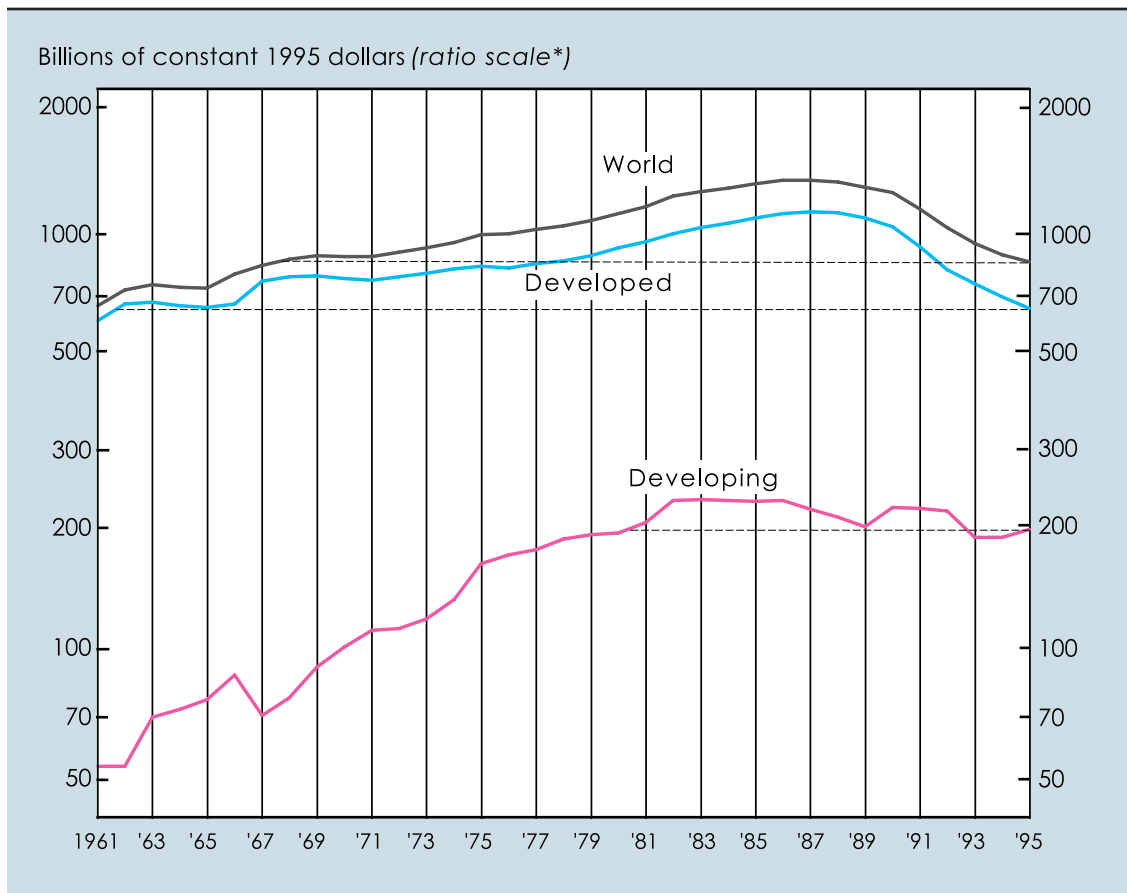


# Highlights

## Military Expenditures

Figure 1. World Military Expenditures: 1961-1995



World military spending of \$864 billion in 1995 was down 34% from the all time high of \$1.36 trillion in 1987 and marked the eighth consecutive drop (in 1995 dollars—Main Table I). It was also the lowest spending level since 1967.

As can be seen in Figure 1, the reduction in world spending can be credited to the developed country group (found mainly in Europe,<sup>†</sup> North America, and East Asia), where the downward trend also began in 1987 and closely followed that of the world. The developed group, making up over three-quarters of the world total, fell by a hefty 8%

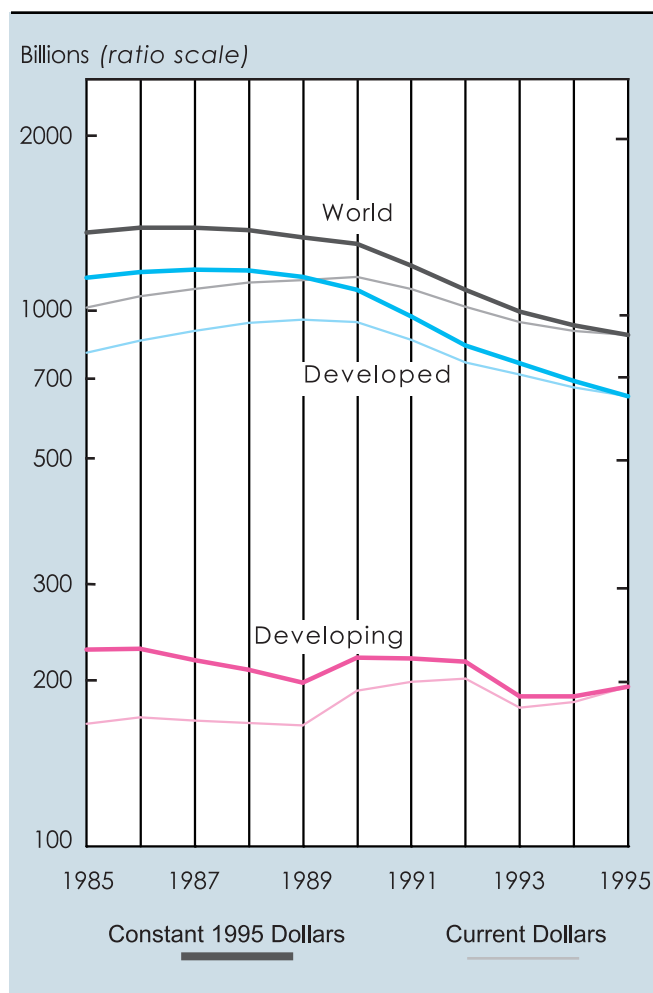
annually in 1991-1995, the latter half of the decade under report (Table 1). The straight-line segment in Figure 2, shows developed group spending dropping steadily at a rate of 7% since 1992 with no sign of impending deviation, although regional rates vary substantially, as will be seen.

In contrast, military spending by this group of countries (mainly in South and Central America, Africa, and Asia) experienced a sizable increase in 1995, to roughly \$200 billion, after having posted consecutive reductions

<sup>†</sup> Regions and countries are listed in Main Table III, pp. 151-155. See also Statistical Notes, Coverage and Groups of Countries.

\* The logarithmic or ratio scale used in these figures is designed to facilitate comparison of rates of change. Ratio scales are compressed as values increase so that, anywhere on the chart, equal vertical distances represent equal ratios of value and equal slopes represent equal rates of change.

**Figure 2. World Military Expenditures:  
1985-1995**



since 1990. Spending by this group has fluctuated repeatedly and peaked earlier in a 1982-1986 plateau. It declined relatively slowly at under 2% over the decade and under 4% in the latter half, with a reversal at the time of the Gulf War.

This suggests that the post-Cold War downward adjustment among the developed group is still in progress and is independent of the decline in the developing group, where it may be drawing to a close or reversing direction.

### Regional Trends

Although regional military spending continues to exhibit the predominantly downward tendency seen in recent years, the trends are becoming more diverse, as shown in Table 1 and Figure 3. Real spending growth rates in 1991-1995 for seven regions, including the largest, were still declining moderately to rapidly, while five had rising trends (in percent):

	1991-1995 Average Rate	World Share 1995
--	---------------------------	---------------------

#### Declining

Eastern Europe	-24.1	11.5
Middle East	-18.0	5.6
Central America & Carib.	-11.9	.1
Subsaharan Africa	-6.4	.4
Western Europe	-3.3	23.2
North America	-3.0	33.4
North Africa	-.6	.6

#### Rising

Central Asia & Cauc. (92-95)	+6.3	.4
South America	+5.2	2.7
South Asia	+3.6	1.5
Oceania	+3.4	1.1
East Asia	+3.3	19.1

The five largest regions in military spending—North America, Western Europe, East Asia, Eastern Europe, and the Middle East—accounted for 93% of the world total in 1995. (The regions are ranked in Table 1, second column.) Trends in Eastern Europe and the Middle East were sharply declining, in North America and Western Europe, modestly-to-moderately declining, and in East Asia, moderately rising. Eastern Europe lost its leading rank in 1991-1992 with Soviet reform and collapse.

