · · · | 257 | 75 | 3 | 1, 2 | 23 | 4 | 7E | 3, 433 | i | * |
| Nigeria · · · · · · · · · · · · · · · · · · · | 5, 450 | 125 | 66 | 1. 2 | 96 | 84 | 87E | 43, 600 | 9 | * |
| Rhodesia, Southern | 997 | 227 | 15E | 1.57/ | 2 | 17 | 13 | 4,400 | 5 | . 1 |
| Senegal · · · · · · · · · · · · · · · · · · · | 716 | 200 | 15 | 2. 1 | 48 | 22 | 7E | 3, 580 | 4 | . 1 |
| Sierra Leone · · · · · · · · · · · · · · · · · · · | 378 | 157 | 3 | . 8 | 14 | 8 | 5E | 2, 403 | 2 | . 1 |
| Somali Republic | 155 | 60 | 7 | 4.5 | 17 | 2 | 3 | 2. 570 | 8 | . 3 |
| South Africa, Republic of | 11,960 | 654 | 331 | 2. 8 | NA | 258 | 37E | 18, 298 | 27 | 1 1 |
| Sudan | 1, 457 | 105 | 47 | 3. 2 | 19 | 47 | 28E | 13, 940 | 18 | . 1 |
| Tanzania · · · · · · · · · · · · · · · · · · · | 860 | 75 | 8-8/ | 1.0 | 39 | 27 | 8 | 11, 487 | 2 | * |
| Togo | 190 | 113 | 3 | 1.6 | 15 | 3 | 2 | 1,680 | ī | . 1 |
| Tunisia · · · · · · · · · · · · · · · · · · · | 931 | 209 | 17 | 1.8 | 76 | 39 | 20 | 4, 460 | 21 | . 5 |
| Uganda | 714 | 92 | 20 | 2.8 | 26 | 29 | 15E | 7,740 | 3 | * |
| Upper Volta · · · · · · · · · · · · · · · · · · · | 275 | 55 | 4 | 1.5 | 20 | 5 | 4 | 4, 955 | ĭ | * |
| Zambia · · · · · · · · · · · · · · · · · · · | 1, 022 | 267 | 20 | 2.0 | 32 | 15 | 11 | 3, 827 | 3 | . 1 |
| | | | | | 0 | | | | | |
| Oceania · · · · · · · · · · · · · · · · · · · | 30, 605 | 2, 153 | 1,185 | 3.9 | <u>128</u> | <u>965</u> | 488 | 14, 217 | <u>82</u> | <u>. 6</u> |
| Australia · · · · · · · · · · · · · · · · · · · | 25, 130 | 2, 178 | 1,065 | 4. 2 | 128 | 788 | 290 | 11,541 | 69 | . 6 |
| New Zealand · · · · · · · · · · · · · · · · · · · | 5, 475 | 2,046 | 120 | 2, 2 | NA | 177 | 198 | 2,676 | 13 | . 5 |

See footnotes on page 13.

TABLE I. Concluded

- NA Not available. E Rough ACDA estimate. * Less than one-half unit.
- 1/ For most countries conversion into U.S. dollars is at official par value exchange rates as employed with rounding by AID. For Argentina, Brazil, Chile, Colombia and Uruguay, "effective" rates estimated by AID are used. Approximate purchasing power equivalent rates are used for communist countries. See Appendix for further details.
- 2/ Entries not in italics show aid received; those in italics show aid given. Estimated aid given by communist countries is not distributed by recipient countries or regions, and is included as aid received only in the world total.
- 3/ Data are for 1965 or latest earlier year, except for U.S. (See Appendix).
- 4/ Most entries are estimates for 1966 based on data for earlier years. Those marked "E" are based on regional averages. (See Appendix).
- 5/ Includes West Berlin.
- 6/ The relationships between GNP and other dollar amounts shown or implied here may not be valid due to use of differentiated conversion rates for particular sectors. If measured in national currencies and at factor cost rather than at market prices, for example, Soviet military expenditures would be in the vicinity of 8-9% of GNP.
- 7/ Because either or both GNP and military expenditure estimates are approximations, the resulting ratio should be used with particular caution.
- 8/ Due to changes in the treatment of non-military expenditures of regular defense agencies, which are excluded, data for 1966 are not fully comparable to data previously published in the ACDA report for 1965.
- 9/ Value data are for fiscal year beginning April 1, and are converted at the new rate of Rs7.50, instead of Rs4.762, per US dollar, established in mid-1966.

U. S. Arms Control and Disarmament Agency November 1968.

TABLE II. MILITARY EXPENDITURES AND RELATED DATA--REGIONAL SUMMARY, 1966 (Amounts in U.S. dollars at current prices and exchange rates)

| REGION | GROSS NA PRODUC | | MILITARY EXPENDI- TURES | | | REIGN DMIC AID | PUBLIC EDUCA- TION | PUBLIC HEALTH EXPENDI- | POPULATION (MID-YEAR) | ARMED I | FORCES |
|--|--|--|-------------------------------------|----------------------------------|--------------------|-----------------------------------|--|------------------------------------|---|-------------------------------------|--------------------------------------|
| AND COUNTRY | Bil \$ | \$ Per Capita | Bil \$ | % of GNP | REC'D Bil \$ | GIVEN Bil \$ | EXPENDITURES Bil \$ | TURES Bil \$ | Millions | Millions | % of Pop |
| WORLD TOTAL | <u>\$2,311.1</u> | \$ 687 | \$ <u>159.0</u> | 6.9% | <u>\$7. 1</u> | <u>\$7.9</u> | \$110.8 | \$52.2 | 3, 363. 4 | 20.3 | <u>. 6%</u> |
| North America UnitedStates | 800.9 747.6 | 3, 696 3, 796 | 64.9 63.3 | 8, 1 8, 5 | 0 0 | 4. 2 4. 0 | 37. 3 34. 3 | 13.7 12.2 | 217.0 196.9 | 3. 2 3. 1 | 1. 5 1. 6 |
| Europe European NATO Warsaw Pact Soviet Union Other European | 1,037.3 466.6 478.5 357.0 92.2 | 1, 455 1, 570 1, 434 1, 531 1, 123 | 76.5 21.3 52.3 47.0 2.8 | 7. 4 4. 6 NA NA 3. 1 | .6 .3 0 0 | 3. 1 2. 5 . 4 . 3 . 1 | 58. 5 18. 8 36. 3 30. 6 3. 4 | 33.5 6.1 25.5 21.0 2.0 | 712. 9 297. 1 333. 7 233. 1 82. 1 | 7. 9 2. 9 4. 2 3. 2 . 8 | 1. 1 1. 0 1. 3 1. 4 1. 0 |
| NATO Total | 1,267.5 | 2,466 | 86.2 | 6.8 | .3 | 6.8 | 56.1 | 19.8 | 514.0 | 6.1 | 1.2 |
| Latin America | 102.4 | | 2.1 | 2.1 | 1.4 | 0 | 2.5 | 1.6 | 246.9 | .8 | . 3 |
| Far East China, Main- land Japan | 80.0 97.5 | 185 104 986 | 9. 4 6. 5 . 9 | 4.3 8.1 1.0 | 1.2 0 0 | . 4 . 1 . 3 | 8. 0 2. 8 4. 1 | 1.5 1.1 .1 | 1, 180. 6 772. 0 98. 9 | 5.9 2.5 .2 | .3 |
| South Asia India | 54. 2 36. 9 | 83 74 | 1.9 1.4 | 3.5 4.0 | 1.9 1.3 | 0 0 | 1. 3 1. 0 | . 2 . 2 | 655.8 501.6 | 1. 4 1. 0 | . 2 |
| Near East | 24. 8 | 284 | 1.9 | 7.5 | . 4 | * | 1.0 | . 6 | 87.2 | . 7 | .8 |
| Africa | 42.5 | 171 | 1. 1 | 2.5 | 1.3 | * | 1.2 | . 5 | 249. 1 | . 3 | . 1 |
| Oceania | 30.6 | 2, 153 | 1.2 | 3.9 | 0 | . 1 | 1.0 | . 5 | 14. 2 | . 1 | .6 |

NA Not available. * Negligible.

NOTE: See footnotes to Table I for details.

U.S. Arms Control and Disarmament Agency

November 1968

TABLE III. MILITARY EXPENDITURES AND RELATED DATA FOR LESS DEVELOPED COUNTRIES ¹/₋ REGIONAL SUMMARY, 1966

(Amounts in U.S. dollars at current prices and exchange rates)

| | GROSS NA PRODUC | _ | MILI' EXPENI | TARY DITURES | FOREIGN | PUBLIC EDUCA- | PUBLIC HEALTH | POPULATION | ARMED F | ORCES |
|---|--------------------|------------------|-----------------|-----------------|------------------------------------|----------------------------|-----------------------------|----------------------|---------------|-------------|
| REGION AND COUNTRY | Bil \$ | \$ Per Capita | Bil \$ | % of GNP | ECONOMIC AID REC'D 2/ Bil \$ | TION EXPENDI- TURES Bil \$ | EXPENDI- TURES Bil \$ | (MID-YEAR) Millions | Thousands | % of Pop |
| TOTAL LDC'S | \$395.0 | <u>\$ 164</u> | <u>\$17. 4</u> | <u>4. 4%</u> | <u>\$7. 1</u> | \$11.0 | \$5.0 | 2,415 | 10, 372 | . 4% |
| Europe | 61.9 | 554 | 2.4 | 3. 8 | . 6 | 1. 4 | .9 | 112 | 1,510 | 1. 3 |
| Latin America | 102.4 | 415 | 2. 1 | 2. 1 | 1.4 | 2.5 | 1.6 | 247 | 814 | . 3 |
| Far East | 121.2 | 112 | 8.5 | 7.0 | 1. 2 | 3.9 | 1. 3 | 1,082 | 5,68 2 | .5 |
| South Asia | 54.1 | 8 3 | 1.9 | 3.5 | 1.9 | 1. 2 | . 2 | 656 | 1, 399 | . 2 |
| Near East | 24. 8 | 284 | 1.9 | 7.5 | . 4 | 1.0 | . 6 | 87 | 668 | .8 |
| Africa | 30.6 | 134 | .7 | 2.4 | 1.3 | 1.0 | . 4 | 231 | 299 | . 1 |
| Total LDC's as % of World Total Total LDC's | 17. 1% | - | 11.0% | - | 100.0% | 10.9% | 10.1% | 71.8% | 51.1% | _ |
| excluding Mainland China: Bil \$ | 315.0 | 192 | 11.0 | 3.5 | 7.1 | 8.1 | 4. 0 | 1,643 | 7,872 | . 5 |
| % of World Total | 13.6% | - | 6.8% | - | 100.0% | 8 .0 % | 8. 1 % | 48.8% | 3 8.8% | - |

^{1/} The 93 countries classified as less developed are: Albania, Bulgaria, Greece, Portugal, Spain, Turkey, and Yugoslavia in Europe; all Latin America; the Far East except Japan; all South Asia and the Near East; and Africa except the Republic of South Africa.

^{2/} Bulgaria, Kuwait, Mainland China, Portugal, Saudi Arabia, and Southern Rhodesia are considered net donors and are excluded. Entries do not add to the total because estimated aid given by communist countries is included in the world total but is not distributed by region and country. See Table I and Appendix.

(Amounts in millions of U.S. dollars at constant 1966 prices and 1966 exchange rates)