North America's one-third share of world spending in 1995 was down from its 36% share in the previous year, as the region continued to follow a steady if moderate declining pattern begun in 1986, broken only in 1992 by the Gulf War. The United States (96% of the region) was by far the largest spender in the world, its \$278 billion in 1995 being 3.7 times that of second-ranked Russia. This was despite dropping by \$18 billion (constant dollars) or 6% in 1995 and by around 3% annually from 1985 and 1991. Over the decade, the United States' share of the world in military spending as well as in other military indicators has increased, even as its real levels declined, due to the fact that the rest of the world has been falling faster (see box below). Canada's over \$9 billion in 1995 gave it a relatively high 13th world spending rank despite being overshadowed by the United States (Figure 4).

Western Europe's spending, at \$200 billion now nearly a quarter of the world's, has also been falling moderately every year since 1990 at over 3% annually. In 1995, the largest spenders—France, Germany, the United Kingdom, and Italy, ranked 5th through 8th with outlays ranging from \$48 to \$19 billion—continued to fall, led by the United Kingdom's nearly \$3 billion drop. Most others also declined, the seven exceptions being Spain, Turkey, Portugal, Greece, Sweden, Ireland, and Switzerland. Over

**Table 1**  
**Military Expenditures: Shares and Growth**  
(in percent)

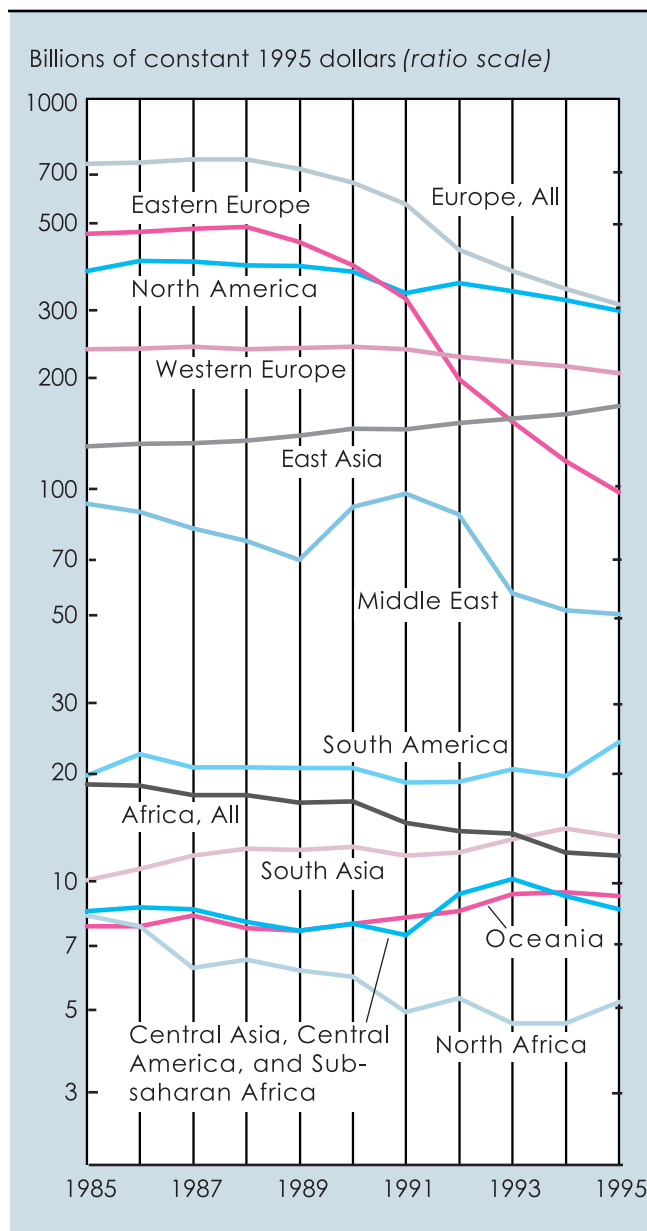
	World Share		Real Growth Rate*	
	1985	1995	Decade 85-95	2nd Half 91-95
<b>World</b>	100.0	100.0	-4.9	-7.1
Developed	82.7	77.3	-5.6	-8.0
Developing	17.3	22.7	-1.7	-3.8
<b>Region</b>				
North America	27.4	33.4	-2.7	-3.0
Western Europe	17.3	23.2	-1.3	-3.3
East Asia	9.8	19.1	2.3	3.3
Eastern Europe	34.1	11.5	-15.5	-24.1
Middle East	7.0	5.6	-5.3	-18.0
South America	1.4	2.7	.2	5.2
South Asia	.8	1.5	2.2	3.6
Oceania	.6	1.1	2.1	3.4
North Africa	.6	.6	-5.8	-.6
Subsaharan Africa	.4	.4	-2.3	-6.4
Central Asia & Cauc.	—	.4	—	—
Central Amer. & Car.	.2	.1	-9.6	-11.9
Europe, all	51.4	34.7	-9.0	-13.2
Africa, all	1.3	1.4	-4.3	-5.0
<b>Organization / Reference Group</b>				
OECD	48.2	63.5	-1.7	-2.7
OPEC	5.8	4.3	-6.1	-21.7
NATO, all	43.4	54.5	-2.2	-3.3
Warsaw Pact (fmr)	33.7	11.4	-15.6	-24.5
NATO Europe	16.0	21.3	-1.4	-3.5
Latin America	1.8	3.1	-.5	4.6
CIS	—	9.7	—	—

\* Average annual rate, calculated as a compound rate curve fitted to all points (see Statistical Notes for details).

the decade, Western Europe's 1.3% rate of decline has been lowest of all major declining regions, followed by North America, suggesting the possibility of further substantial drops yet to come.

East Asia continued its upward trend in 1995, increasing its total military expenditures by \$8 billion or 5%, to a decade high \$165 billion. The region has steadily increased its spending every year of the decade except for a slight drop in 1991, with an average 3.3% growth rate since then. China's \$5 billion jump can be credited for much of the region's increase in 1995. There were large increases in 1995 by numerous others as well, including Taiwan (\$1.4 billion), Indonesia (\$975 million), Singapore (\$585 million), and North Korea (\$362 million). Only Japan and the Philippines recorded sizable reductions, \$300 million and

**Figure 3. Military Expenditures by Region: 1985-1995**



\$251 million, respectively. China, at \$63 billion in military expenditures, was the third largest spender in the world in 1995, followed by Japan at fourth with \$50 billion. South Korea and Taiwan also were high in the world rankings, 10th and 11th, respectively.

Eastern Europe's roughly \$100 billion in military expenditures in 1995 marks the region's seventh consecutive drop since peaking at \$472 billion in 1988, an overall reduction of about four-fifths. The 1995 drop of \$20 billion can be credited mostly to Russia, down by \$19.3 billion. Russia's roughly estimated \$76 billion continues to dominate regional spending and puts it second in the world, followed by Poland, 24th with \$5 billion. The Ukraine posted

## US Military: Changes in World Status and Trends

The United States position in the world's military picture has changed in divergent ways recently, depending on whether the comparison is over time or with the rest of the world. On the one hand, US military indicators fell substantially since peaking in 1986 to 1988, including in the most recent 5-year period, while general economic indicators rose (in %):

	1995 as % of previous peak (in 1986-1988)	Average growth rate 1991-95
Military expenditures	74	- 3.2
Armed forces	71	- 6.3
Military spending/GNP	60	- 5.6
Arms exports	69	- 1.9
Arms imports	29	- 17.4
GNP	—	+ 2.6
Population	—	+ 1.0
Total exports	—	+ 5.5
Total imports	—	+ 8.2

On the other hand, the US rank and share of the world rose over the decade in such key indicators as military expenditures and arms exports, where the US has become far and away the world's largest, and armed forces, where the US rose from third to second, even as its share dropped.