| | | 1961 | THE RESERVE OF THE PARTY OF THE | | 1964 | | | 1965 | | | 1966 | |
|--------------------|------------------------------|-----------------------|--|------------------------------|--|----------------------------|------------------------------|-------------------------------|--|---|-------------------------------|----------------------------|
| Region and Country | Gross National Product | Military Expenditures | Military As % of GNP | Gross National Product | Military Expendi- tures | Military As % of GNP | Gross National Product | Military Expendi- tures | Military As % of GNP | Gross National Product | Military Expendi- tures | Military As % of GNP |
| Europe | | | | | | ~ | | | ~ | | | |
| Greece | \$4, 223 | \$175 | 4.1% | \$5,377 | \$194 | 3.6% | \$6,056 | \$216 | 3.6% | \$6,579 | \$240 | 3.6% |
| Portugal | 3,060 | 201 | 6.6 | 3,693 | 243 | 6.6 | 3,946 | 245 | 6.2 | 4,070 | 240 | 5.9 |
| Spain | 17, 311 | 499 | 2.9 | 21, 452 | 648 | 3.0 | 23,099 | 613 | 2.7 | 24,570 | 753 | 3. 1 |
| Turkey | 6, 851 | 379 | 5.5 | 8, 116 | 411 | 5.1 | 8,562 | 448 | 5.2 | 9,420 | 445 | 4.7 |
| Latin America | | | | | manufacture of the state of the | | | | | İ | | |
| Argentina | 14, 805 | 429 | 2.9 | 15, 182 | 317 | 2.1 | 16, 387 | 278 | 1.7 | 16,240 | 279 | 1.7 |
| Brazil | 21, 362 | 495 | 2. 3 | 23,587 | 854 | 3.6 | 24, 694 | 681 | 2.8 | 25,790 | 798 | 3. 1 |
| Chile | 3, 884 | 97 | 2.5 | 4,347 | 119 | 2. 7 | 4,598 | 110 | 2.4 | 4, 867 | 113 | 2. 3 |
| Colombia | 4, 395 | 79 | 1.8 | 5,020 | 85 | 1. 7 | 5, 185 | 104 | 2.0 | 5, 457 | 92 | 1.7 |
| Ecuador | 973 | 22 | 2. 3 | 1, 147 | 23 | 2.0 | 1, 186 | 25 | 2.1 | 1, 245 | 25 | 2.0 |
| Mexico | 15,661 | 109 | .7 | 19, 204 | 135 | .7 | 20, 230 | 159 | .8 | 21,770 | 166 | . 8 |
| Peru | 2,635 | 79 | 3.0 | 3,222 | 102 | 3. 2 | 3, 361 | 97 | 2.9 | 3,547 | 83 | 2.3 |
| | | 17 | 1.1 | 1,511 | 25 | 1.6 | 1,525 | 23 | 1.5 | 1,565 | 26 | 1.6 |
| Uruguay | 1,543 | 131 | 2. 1 | 7,359 | 151 | 2. 1 | 7,722 | 175 | 2.3 | 7,940 | 182 | 2.3 |
| Venezuela | 6, 105 | 131 | 2. 1 | 1,338 | 191 | 2. 1 | 1, 122 | 113 | 2.3 | 1, 540 | 102 | 2.3 |
| Far East | | | | | | | | | THE PARTY CONTRACTOR OF THE PA | | | |
| Korea, Republic of | 2,517 | 143 | 5.7 | 3, 118 | 78 | 2.5 | 3, 371 | 131 | 3.9 | 3,822 | 150 | 3.9 |
| Philippines | 4,599 | 65 | 1.4 | 5,217 | 84 | 1.6 | 5, 499 | 80 | 1.5 | 5,728 | 84 | 1.5 |
| China, Republic of | 1,909 | 179 | 9.4 | 2,550 | 223 | 8. 7 | 2,868 | 221 | 7.7 | 3, 138 | 350 | 11.2 |
| Malaysia | 2, 205 | 38 | 1.7 | 2,657 | 82 | 3. 1 | 2,833 | 115 | 4. 1 | 3,022 | 121 | 4.0 |
| South Asia | | | | | | | | | | | | |
| Ceylon | 1,458 | 17 | 1.2 | 1,603 | 13 | . 8 | 1,635 | 13 | . 8 | 1,688 | 14 | .8 |
| India | 32, 442 | 654 | 2.0 | 37,925 | 1, 476 | 3.9 | 36, 374 | 1,535 | 4.2 | 36, 895 | 1,400 | 4.0 |
| Pakistan | 10, 216 | 296 | 2.9 | 12,098 | 339 | 2.8 | 12,541 | 668 | 5.3 | 13, 450 | 483 | 3.6 |
| | , | | | , | | | | | | , | | |
| Near East | 1 | | | | | | | | _ | | | |
| Iran | 4, 762 | 202 | 4. 2 | 5, 404 | 229 | 4. 2 | 5,911 | 294 | 5.0 | 6, 423 | 328 | 5.1 |
| Iraq | 1,635 | 131 | 8.0 | 1,835 | 180 | 9.8 | 2,001 | 206 | 10.3 | 2,235 | 207 | 9.3 |
| Israel | 2,606 | 203 | 7.8 | 3,523 | 298 | 8.5 | 3,807 | 308 | 8. 1 | 3,822 | 400 | 10.5 |
| Jordan | 383 | 57 | 14.9 | 487 | 65 | 13. 3 | 506 | 66 | 13.0 | 520 | 61 | 11.7 |
| Africa | | | | | į | | | | | | | |
| Ethiopia | 1,238 | 22 | 1.8 | 1,373 | 30 | 2. 2 | 1, 422 | 36 | 2.6 | 1,484 | 34 | 2.3 |
| Ghana | 1,540 | 33 | 2. 1 | 1,714 | 27 | 1.6 | 1,717 | 28 | 1.6 | 1,743 | 25 | 1.4 |
| Kenya | 825 | 2 | . 2 | 990 | 8 | . 8 | 1,014 | 10 | 1.0 | 1, 114 | 12 | 1. 1 |
| Morocco | 2, 124 | 97 | 4. 6 | 2,539 | 115 | 4.5 | 2,572 | 102 | 4.0 | 2,503 | 103 | 4. 1 |
| Nigeria | 4, 139 | 28 | .7 | 4,794 | 50 | 1.0 | 5, 114 | 70 | 1.4 | 5,450 | 66 | 1. 2 |
| Sudan | 1, 174 | 19 | 1.6 | 1,351 | 31 | 2.3 | 1,379 | 33 | 2.4 | 1, 457 | 47 | 3. 2 |
| Tanzanta | 592 | 0 | 1.0 | 714 | 1 | . 1 | 770 | 6 | . 8 | 860 | 8 | 1.0 |
| Tunisia | 784 | 17 | 2, 2 | 882 | 17 | 1.9 | 936 | 14 | 1.5 | 931 | 17 | 1.8 |
| Uganda | 553 | 0 | 2.2 | 642 | 7 | 1. 1 | 667 | 9 | 1.4 | 714 | 20 | 2.8 |
| Zambia | 751 | 0 | 0 | 833 | 3 | .3 | 1,046 | 11 | 1.1 | 1,022 | 20 | 2.0 |
| Lailibia | 1 ,21 | | v | 1 000 | | | 1,070 | 1.1 | 1.1 | 1, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 4.0 |

TABLE V. PURCHASING POWER EQUIVALENTS OF MILITARY EXPENDITURES AND GROSS NATIONAL PRODUCT, BY SELECTED COUNTRY; 1964-1966 (Amounts in U.S. dollars at current prices and purchasing power equivalent rates $\frac{1}{2}$)

| | 1 | (| | | | | F | | | | | | | | |
|--|--|--------------------------------------|--------------------------|--------------------------------|--|--|--|--|--------------------------------|--|---|----------------------------------|------------------------------|--------------------------------|--------------------------|
| | | 1 | 964 | | | | 1 | 965 | | | | : | 1966 | | |
| REGION | GROSS NAT | IONAL P | RODUCT | MILIT EXPEND | | GROSS NAT | IONAL P | RODUCT | MILIT. EXPENDI | | GROSS NAT | 'IONAL I | PRODUCT_ | MILIT. EXPENDI | |
| AND COUNTRY | Mil \$ | \$ Per Capita | % of World Total | Mil \$ | % of World Total | Mil \$ | \$Per Capita | % of World Total | Mil \$ | % of World Total | Mil \$ | \$ Per Capita | % of World Total | Mil \$ | % of World Total |
| WORLD TOTAL | \$2, 170, 136 | \$ <u>675</u> | 100.0% | \$140,830 143,830 | 100.0% | \$2,317,054 | \$701 | <u>100. 0%</u> | \$144,575 | 100. <u>0%</u> | \$2,551,2 <u>82</u> | \$ 759 | <u>100.0%</u> | \$165,054 | <u>100.0%</u> |
| North America United States Canada | 677, 500 628, 700 48, 800 | 3, 205 3, 272 2, 537 | 31. 1 28. 9 2. 2 | 53, 193 51, 323 1, 870 | 37.3 36.0 1.3 | 737, 600 683, 900 53, 700 | | 31.7 29.4 2.3 | 53,568 51,844 1,724 | $\frac{37.0}{35.7}$ | 806, 550 747, 600 58, 950 | 3,717 3,796 2,940 | 31. 6 29. 3 2. 3 | 65,053 63,283 1,770 | 39. 4 38. 4 1. 1 |
| Europe <u>NAT</u> O, European Belgium Denmark | $\begin{array}{r} 976,674 \\ \hline 467,444 \\ \hline 18,800 \\ 10,400 \\ \end{array}$ | 1, 402 1, 615 2, 010 2, 213 | 44.8 21.5 .9 .5 | 72,039 23,513 818 338 | 50.6 16.5 .6 | 1,034,458 495,808 19,700 10,900 | $\begin{array}{c} \underline{1,466} \\ \underline{1,687} \\ \overline{2,070} \\ 2,254 \end{array}$ | 44.5 21.3 .8 .5 | 73,036 24,623 816 363 | $\begin{array}{r} 50.4 \\ \hline 17.0 \\ \hline .6 \\ \hline .3 \end{array}$ | 1, 140, 137 537, 003 21, 032 11, 789 | 1,599 1,808 2,207 2,458 | 44. 7 21. 1 . 8 . 5 | 80,060 23,840 863 318 | 48.5 14.4 .5 .2 |
| France Germany, West Greece | 99, 800 117, 400 4, 500 | 2,061 2,093 529 | 4. 6 5. 4 . 2 | 5,850 4,980 170 | 4. 1 3. 5 . 1 | 105, 800 124, 700 5, 300 | 2, 159 2, 114 620 | 4. 6 5. 4 . 2 | 6, 100 4, 991 189 | 4. 2 3. 4 . 1 | 109, 281 144, 072 5, 857 | 2, 212 2, 398 680 | 4.3 5.7 .2 | 6,305 4,913 214 | 3.8 3.0 .1 |
| Iceland Italy Netherlands | NA 64,500 21,600 | NA 1, 262 1, 785 | NA 3.0 1.0 | 0 2,360 984 | 0 1.7 .7 | 260 69,800 23,000 | 1, 354 1, 354 1, 871 | * 3. 0 1. 0 | 2,509 980 | 0 1. 7 . 7 | 282 72, 727 24, 075 | 1, 439 1, 400 1, 933 | 2. 9 . 9 | 0 2,092 1,020 | 0 1.3 .6 |
| Norway Portuga1 Turkey | 7,300 5,390 8,830 | 1, 976 572 286 | .3 | 292 378 464 | .2 | 8, 100 6, 030 9, 590 | 2,179 655 306 | .3 .3 .4 | 340 374 501 | .3 | 8, 657 6, 429 10, 456 | 2, 307 689 328 | . 3 . 3 . 4 | 285 379 494 | .2 |
| United Kingdom Others, at | 108,000 | 1,992 | 5.0 | 6, 870 | 4.8 | 112,000 | 2,055 | 4.8 | 7,450 | 5.1 | 121,670 | 2, 223 | 4.8 | 6, 947 | 4. 2 |
| official rates 1/ | 924 | | * | 9 | * | 628 | 1,897 | * | 10 | * | 676 | 2,018 | * | 10 | * |
| NATO Total | 1,145,031 | 2,287 | 52.6 | 76,706 | 53.8 | 1, 233, 408 | 2,428 | 53.0 | 78,191 | 53.9 | 1,343,553 | 2,614 | 52.7 | 88,893 | 53.9 |
| Warsaw Pact Bulgaria Czechoslovakia | 404,000 | 1,231 | 18.5 | 45,000 | 31.6 | 425,200 6,800 22,100 | 1, <u>279</u> 829 1, 556 | $\begin{array}{c c} \underline{18.3} \\ 1.0 \end{array}$ | 45,000 200 1,300 | $\begin{array}{c} 31.0 \\ \hline .1 \\ .9 \end{array}$ | 478, 500 7, 600 23, 800 | 1, 434 918 1, 671 | 18.8 .3 .9 | 52,290 210E 1,400 | 31 <u>.7</u> .1 .8 |
| Germany, East Hungary Poland | 104,000 | 1,037 | 4.8 | 5,000 | 3.5 | 26,600 11,100 30,800 | 1,565 1,099 978 | 1. 1 . 5 1. 3 | 1,000 300 1,700 | .7 .2 1.2 | 28, 300 12, 000 33, 200 | 1, 658 1, 179 1, 047 | 1. 1 . 5 1. 3 | 1, 100 300 1, 750 | . 7 . 2 1. 1 |
| Romania Soviet Union | 300,000 | 1,316 | 13.8 | 40,000 | 28. 1 | 14, 800 313, 000 | 779 1,358 | . 6 13. 5 | 500 40,000 | . 3 27. 6 | 16, 600 357, 000 | 867 1,531 | . 7 14. 0 | 530 47,000 | . 3 28. 5 |
| Other European Austria Finland | 105, 230 12, 400 8, 150 | 1, 33 <u>6</u> 1, 723 1, 779 | 4.8 .6 .4 | 3,526 190 131 | $\begin{array}{c} 2.\frac{5}{1} \\ .1 \end{array}$ | 113, 450 13, 240 9, 840 | 1, 427 1, 800 2, 148 | 4 <u>. 9</u> . 6 . 4 | 3, <u>413</u> 168 170 | 2.4 .1 | 124, 634 14, 393 10, 446 | $\vec{1}, \vec{974}$ | 4.9 .6 | 3,930 194 171 | 2.4 .1 .1 |