### US as Percent of the World

	1985	1995		1985	1995
Military spending	27	32	GNP	23	23
Arms exports	26	49	Total exports	11	12
Arms imports	3	3	Total imports	18	16
Armed forces	8	7	Population	5	5

This rise in US military status has resulted mainly from sharp reductions in other parts of the world, due especially to the Soviet collapse and Cold War end, rather than US increases. Since US military indicators dropped more slowly than those of the rest of the world, relative US military stature rose.

Besides rising, US shares of the world for military indicators (except arms imports) are higher than for corresponding civilian or overall indicators, where shares have been stable. Whether this military advantage persists may depend on whether it derived mainly from a not-yet-dissipated Cold War momentum, domestic economic and political factors, or the US's leading role in international security affairs, as well as future demands on that role. (Data derived from Main Tables I and II; see also Figure 4 and the Country Rankings section, below.)

a large drop of \$900 million, and Hungary (\$272 million), the Czech Republic (\$190 million), and Belarus (\$172 million) also experienced sizable drops. On the other hand, sizable increases were recorded in 1995 by Romania (\$287 million), Croatia (\$241 million), Poland (\$127 million), and Slovakia (\$126 million). These followed rises in 1994 as well.

The largest single drop in Eastern Europe's spending came in 1992 with a sharp 36% decline. (Only about one percentage point of this drop was due to the definitional transfer of eight former republics of the Soviet Union from the region to the new *WMEAT* Central Asia and Caucasus region.)

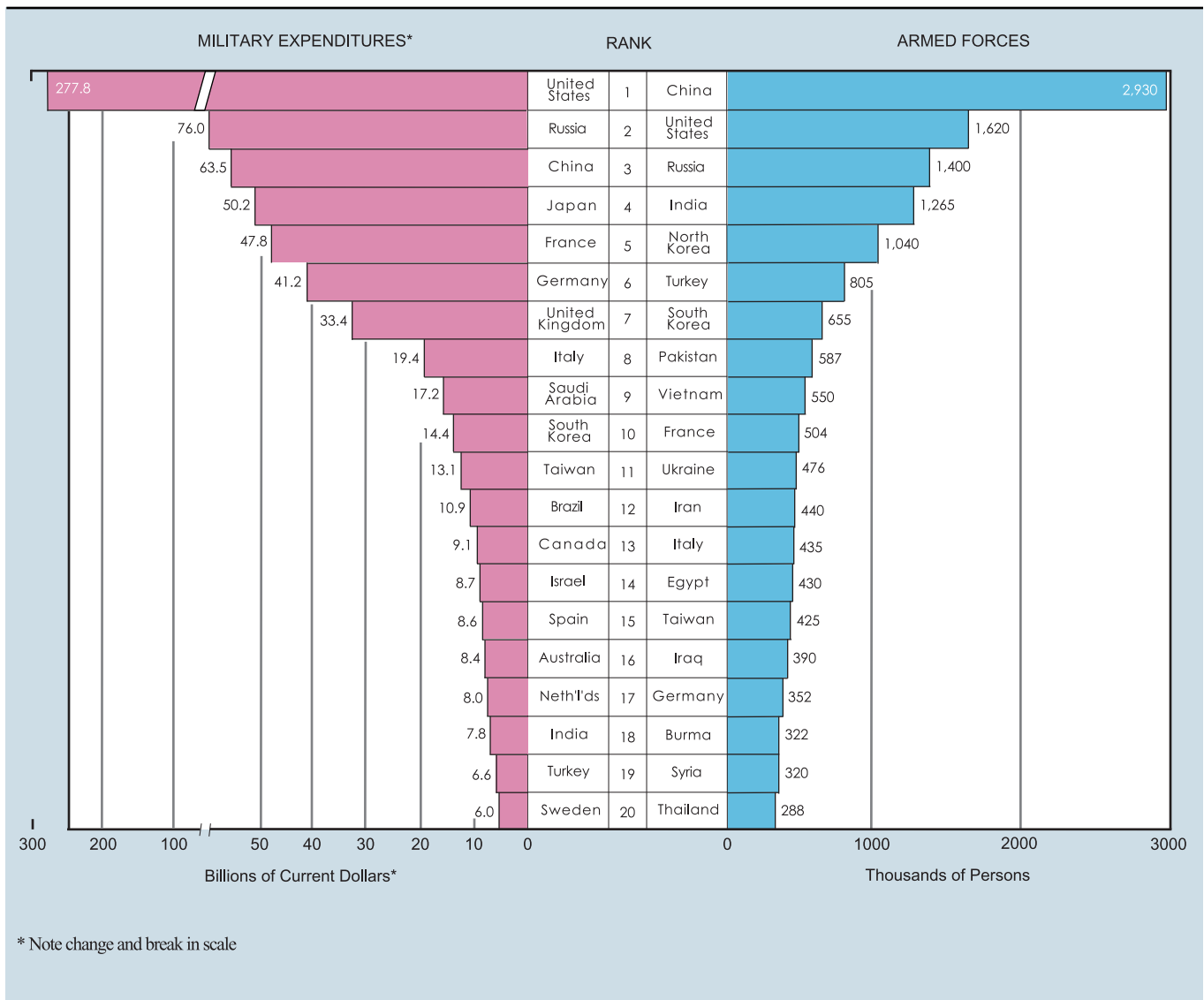
Middle East military spending totalled \$49 billion in 1995, a slight decline from 1994 and about half of the 1991 peak during the Gulf War. Large drops were experienced by Iran, which fell by \$1.4 billion, Saudi Arabia, \$420 million, the United Arab Emirates, \$290 million, and Syria, \$156 million. Most other countries increased their spending. Egypt had the largest increase in 1995, up by \$772 million. Israel, with \$358 million, and Kuwait, \$342 million, also showed sizable rises. Saudi Arabia ranked 9th in the

world in 1995 with \$17 billion and Israel ranked 14th with \$9 billion.

While all five major spending regions except East Asia had falling trends in the latter half of the decade, the remaining smaller regions exhibited a more varied picture for that period. Four had rising trends—South America, South Asia, Oceania, and Central Asia and Caucasus (in 1992-1995), while three were falling—North Africa, Sub-Saharan Africa, and Central America and Caribbean. In 1995, several of these regions bucked their trends; South Asia and Oceania fell while North Africa rose.

Though trends in these smaller spending regions have little influence on the shares or movement of spending in the world and various other large groupings of countries, they are significant from the standpoint of arms control, nonproliferation, and regional stability. It is here, after all, that much conflict and war occurs, and such conflict or its potential provides incentive for the acquisition of ordinary conventional weapons and, ultimately, advanced conventional and mass destruction weapons. Most interstate conflicts involve individual countries in small sub-regions, of course, rather than large groups and regions.

**Figure 4. Leading Military Spenders and Armed Forces: 1995**



South America's relatively fast annual growth in military spending during the latter half of the decade is due mainly to a rise of \$4 billion in 1995, to a total of \$23 billion, marking an all-time decade high for the region. Much of the 1995 rise can be credited to Brazil's dramatic \$3.5 billion increase, along with Colombia's \$665 million, Chile's \$366 million, and Peru's \$121 million. Only Argentina and Venezuela experienced sizable drops from 1994, \$328 million and \$158 million, respectively. Brazil's \$11 billion in 1995 spending ranked 12th in the world.