TABLE V. Continued

| Value 1111 | | | | | | | | | | | | | | | |
|---|------------------------------|------------------|------------------------|-----------------------------------|------------------------|------------------------------|-------------------------|------------------------|-----------------------|------------------------|--------------------------------|---------------------|------------------------|------------------------|------------------------|
| | | GROSS | 1964 | MILITA | RV | | GROSS | 1965 | MILIT | ARV | 1966 GROSS MILITARY | | | | |
| REGION | | AL PROD | UCT | EXPENDI | | | NAL PRO | DUCT | EXPEND | | NATION | | DUCT | EXPENDI | |
| AND COUNTRY | Mil \$ | \$ Per Capita | % of World Total | Mil \$ | % of World Total | Mil \$ | \$ Per Capita | % of World Total | Mil \$ | % of World Total | | \$ Per Capita | % of World Total | Mil \$ | % of World Total |
| Ireland Spain Sweden | \$ 2,840 26,600 26,400 | 849 | . 1% 1. 2 1. 2 | \$ 65 777 1,233 | *% .5 .9 | \$ 2,980 29,600 28,100 | \$1,046 937 3,635 | . 1% 1. 3 1. 2 | \$ 35 785 1,230 | *% . 5 . 8 | \$ 3,118 3 31,978 29,972 | | . 1 % 1. 3 1. 2 | \$ 39 980 1,298 | * % . 6 . 8 |
| Switzerland Yugoslavia | 14, 800 14, 040 | | . 7 | 400 730 | . 3 | 15, 400 14, 400 | 2,593 738 | .7 | 401 624 | .3 | 16,527 18,200 | 2,755 922 | . 6 . 7 | 428 820 | . 3 |
| Latin America | 97, 361 | 422 | 4.5 | 2, 128 | 1.5 | 100, 845 | 419 | 4.3 | 2,348 | 1.6 | <u>113, 851</u> | 461 | 4.5 | 2,524 | 1.5 |
| Argentina Bolivia | 19, 100 396 | | .9 | 204 6 | .1 | 19, 450 429 | 870 104 | .8 | 421 9 | .3 | 21, 455 446 | 946 105 | .8 | 369 11 | . 2 * |
| Brazil Chile Colombia | 27, 800 4, 880 6, 010 | 587 | 1.3 .2 .3 | 996 130 104 | .7 .1 .1 | 28, 400 5, 430 5, 910 | 348 618 329 | 1. 2 . 2 . 3 | 961 114 118 | .7 | 32, 143 5, 740 6, 554 | 386 656 351 | 1.3 .2 .3 | 994 178 139 | .6 .1 .1 |
| Dominican Rep. Ecuador Mexico | 630 754 17, 700 | 155 | * .8 | 22 15 115 | * * .1 | 594 776 18,800 | 164 153 440 | * * .8 | 22 17 148 | * * .1 | 596 839 20, 2 98 | 159 160 460 | * * . 8 | 20 17 155 | * * . 1 |
| Paraguay Peru Uruguay | 312 3,260 1,290 | 294 | * .1 .1 | 9 109 16 | * .1 * | 339 3,460 1,100 | 169 296 405 | * .1 * | 10 100 16 | * .1 | 351 3,862 1,577 | 168 322 574 | * . 2 . 1 | 11 103 26 | * .1 * |
| Venezuela Others, at official rates $\underline{1}/$ | 7, 320 7, 909 | | . 3 | 152 250 | . 1 . 2 | 7, 450 8, 707 | 854 336 | . 3 | 168 279 | .1 | 8, 120E 11, 870 | 910E 389 | . 3 | 189 312 | . 1 . 2 |
| <u>Far East</u> Cambodia China, Mainland | 275, 676 456 70, 000 | 76 | * | 8,355-11,355 26 4,000-7,000 | 6.9 * 3.9 | 293, 582 472 76, 000 | 254 77 101 | 12.6 * 3.3 | 9,414 30 6,000 | 6.5 * 4.1 | 324, 426 518 80, 000F | 275 83 104E | 12.7 * 3.1 | 10,724 32 6,500E | 6.5 * 3.9 |
| China, Rep. of Japan Korea, Rep. of | 3,820 167,000 4,230 | 1,723 | . 2 7. 7 . 2 | 316 1,460 158 | .2 1.0 .1 | 4, 300 175, 000 4, 620 | 331 1,786 163 | . 2 7. 5 . 2 | 331 1,622 175 | .2 1.1 .1 | 4, 353 199, 400 5, 671 | 327 2,017 195 | 7.8 .2 | 535 1,910 222 | . 3 1. 2 . 1 |
| Malaysia Thailand Others, at official rates <u>1</u> / | 3,580 3,780 22,810 | 124 | . 2 . 2 1. 0 | 112 88 2, 195 | .1 .1 1.5 | 3,820 4,020 25,350 | 406 128 173 | . 2 | 161 88 1,007 | .1 | 4, 301 4, 840 25, 343 | 442 154 116 | .2 .2 1.0 | 172 104 1,249 | .1 |
| <u>Near East</u> Iran Iraq | 21,510 4,900 2,690 | 204 | 1.0 .2 .1 | 1, 438 207 213 | 1.0 .1 .1 | 24,524 5,440 2,820 | 291 220 344 | 1.1 .2 .1 | 1,714 266 289 | 1.2 .2 .2 | 23,657 6,074 384 | 271 238 25 | .9 .2 * | 2,021 310 297 | 1.2 .2 .2 |

See footnotes on page 19.