South Asia's rising trend in 1991-1994 is attributable to India, which makes up about 60% of the region, and Pakistan, about 30%. Both Indian and Pakistani military expenditures fell in 1995, however, by \$671 and \$292 million, respectively. In terms of world rankings, India's \$8 billion in expenditures in 1995 places it 18th, while Pakistan, with roughly \$4 billion, ranks 30th.

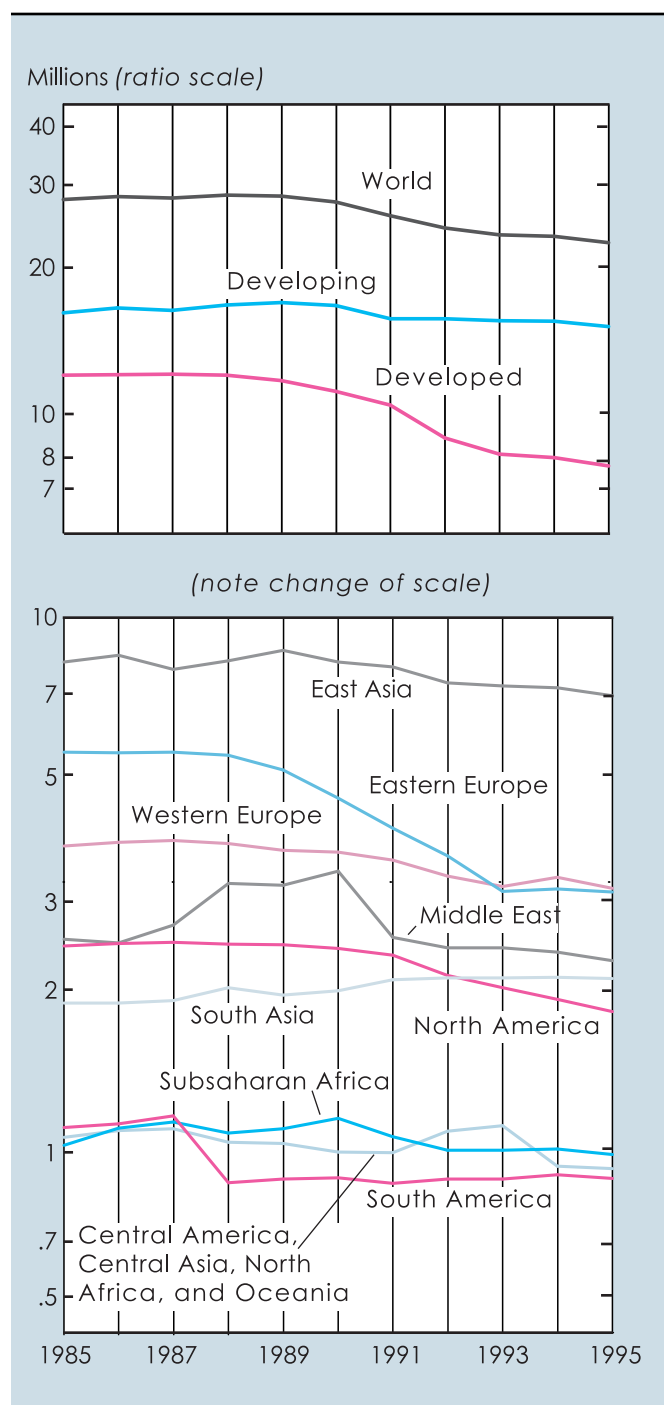
Oceania's spending has been rising steadily and moderately since 1989, with a slight drop in 1995. Australia, which dominates the region, continued a relatively stable level of spending in 1994 and 1995 of around \$8.5 billion, ranking 16th in the world.

Other small regions have diverse trends. Spending in North Africa has been declining in most years of the decade until bottoming in 1993-1994 and rising in 1995, due to Libya's \$660 million upturn. Countries in Sub-Saharan Africa overall, as well as South Africa, have been dropping since 1993. Total spending in Central Asia and the Caucasus has levelled at around \$3.5 billion in 1993-1995. Central America and Caribbean spending has dropped rapidly in the last half of the decade, particularly in 1992 and 1995, led by reductions in Cuba, El Salvador, and Nicaragua, with upturns in Haiti and Dominican Republic in 1995.

# Armed Forces

The world armed forces total of 22.8 million soldiers in 1995 represented a 3% drop from 1994 and a continuation of the downward trend following the 1988 decade high of 28.7 million (Main Table I). The worldwide trend was relatively flat over the first half of the decade but fell at a modest 3% annual rate in the second half.

**Figure 5. World and Regional Armed Forces: 1985-1995**



Total developing country forces fell only slightly, at an average rate of less than 1% over both periods. Now twice as large as the developed, they numbered 15.1 million in 1995, down 2.5% from 1994 (Figure 5).

The armed forces of the developed country group totaled 7.7 million in 1995, 4% less than in 1994. They continued to fall faster than those of the developing group, posting annual drop rates of 7% in 1991-1995 and 5% over the entire decade.

**Table 2  
Armed Forces: Shares and Growth  
(in percent)**

	World Share		Real Growth Rate*	
	1985	1995	Decade 85-95	2nd Half 91-95
<b>World</b>	100.0	100.0	-2.5	-3.0
Developed	42.5	33.6	-5.1	-6.6
Developing	57.5	66.4	-.9	-.8
<b>Region</b>				
East Asia	30.0	31.6	-1.6	-2.7
Western Europe	13.5	13.9	-2.2	-2.4
Eastern Europe	20.1	13.7	-7.2	-6.7
Middle East	9.1	10.2	-1.5	-2.1
South Asia	6.9	9.4	1.3	.1
North America	8.8	8.2	-2.9	-5.7
Subsaharan Africa	3.8	4.5	-1.0	-1.5
South America	4.0	4.0	-2.5	-.6
North Africa	1.7	1.9	-1.1	-1.1
Central Asia & Cauc.	—	1.1	—	—
Central Amer. & Car.	1.8	.9	-8.2	-17.6
Oceania	.3	.4	-1.3	-3.8
Europe, all	33.7	27.5	-4.9	-4.6
Africa, all	5.7	6.8	-1.0	-.9
<b>Organization / Reference Group</b>				
OECD	23.4	23.4	-2.4	-3.6
OPEC	7.2	7.7	-2.3	-1.5
NATO, all	21.1	20.6	-2.6	-3.9
Warsaw Pact (fmr)	19.1	13.3	-7.0	-6.2
NATO Europe	12.8	13.2	-2.2	-2.5
Latin America	6.5	5.7	-3.4	-4.0
CIS	—	9.9	—	—

\* Average annual rate, calculated as a compound rate curvefitted to all points (see Statistical Notes for details).



As a result of the differing trends, the forces of developing countries have grown from 57% of the world total in 1985 to two-thirds in 1995 (Table 2).

Thirteen of the world's twenty largest armies in 1995 belonged to developing countries (Figure 4 and Country Rankings). Of these, China, India, and North Korea had forces of over 1 million soldiers each in 1995 and ranked 1st, 4th and 5th in the world, respectively. The next three largest developing country armies—Turkey, Pakistan, and Vietnam—had armed forces totaling between roughly 550 and 800 thousand and ranked 6th, 8th and 9th. The Ukraine, Iran, Egypt, Iraq, Burma, Syria, and Thailand—with forces between roughly 300 and 500 thousand—rounded out the top twenty.

Among developed countries, armed forces of the United States and Russia ranked second and third in the world, respectively, roughly 1.5 million each. Together, the five armies of a million or more made up over a third of the world total in 1995.

## **Regional Trends**

Nearly all regions followed at least mildly declining trends over the decade. Only South Asia had rising trends over the decade and its second half. East Asian armed forces, more than twice as large as the next region's, found their share of worldwide forces expanding to nearly a third. Eastern European and Central American forces dropped sharply, especially in 1990-1992. North America had the third fastest rate of decline in the last half-decade.