TABLE V. Concluded

| | | | | | 1 AI | BLE V. C | onciuded | | | | | | | | | | |
|---|------------------------------|-------------------------|------------------------|--------------------------|------------------------|-----------------------------|-----------------------|------------------------|-----------------------|------------------|------------------------------|-----------------------|------------------------|--------------------------|------------------------|--|--|
| | 1964 | | | | | | 1965 | | | | | 1966 | | | | | |
| REGION | GROSS NATIONAL PRODUCT | | | MILITARY EXPENDITURES | | GROSS NATIONAL PRODUCT | | | MILITARY | | GROSS NATIONAL PRODUCT | | | MILITARY EXPENDITURES | | | |
| AND COUNTRY | Mil \$ | \$ Per Capita | % of World Total | Mil \$ | % of World Total | | \$ Per Capita | % of World Total | Mil \$ | % of World | Mil \$ | \$ Per Capita | % of World Total | Mil \$ | % of World Total | | |
| Israel Jordan United Arab Republic | \$ 2,788 432 5,910 | \$ 1,126 234 206 | .1% | \$ 236 57 448 | .2% | \$ 3,168 496 6,410 | \$1,236 261 217 | . 1% * . 3 | \$ 256 64 532 | . 2% * . 4 | \$ 3,230 520 6,773 | \$1,229 266 225 | . 1% | \$ 338 61 615 | . 2% * . 4 | | |
| Others, at official rates 1/ | 4, 790 | 281 | . 2 | 277 | . 2 | 6, 190 | 356 | . 3 | 307 | . 2 | 6, 676 | 359 | . 3 | 400 | . 2 | | |
| South Asia Ceylon India | 54, 133 1, 680 42, 000 | 154 | 2.5 .1 1.9 | 1,905 13 1,630 | 1.3 * 1.1 | 53,746 1,770 40,500 | 84 158 83 | 2.3 .1 1.7 | 2,246 14 1,710 | 1.5 * 1.2 | 61,756 1,878 46,818 | 94 163 93 | 2.4 .1 1.8 | 2,291 16 1,860 | 1.4 * 1.1 | | |
| Pakistan Others, at official rates $\frac{1}{2}$ | 8, 750 1, 703 | 79 71 | .4 | 244 18 | .2 | 9,280 1,986 | 83 76 | .4 | 494 28 | . 3 | 10, 933 2, 127 | 93 83 | . 4 | 393 22 | .2 | | |
| Africa Ghana Morocco | 34,752 2,010 2,960 | 267 | 1.9 .1 .1 | 823 21 135 | .8 * .1 | 38, 399 2, 023 3, 120 | 155 263 235 | 2.0 .1 .1 | 1,038 19 123 | .9 * .1 | 42, 227 2, 690 3, 197 | 169 339 233 | 1.7 .1 .1 | 1,015 38 131 | .6 * | | |
| Nigeria South Africa, Rep. of Sudan | 5, 950 8, 354 432 | 139 478 33 | . 3 . 4 * | 61 304 9 | * .2 * | 6, 440 8, 641 435 | 151 429 33 | .3 | 79 253 10 | .1 | 6, 664 9, 531 434 | 153 521 31 | . 3 . 4 * | 81 264 14 | * .2 * | | |
| Tunisia Others, at official rates $\frac{1}{2}$ | 1, 120 13, 926 | | . 1 | 21 272 | * . 2 | 1,260 16,480 | 276 113 | .1 | 18 536 | * .4 | 1, 223 18, 488 | 274 126 | .7 | 23 464 | | | |
| <u>Oceania</u> Australia New Zealand | 32,530 26,780 5,750 | 2,309 2,339 2,178 | 1.5 1.2 .3 | 949 845 104 | .7 .6 .1 | 33,900 27,900 6,000 | 2, 437 | 1.5 1.2 .3 | 1,211 1,080 130 | .8 .7 .1 | 38, 678 32, 430 6, 248 | 2,810 | 1.5 1.3 .2 | 1,366 1,230 136 | . 7 | | |

NA Not Available. * Less than one-half unit.

U.S. Arms Control and Disarmament Agency November 1968.

All countries not listed in the present table but listed in Table I have been shown here by region as "Others, at official rates." These include countries for which estimated effective rates were used as well as countries for which official rates were used. (See Table I, footnote 1.)

TABLE VI. RANKING OF MAJOR COUNTRIES ACCORDING TO GNP AND MILITARY EXPENDITURES, 1966 (Amounts at current prices and purchasing power equivalent dollars)

| | | MILITARY | | | | |
|-----------------|------|----------------|--------|-------------------|------------|--------|
| | | EXPENI | ITURES | | | |
| COUNTRY | Rank | otal Bil \$ | Rank | Capita Dollars | Rank | Bil \$ |
| | | Dπ ψ | Tuttin | Donars | Tunk | Dir |
| Jnited States* | 1 | \$747.6 | 2 | \$3,769 | 1 | \$63. |
| Soviet Union* | 2 | 357.0 | 19 | 1,531 | 2 | 47. |
| Japan | 3 | 199.4 | 14 | 2, 017 | 8 | 1. |
| West Germany | 4 | 144.1 | 7 | 2, 398 | 6 | 4. |
| Jnited Kingdom* | 5 | 121.7 | 11 | 2, 223 | 3 | 6. |
| France* | 6 | 109, 3 | 12 | 2, 212 | 5 | 6. |
| Mainland China* | 7 | 80.0 | 58 | 104 | 4 | 6, |
| taly | 8 | 72.7 | 21 | 1,400 | 7 | 2. |
| Canada | 9 | 58.9 | 3 | 2, 940 | 10 | 1. |
| ndia | 10 | 46.8 | 59 | 93 | 9 | 1. |
| Poland | 11 | 33, 2 | 24 | 1,047 | 11 | 1. |
| Sustralia | 12 | 32. 4 | 4 | 2, 810 | 14 | 1. |
| Brazil | 13 | 32. 1 | 38 | 386 | 17 | 1. |
| pain | 14 | 32.0 | 25 | 1,003 | 18 | 1. |
| weden | 15 | 30, 0 | 1 | 3, 839 | 13 | 1. |
| East Germany | 16 | 28.3 | 18 | 1, 658 | 15 | 1. |
| Netherlands * | 17 | 24. 1 | 16 | 1,933 | 16 | 1. |
| Czechoslovakia | 18 | 23.8 | 17 | 1,671 | 12 | 1. |
| Argentina | 19 | 21.5 | 26 | 946 | 28 | |
| Belgium | 20 | 21.0 | 13 | 2, 207 | 19 | |
| Mexico | 21 | 20.3 | 36 | 460 | 44 | |
| Yugoslavia | 22 | 18.2 | 27 | 922 | 20 | l . |
| Romania | 23 | 16.6 | 30 | 867 | 23 | |
| witzerland | 24 | 16.5 | 5 | 2,755 | 2 5 | |
| ustria | 25 | 14. 4 | 15 | 1,974 | 39 | |
| lungary | 26 | 12.0 | 22 | 1, 179 | 31 | |
| enmark | 27 | 11.8 | 6 | 2, 458 | 29 | : |
| Pakistan | 28 | 10.9 | 60 | 93 | 26 | : |
| urkey | 29 | 10.5 | 41 | 328 | 24 | : |
| Finland | 30 | 10.4 | 10 | 2, 252 | 43 | : |

^{*} Denotes country possessing nuclear weapons.

Note: All value data in this table are from Table V; see also notes to Table I for explanation of data on communist countries.

APPENDIX

Notes on Data, Sources and Methods

Since a major purpose of this report is to compile world-wide and regional totals of military spending and to provide a basis for comparison with other economic information, coverage was made as broad as possible. It should be emphasized that in doing so, it was necessary to include national data which are in some cases very approximate estimates. It is believed that world-wide and regional totals adequately show orders of magnitude and can be viewed with considerable confidence. For some individual countries, however, particularly those with national statistical systems in early stages of development, or those having a policy of limited disclosure of data, considerable allowance should be made for imprecise or noncomparable data.

Numerous factors affect comparability and the interpretations to be made of national differences. For example, many elements of gross national product, particularly in a developing country, may escape measurement; military programs may draw from several parts of national budgets; social service expenditures are undertaken by various levels of government and are not always reported consistently. Also, the public versus private shares in the support of national programs vary significantly among countries. In plannedeconomy countries, the share of public support through national budgets is larger than in market-economy countries. In some cases religious or other non-governmental organizations provide services analogous to those provided by governments in other countries.

The data presented here have been obtained largely from statistical materials prepared by the U.S. Agency for International Development (AID) and various international agencies. AID compiles population, gross national product and military expenditures data for most non-communist countries. These materials are contained in AID's economic data books for various regions and individual countries, as well as other special purpose AID publications and compilations. The considerable effort made by AID to adjust reported national data in accordance with standard concepts and definitions and in the light of evaluations by U.S. Missions abroad makes this body of material particularly useful for present purposes.

Other types of data have been obtained from various international agencies, particularly the

Organization for Economic Cooperation and Development (OECD), the World Health Organization (WHO), and the United Nations Educational, Scientific and Cultural Organization (UNESCO). These agencies also seek to provide standard data for inter-country comparisons, but because of limitations and ambiguities in national reports they, like AID, are not always able to achieve full comparability. Data designated in the tables by the symbol "E" are approximate estimates made by ACDA on the basis of limited information.

Further discussion of data concepts, sources and methods will be found below.

Country Groupings

Country groupings and regions follow AID practice. They are essentially geographical. It should be noted, however, that "North America" consists only of the U.S. and Canada; Mexico and all of Central and South America are included in "Latin America." "Total NATO" consists of "North America" and "European NATO," with the latter including Turkey. Also, the United Arab Republic is assigned to the "Near East" with other Asian countries and not to "Africa."

Developed and Less-Developed Countries

Of the 120 countries covered in the report, 93 are classified as "less-developed" and 27 as "developed." (See Definitions of Terms, page 7, for the countries falling in each category.)

For the non-communist countries, the assignment of countries to one or the other category follows AID practice. For both non-communist and communist, the assignment attempts to take account of such factors as income levels, national literacy and mortality rates, levels of industrialization, and terms of trade. Most of the countries classified as LDC's have a per capita GNP below \$500, and all but Israel and Kuwait have less than \$1,000. Although they also are below the latter level, Japan, Romania and the Republic of South Africa are classed as developed.

Gross National Product (GNP)

AID is the source of the GNP data used in this report for 84 non-communist LDC's. In most cases, these data are based on national accounts published by the country in question; for the remaining LDC's where such data are not available, GNP figures are based on estimates of agricultural and industrial production and other available information.

GNP data for OECD and other developed non-communist countries are from the International Monetary Fund monthly, <u>International</u> Financial Statistics.

Warsaw Pact GNP data are from the US Congress Joint Economic Committee, Soviet Economic Performance: 1966-67, May 1968. Other communist country estimates are based on very limited information and should be considered rough approximations only.

Military Expenditures

AID compiles figures on military expenditures for most free world countries, adjusting national data to a standard definition of military expenditures where possible. The standard definition calls for current and capital expenditures made to meet the needs of the armed forces. This includes all expenditures of national defense agencies except those for civilian programs. Also included are the military components of mixed military-civilian activities such as atomic energy, space, research and development, and paramilitary forces, where such components can be distinguished.

Military assistance to foreign countries, retirement pensions of career personnel, and military stockpiling are included in the standard concept of military expenditures, whereas civil defense, civilian space and industrial stockpiling are excluded.

The estimate of Soviet military spending in US dollars is adapted from various estimates made by Western analysts. Many Western observers believe that the Soviet defense budget omits some expenditure categories which are in Western defense budgets and that Soviet prices in the military sector understate values when compared with US prices. The figure for Soviet military expenditures represents an estimate of what equivalent dollar amounts would be if the expenditures were made at U.S. prices.

Military expenditures for the remainder of the Warsaw Pact countries are based on announced military budgets with some upward adjustment to make coverage comparable to Western concepts; like the Soviet estimate they represent approximate purchasing power equivalents. For Mainland China, a very rough estimate is derived from fragmentary information. No budgetary data have been issued since 1960.

Foreign Economic Aid

With the exception of estimates for Warsaw Pact countries, the data are based on information made available by the Development Assistance Committee (DAC) of OECD. These data cover aid given by the 16 donor countries which report to the DAC: Australia, Austria, Belgium, Canada, Denmark, France, West Germany, Italy, Japan, Netherlands, Norway, Portugal, Sweden, Switzerland, United Kingdom and the United States. Their aid is made up of disbursements of official (i.e., governmental) net bilateral grants and grant-like aid, gross bilateral lending (gross of repayments of principal only) and net contributions to multilateral agencies.

Data shown for DAC donor countries include bilateral aid to countries, territories and dependencies not covered by the present report. In the case of Portugal, which is considered "developed" by OECD and "less-developed" in this report, the aid shown in Table I is given entirely to Portuguese overseas provinces. Due to this difference in coverage, the bilateral aid component of all DAC donor entries in Table I exceeds the bilateral aid component of the recipient entries by \$1.1 billion.

On the other hand, the contributions of DAC donors to multilateral agencies were less than the aid extended by these agencies in 1966. The net result of these two partially offsetting disparities—the incomplete coverage of recipients in the case of bilateral aid, and the excess of aid given over contributions received by multilateral agencies—accounts for the discrepancy of \$.7 billion between total world-wide aid received and given as shown in Table I.

Entries for communist donors show estimated gross aid drawn by non-communist LDC's only; aid between communist countries is excluded. These data were estimated by ACDA on the basis of aid commitments data published by the Department of State and of various other sources. In view of marked differences between aid commitments and actual withdrawals from communist donors, these estimates should be considered only rough approximations. Aid given by communist countries is shown only by donor country and in aid received; receipts of this aid are not included in aid-received entries for countries and regions.

Education

World-wide data for 1966 public education expenditures are not expected to be available until 1969. Except for the U.S., the data used in the present report were taken from the UNESCO <u>Statistical Yearbook 1966</u>, Geneva, 1968, together with some revisions and additions provided to ACDA by UNESCO. These data relate to 1965 for 37 countries and previous years for most others. The Malagasy Republic entry is for 1966, and includes a substantial component financed by foreign aid.

The entry for the United States represents an estimate for calendar year 1966 based on figures for fiscal years 1966 and 1967, as reported in Social Security Bulletin, December 1967, issued by the U.S. Department of Health, Education and Welfare.