### ***East Asia***

East Asian armies made up 32% of all armed forces in 1995 compared to 30% in 1985. The dominant army—Mainland China's—had 2.9 million soldiers in 1995, 41% of East Asia's and 13% of the world's armed forces. The size of its 1995 army held constant from 1994, ending a downward trend that began in 1989. Over the decade, China's army fell on average by 3.5% and slightly slower at 2.5% during 1991-1995. China's army is roughly three times North Korea's, the next largest East Asian army with just over one million soldiers in 1995, down 13% from 1994. Over the decade, North Korea's army grew on the order of 3.4% annually, but fell during the latter half of the decade by 3% as a result of the drop in 1995. The next three largest armies in East Asia in 1995 were South Korea (655 thousand soldiers), Vietnam (550), and Taiwan (425). Of these, only Vietnam had rapid change, an annual decline of 9% over the decade and 12% over the latter half. The above five were among the 15 largest armies in the world in 1995, 1st, 5th, 7th, 9th, and 15th, respectively.

### ***Western and Eastern Europe***

Total European military strength fell to 6.3 million soldiers in 1995 following consecutive reductions during 1987-1993 and a slight increase in 1994. European armies dropped to 27.5% of world armed forces in 1995 compared to a 34% share in 1985. This dramatic shift is due mostly to Eastern Europe's fall from 20% of the world in 1985 to under 14% in 1995.

Turkey has the largest army in Western Europe with 805 thousand soldiers in 1995, down slightly from 1994. It accounts for over one quarter of Western Europe's armed forces. Over the decade, Turkey's armed forces trended downward slightly but rose during 1991-1995.

France, with 504 thousand soldiers, Italy, 435, and Germany, 352, maintained the next largest armies in Western Europe in 1995, together making up an additional 41% of total regional strength. Each of these three declined steadily over the mid-to-late portion of the decade, with Germany's being the most rapid (3.5% over the decade and 7% over the latter half). Turkey ranked 6th in the world in terms of total armed forces in 1995, followed by France at 10th, Italy at 13th, and Germany at 17th.

European members of NATO made up 64% of NATO's total strength in 1995, 48% of Europe's, 95% of the Western European, and 13% of the world's.

Eastern Europe's armed forces have been reduced by 45% from the beginning to the end of the decade, with the 1995 total being the lowest level, although the trend was nearly level in the last three years. Russia claims the largest army, with 1.4 million soldiers in 1995, 45% of the regional total. Ukraine has the second largest army with 476 thousand soldiers and 15%, followed by Poland (278 thousand) and Romania (209). Poland and Romania have experienced substantial growth in forces strength since 1993, Poland up by roughly 100,000 soldiers or 54%, and Romania up by 42,000 soldiers or 25%. Over the decade both had strong declining trends. Russia's forces declined during 1992-1995 at an annual rate of 9% while the Ukraine's grew at 2%. Russia ranked 3rd among the world's armed forces in 1995, the Ukraine, 11th, Poland, 23rd, and Romania, 28th.

### ***Middle East***

Armies of the Middle East accounted for 10% of world armed forces in 1995, totaling over 2.3 million soldiers. The region's total fell by 86,000 soldiers from 1994 to 1995, a 4% drop. A relatively mild 2% annual drop since 1991 comes after sharp increases in the first half of the decade with the Iran-Iraq and Gulf Wars, followed by a precipitous 25% fall in 1991 alone.

Iran (440 thousand), Egypt (430), and Iraq (390) continue to have the region's largest armies, making up over half of the 1995 regional total. The next three largest armies were Syria (320 thousand), Israel (185), and Jordan (112).

Iran and Iraq were the only Middle East countries to reduce their armies in 1995, Iran by 88 thousand soldiers or 17% and Iraq by 35 thousand or 8%. Increases were experienced by Jordan, 12 thousand soldiers, and Saudi Arabia, 11 thousand. The armies of Kuwait, Lebanon, and Oman increased their armies by 5 thousand soldiers, while all others remained at their 1994 manpower levels. Over the decade, Iran and Saudi Arabia grew annually on the order of 3% and 11%, respectively, while Iraq dropped at an average rate of 10%, mostly in 1991. Over the latter half of the decade all major armies of the Middle East had declining trends, the most rapid being Syria's, with a 7% rate.

In 1995 Iran maintained the 12th largest army in the world, followed by Egypt at 14th, Iraq at 16th and Syria at 19th. Far out of line with their significance, Israel's was the 30th largest and Jordan's, the 41st.

### South Asia

South Asian armed forces totaled over 2.1 million soldiers in 1995, over 9% of the world total and 11 thousand less than the previous year, ending a period of moderate growth that began in 1989.

Indian and Pakistani armies make up 86% of the region's total strength, India alone accounting for almost three-fifths. India's armed forces fell by 40 thousand soldiers in 1995, returning its manpower to the 1993 level, while Pakistan's armed forces rose by 47 thousand, also returning to roughly their 1993 size. Both nations had slow growth during both the decade and half-decade periods. India continues to possess the 4th largest army in the world, with 1.265 million soldiers in 1995, while Pakistan had the 8th largest, with 587 thousand. Bangladesh's army, 115 thousand soldiers strong, was only the 38th largest.

### North America

The United States dominates North American armed forces strength. The US armed forces level of over 1.6 million in 1995—the world's second largest army—is down roughly 100 thousand soldiers from 1994 and 659 thousand from its peak level in 1987. The 1995 US forces accounted for 87% of the North America region, 21% of the developed countries total, but only 5% of the world strength. Over the decade, US forces fell at an annual rate of 4%, but the decline quickened over the latter half of the decade, to 6%. Mexico, with 175 thousand soldiers, ranked 31st in the world in 1995 and Canada, with 70 thousand, ranked 56th.

**Table 3**  
**Force Ratio Trends**

	Amount		Growth Rate*		
	1985	1991	1995	Decade 85-95	2nd Half 91-95
<b>Armed Forces:</b>	(In millions)				
World	28.1	26.0	22.8	-2.5	-3.0
Developed	11.9	10.3	7.7	-5.1	-6.6
Developing	16.2	15.7	15.1	-.9	-.8
<b>Population:</b>	(In billions)				
World	4.8	5.3	5.7	1.6	1.5
Developed	1.2	1.3	1.2	-.8	-1.8
Developing	3.6	4.0	4.5	2.3	2.4
<b>Force Ratio:</b>	(In soldiers per 1000 pop.)				
World	5.8	4.9	4.0	-4.0	-4.4
Developed	9.8	8.1	6.6	-4.3	-4.9
Developing	4.5	3.8	3.3	-3.1	-3.2
Middle East	15.8	13.2	10.7	-4.4	-4.8
Eastern Europe	13.6	9.8	9.1	-4.8	-2.9
Western Europe	9.4	8.2	7.1	-3.3	-3.0
North Africa	8.2	6.8	5.9	-3.5	-3.4
North America	8.8	6.5	4.8	-4.1	-6.9
East Asia	5.0	4.5	3.8	-2.9	-3.8
Central Asia & Cauc.	—	—	3.4	—	—
Central Amer. & Car.	10.5	8.5	3.4	-10.0	-19.2
Oceania	3.9	3.5	2.9	-2.7	-5.1
South America	4.2	3.0	2.9	-4.1	-.9
Subsaharan Africa	2.6	2.3	1.9	-3.9	-4.3
South Asia	1.9	1.8	1.7	-.8	-1.8
Europe, all	11.5	9.0	8.0	-4.4	-3.2
Africa, all	3.3	2.8	2.4	-3.8	-3.6
OECD	7.4	6.6	5.5	-3.4	-4.4
OPEC	5.5	4.4	3.7	-4.6	-3.8
NATO, all	9.3	8.2	6.7	-3.7	-4.7
Warsaw Pact (fmr)	19.1	9.9	13.3	-6.8	-6.1
NATO Europe	9.7	8.4	7.3	-3.4	-3.1
Latin America	4.6	3.5	2.7	-5.1	-5.6
CIS	—	—	7.9	—	—

\* Average annual rate, calculated as a compound rate curve fitted to all points (see Statistical Notes for details).