Health

The data for public spending on health were taken largely from two reports of the World Health Organization (WHO): Third Report on the World Health Situation, 1961-1964, Geneva, 1967, and Supplement to the Third Report on the World Health Situation, 1965-1966, Geneva, 1968 (mimeographed). The Supplement is provisional and subject to revision.

The data generally reflect current expenditures for the provision of health services by agencies and institutions at all levels of government. Since capital outlay data are unavailable or ambiguous for many countries, such outlays are excluded to provide greater intercountry comparability.

(In the 21 countries for which public health capital outlays are available for 1965 or 1966 these expenditures averaged 10 percent of current outlays. The evidence suggests wide variations from country to country and also from year to year but in most cases capital expenditures are below 25 percent of current expenditures.)

The WHO sources provide 1966 data for 35 countries. Where 1966 data are not reported, the most recent per capita expenditure rates available were applied to the 1966 population. Where no country data are reported, ACDA estimates (indicated by "E" in Table I) were made on the basis of regional average per capita dollar expenditures shown in the Supplement cited above, with some adjustments. The figure for the United States is from the Social Security Bulletin, April 1968, issued by the U.S. Department of Health, Education and Welfare.

Population

Population estimates for mid-1966 are primarily from the United Nations <u>Demographic Yearbook</u>, 1966, New York, 1967. In selected cases, AID modifications made on the basis of evaluations from U.S. Missions abroad were used. The estimate for Mainland China is based on John S. Aird, "Population Growth and Distribution in Mainland China", in Joint Economic Committee of Congress, <u>An Economic Profile of Mainland China</u>, Volume 2, 1967.

Armed Forces

The data are intended to cover military personnel actually on duty, including paramilitary forces where such forces add substantially to a nation's military capabilities. Reserves are excluded for all countries in the present report. In reports for previous years, such reserves had been included for Switzerland, where the national militia includes all able-bodied males, and for Israel, where reserves are a high percentage of the readily mobilized fighting force.

Estimates for the number of men under arms were derived from data in The Statesman's Year-Book, 1967-1968, MacMillan London, 1967; the Reader's Digest Almanac and Yearbook, 1967, New York, 1966; and the Institute of Strategic Studies' The Military Balance 1966-1967, London, September 1966.

Conversion Rates

For the conversion of data from foreign currencies to U.S. dollars, official exchange rates were used for most of the national totals shown in Tables I through IV. Alternative rates were used for the Warsaw Pact nations, including the Soviet Union, and for several countries in Latin America and the Far East for which official rates appeared to yield unrealistic dollar equivalents.

For the Warsaw Pact countries, rough purchasing power factors were used in place of official rates to convert national currencies into dollars. In most cases of conversion, including for the Soviet Union, different purchasing power factors were used for GNP, military expenditures, foreign aid, public health and education, in order to make the respective dollar values more comparable to U.S. values. The proportions among the components of GNP consequently suffer some distortion and should not be considered precise. The conversion factors used for Argentina, Brazil, Chile, Colombia and Uruguay are estimated by AID as

representing "effective rates" appropriate to foreign transactions. For some countries where official rates are not established or are inactive, e.g., Indonesia, available market rates considered most appropriate were used.

The use of official exchange rates as in Fables I-IV of the present report can produce significant distortions in magnitudes and trends. The Indian rupee, for example, underwent a 37% devaluation in mid-1966. As a consequence, 1966 dollar values for India in Table I at the new official exchange rate showa GNP that is more than \$20 billion lower and military expenditures that are \$.8 billion lower than they would have been at the previous official rate. The \$.8 billion represents over 40% of total military expenditures in South Asia.

Table V represents an effort to obtain a more realistic and consistent basis for international comparisons than official exchange rates, which are set primarily for foreign trading purposes. In this table GNP and military expenditures are shown for all countries in addition to those of the Warsaw Pact for which there was some means of computing purchasing power equivalent (PPE) rates, that is, conversion rates from national currencies into U.S. dollars which take into account what the value of equivalent goods and services would be if purchased in the U.S.

The initial PPE computations were done under the guidance of an ACDA consultant, Professor Emile Benoit of Columbia University. The primary sources of information were the research studies by Gilbert and Kravis on OECD countries, as published in Comparative National Products and Price Levels, A Study of Western Europe and the United States, OECD, Paris, 1958, and the more recent work by Wilfred Beckerman and Robert Bacon, published in the Royal Economic Society's The Economic Journal, London, September, 1966.

The Gilbert and Kravis study provides separate PPE rates for GNP and military expenditures for each of eight OECD countries (Belgium, Denmark, France, West Germany, Italy, Netherlands, Norway, and the United Kingdom). For the other nations shown in Table V, PPE rates applicable to GNP are also used to convert military expenditures. ACDA has updated the rates to 1966 by the use of national price indexes found in International Monetary Fund International Financial Statics.

A brief description of the methodology used in constructing the PPE rates and a table of the factors used are available from the Economics Bureau of ACDA.

Prices

The estimates of approximate trends in military spending and GNP from 1964 through 1967 in constant 1967 prices, as discussed and charted in the text, are based on average deflators for the developed and less-developed countries as a group. These were derived by ACDA from GNP growth rates estimated by AID for these groups of countries on a worldwide basis (excluding communist countries) using constant 1966 prices and exchange rates. (AID, Gross National Product; Growth Rates and Trend Data by Region and Country, RC-W-138, July 25, 1968.) GNP growth rates in real terms, together with growth rates derived from data at current prices and exchange rates as reported by ACDA, yield factors for converting current dollars into constant dollars which adjust for both price and exchange rate changes. For communist countries, whose estimates in current dollars are intended to reflect current purchasing power equivalence, the implicit price deflators applicable to U.S. GNP (U.S. Department of Commerce, Office of Business Economics, Survey of Current Business, July 1968) were used to convert to 1967 dollars. The same deflator was used for GNP and military expenditures. (This implies the assumption that the ratio of military expenditures to GNP remained constant in both current and constant dollar terms.)

A similar procedure was used in Table IV, where military expenditures and GNP data for selected less developed countries are shown for 1961, 1964, and 1965 as well as 1966, at 1966 prices and exchange rates. Data for the pre-1966 years were published by ACDA in World-Wide Military Expenditures and Related Data, Calendar Year 1965 at 1965 prices and rates. These data were converted to 1966 prices and rates by means of conversion factors obtained as the ratio of 1965 GNP data for each country at 1966 prices and rates, as prepared by AID, and 1965 data at 1965 prices and rates, as shown in ACDA's report for 1965. The conversion factors account for changes in both prices and the exchange rates used by AID, and were used for both GNP and military expenditures.