The remaining six developing regions of the world—North and Subsaharan Africa, South and Central America, Central Asia, and Oceania—accounted for 13% of the world's total armed forces in 1995, up by 1 percentage point from 1985. No countries in these regions possessed armies ranking in the top twenty in 1995, and only Brazil, with 285 thousand soldiers, and Morocco, with 195 thousand, rank in the top thirty.



## Force Ratios

The ratio of a country's armed forces to its population provides a useful indicator of national military burden and effort. A comparison of trends in armed forces, population, and the resulting "force ratio" shows some significant differences between developed and developing countries and sharp differences among regions (Table 3; see also column 1 of Figure 18 on page 28).

The force ratio for the world declined at an accelerated 4.4% rate during the 1991-1995 period. In 1995 there were four soldiers per thousand people, compared with just under five in 1991 and nearly six in 1985. The force ratio of developed countries in 1995 was double that of the developing, 6.6 compared to 3.3. Force ratios of both groups have fallen moderately, the annual rate of decline for developed countries during both the decade and half-decade being more rapid than for developing countries.

In 1995, the Middle East had the highest force ratio of any region with 10.7 soldiers per thousand people, followed by Eastern and Western Europe with 9.1 and 7.1, respectively, North Africa with 5.9, North America with 4.8, and East Asia with 3.8. All remaining regions had lower force ratios.

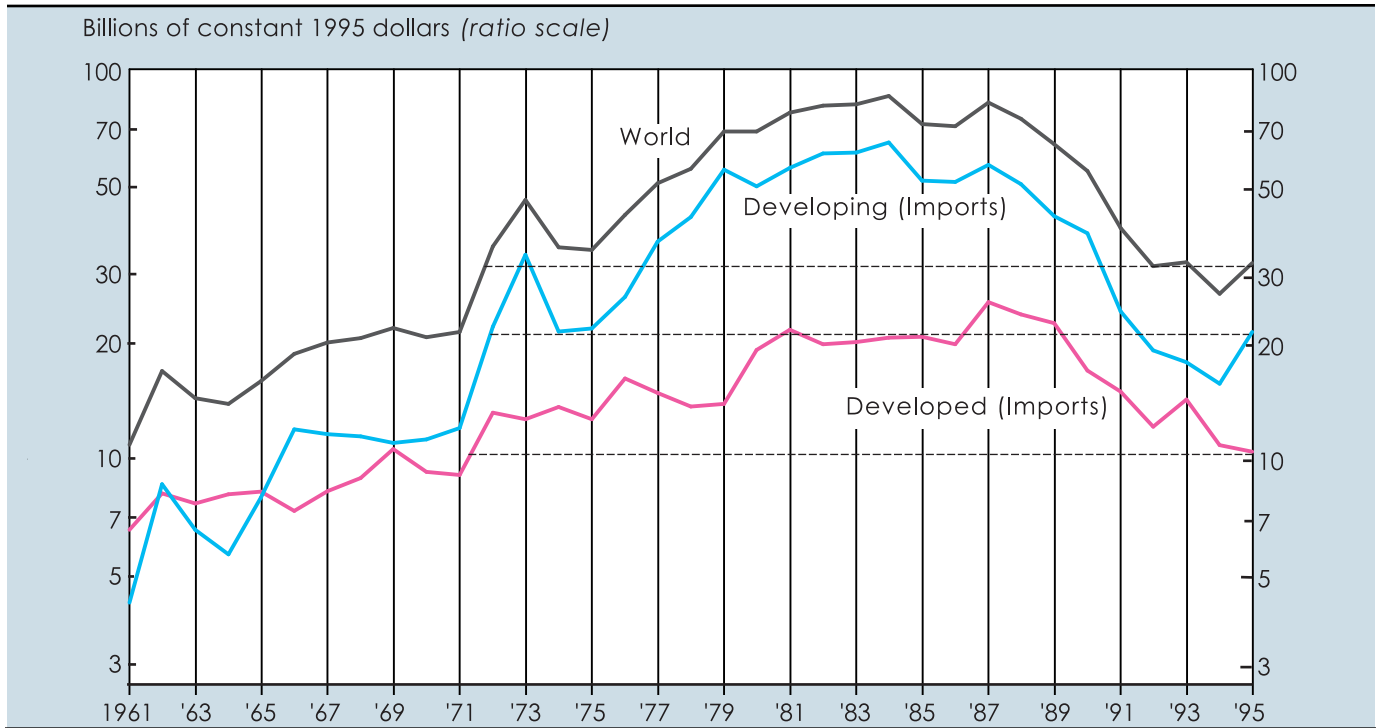
North Korea continues to have the world's largest army relative to its population, with slightly over 44 soldiers per thousand (see Country Rankings). This ratio is down almost eight points from the 1994 rankings. Four other East Asian countries—Taiwan (20), Singapore (18), Brunei (17), and South Korea (15) were also leading countries in terms of this ratio, though only Taiwan ranked in the world's top ten.

Five of the top ten countries in terms of this measure were of the Middle East region. Israel ranked second in the world with 35 soldiers per thousand people, Jordan followed at third with 27, Syria and the United Arab Emirates, each with 21, placed 5th and 6th in the world ranking, and Iraq, with a ratio of 19, ranked 10th. Three other Middle East nations—Qatar (19 soldiers), Oman (17), and Lebanon (15)—also ranked in the top twenty.

Countries with large populations tend to have small force ratios, of course, even if they have large armies. China, for example, with the world's largest army, has a force ratio of 2.4, well below the modal value of 4.2, while India with the fourth largest armed forces has a ratio of 1.4.

# Arms Transfers

**Figure 6. The World Arms Trade: 1961-1995**



The world arms trade rose by \$5.2 billion in 1995, the first significant turn from a steep 16%-per-year, 8-year decline which ended in 1994 below the 1972 level (Figure 6 and Main Table II). The 1995 total of \$32 billion brought the level back to only about two-fifths of the 1987 peak (in constant 1995 dollars), but the upturn suggests that the post-Cold War plunge in the arms trade may be bottoming out.

World arms sales agreements (as distinct from actual deliveries—that is, exports or imports) also declined generally over the decade from a 1985 peak of over \$73 billion to a \$32-34 billion level in 1992-1995, with the exception of a large \$52 billion Gulf-War-induced "spike" in 1993. (Agreements data are in current dollars from Main Table IV.) Agreement levels tend to be more erratic and less reliably estimated than deliveries and have been especially volatile for the United States during the latter years of the decade. US agreement levels also spiked in 1991 and 1993, the latter reaching \$37 billion before returning in 1995 to \$13 billion, well below the decade average and giving no indication of future growth. The 1995 upturn in world deliveries noted above may reflect the agreements surge resulting from the Gulf War, which will take years to realize.

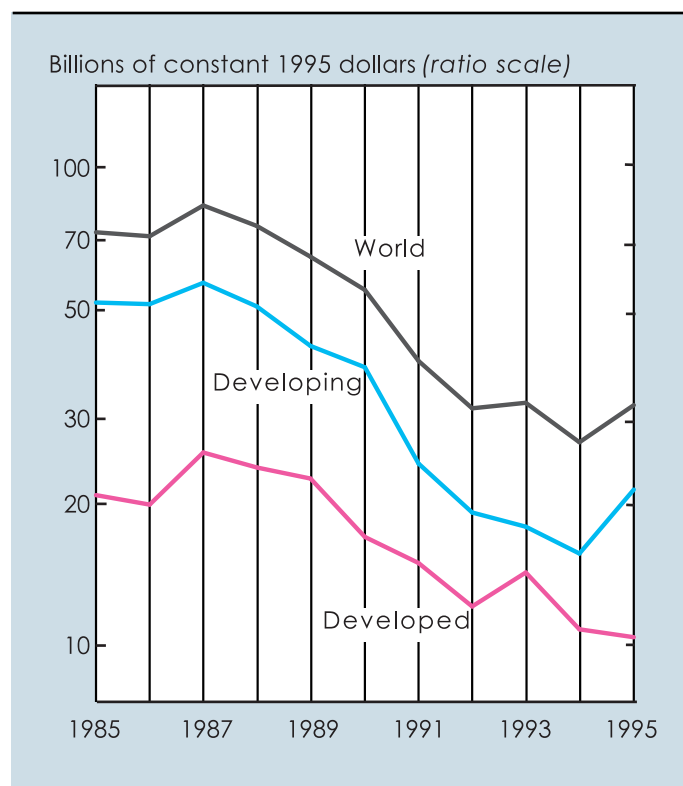
## Note:

- Total arms imports equal arms exports at the world level (only).
- Initial estimates of arms trade totals for the latest year are based on incomplete data and tend to rise when reestimated in subsequent editions.
- With the previous edition, the scope of US arms exports was expanded to include exports of military services under the FMS program (see Statistical Notes, Arms Transfers).

## Arms Import Trends

The 1995 upturn in the world arms trade was the result of a sharp \$5.6 billion or 36% rise in the arms imports of developing countries, as developed country imports continued to fall, though only by \$.4 billion (Figure 7). Both groups of countries began their continuous decline from high points in the same year, 1987, but the rate of decline from then until the 1994 low point was much steep-

**Figure 7. World Arms Imports: 1985-1995**



er for the developing countries—a sharp 33% annually. Over the entire period, the developing countries had a faster average rate of fall despite the upturn in 1995 (Table 4).

The distribution of the world arms trade between developed and developing countries moved towards an increasingly large share for the developed—from 29% in 1985 to near equality, 45% in 1993, but then returned to a more traditional 33% in 1995.

### Overview of Regions

Although all regions of the world had declining arms import trends over the entire period from 1985 to 1995, the three largest importing regions—the Middle East, East Asia, and Western Europe—declined more slowly than the rest and their leading positions rose, their combined share of world imports going from 60% to 76% (Table 4). Their individual shares also rose, the Middle East reaching a relative peak of 43%, and East Asia nearly doubling its share from 12 to 20%. Western Europe at 13% in 1995 was more than three times the next region. Eastern Europe had been a close fourth in regional rankings in 1985 but dropped to eighth by 1995 and was replaced by South America, which rose to 4% with a spurt in 1995 after being one of the smallest importing regions in 1985 at 2%.

**Table 4**  
**World Arms Imports: Shares and Growth**  
(in percent)

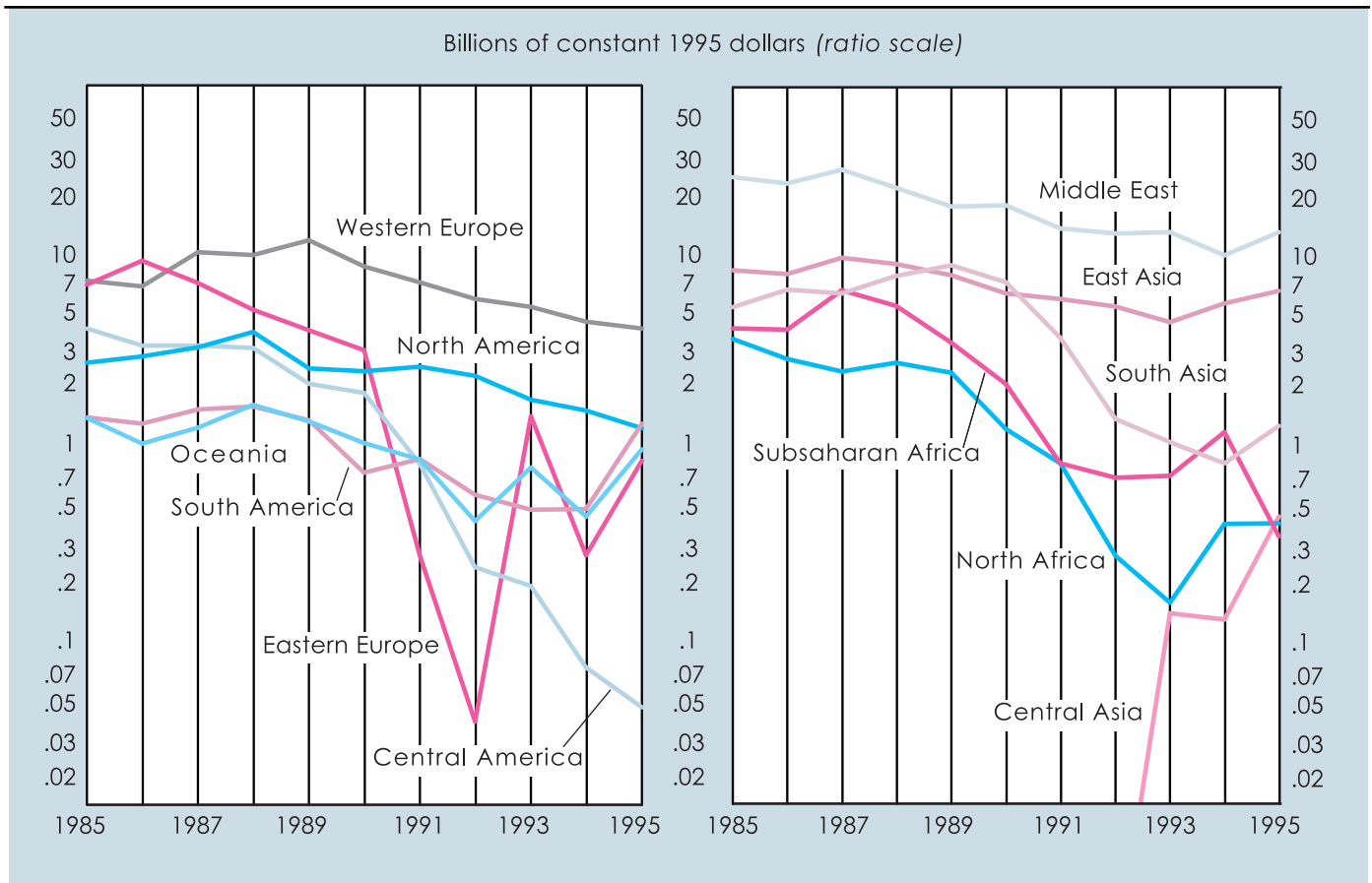
	World Share		Real Growth Rate*	
	1985	1995	Decade 85-95	2nd Half 91-95
<b>World</b>	100.0	100.0	-11.2	-5.5
Developed	28.6	33.1	-8.0	-7.8
Developing	71.4	66.9	-12.9	-4.3
<b>Region</b>				
Middle East	38.4	43.3	-9.6	-3.7
East Asia	11.6	20.2	-6.0	2.4
Western Europe	9.7	12.6	-7.0	-12.8
South America	1.9	4.1	-9.1	6.9
North America	3.7	3.9	-8.1	-17.0
South Asia	7.2	3.5	-21.8	-24.7
Oceania	1.9	3.0	-8.6	3.1
Eastern Europe	9.2	2.6	-31.5	52.6
Central Asia & Cauc.	—	1.1	—	—
North Africa	4.8	1.0	-27.6	-10.8
Subsaharan Africa	5.5	.9	-25.2	-12.2
Central Amer. & Car.	5.5	.1	-37.9	-50.1
Europe, all	19.0	15.2	-13.1	-9.6
Africa, all	10.3	2.6	-22.8	-10.0
<b>Organization / Reference Group</b>				
OECD	17.4	21.3	-7.4	-12.8
OPEC	33.7	35.1	-10.4	-6.0
NATO, all	12.0	16.0	-7.1	-12.8
Warsaw Pact (fmr)	9.2	2.4	-31.6	50.4
NATO Europe	7.9	12.0	-6.2	-11.1
Latin America	7.5	4.3	-20.2	-7.7
CIS —	1.1	—	—	—

\* Average annual rate, calculated as a compound rate curve fitted to all points (see Statistical Notes for details).

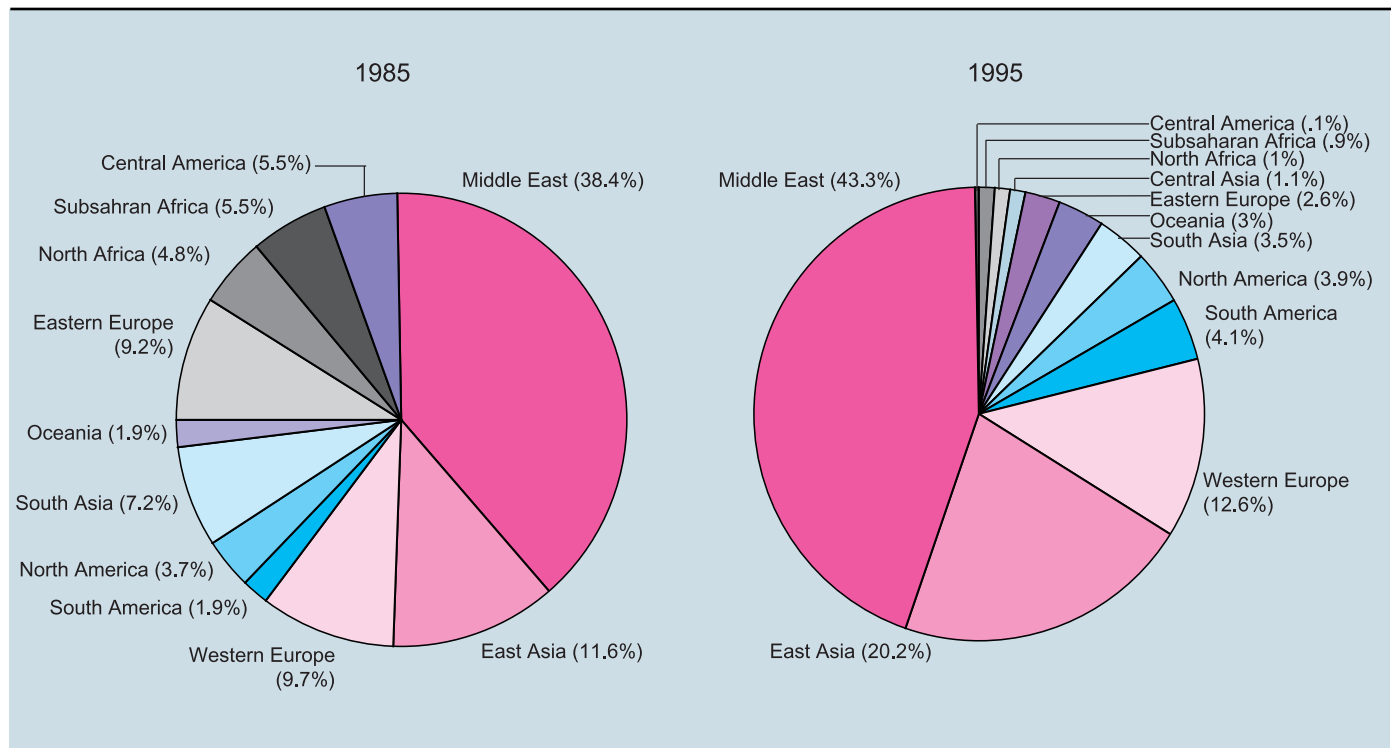
Of the 12 regions, seven raised their imports in 1995, but the Middle East alone accounted for over two-thirds of the 1995 world increase. For the Middle East, South America, and South Asia, 1995 was the first year of upturn after several year declines; for East Asia and North Africa, an upturn began in 1994.

Four regions continued their downward trend in 1995—Western Europe, North America, Subsaharan Africa, and Central America. Western Europe had been declining since 1989, North America, since 1988, and at similar rates since 1991 of 13% and 17%, respectively. Subsaharan Africa dropped sharply in 1995, resuming a decline that began in 1986 but was interrupted by spikes in 1987-1988 and 1994.

**Figure 8. Regional Arms Imports: 1985-1995**



**Figure 9. Regional Shares of the World Arms Import Market: 1985 and 1995**



Central Asia continued a climb from virtually no trade in 1992. Since year-to-year fluctuations in the arms trade can be large, the world market shares over the cumulative 1993-1995 period are also informative; in this case a generally similar picture emerges (in millions of current dollars—based on Main Table III):

Middle East	\$36,940	42%
East Asia	15,895	18
Western Europe	13,270	15
North America	4,440	5
Africa, all	3,350	4
South Asia	2,660	3
Eastern Europe	2,470	3
South America	2,230	2
All others	7,660	8
World	88,915	100

### ***Middle East***

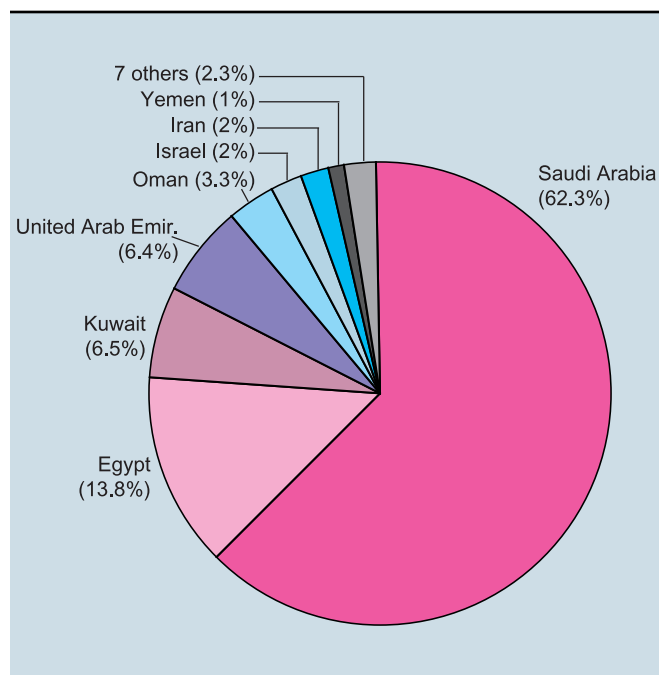
The Middle East remains by far the largest regional arms import market with \$13.8 billion in purchases in 1995. Its 1995 world share of 43% is five percentage points higher than the 38% share recorded in both 1994 and 1985. The region declined by an average 10% annually over the decade, but at a much slower 4% during 1991-1995, which can be credited mostly to a roughly 35% jump in 1995. Overall, the 1995 total is roughly half of that recorded during the earlier part of the decade.

In a sharp contrast to deliveries, arms purchase agreements by Middle East countries fell to a decade low of \$5.6 billion in 1995, less than half the total recorded in 1994 and one quarter of 1993's. These changes are mainly attributable to the dramatic spike in US agreements with the Middle East in 1993 amounting to over \$16 billion, which then fell sharply in 1994 and 1995. French arms agreements with the Middle East also brought about large shifts, rising from \$100 million in 1992 to \$3.6 billion in 1993, to \$6.6 billion in 1994, and then falling to \$1.9 billion in 1995. Over the period 1993-1995, the US accounted for 58% of all arms agreements with the Middle East, and France, for another 30%.

During the latter part of the decade trends among Middle East countries varied widely as evidenced by the high growth rates (in %) of Oman (112), Yemen (85), Lebanon (75), the United Arab Emirates (19), Egypt (16), Jordan (8), and Kuwait (5) and by the rapidly declining trends of Syria (52) and Iran (37).

Other nations showed dramatic shifts in imports, including Saudi Arabia, which had posted consecutive reductions in imports since 1991 (from a lofty \$9.3 billion to \$6.6 billion in 1994) but rose to \$8.6 billion in 1995. Egypt fell from \$1.5 billion in 1993 to \$1.2 billion in 1994 and then rose to \$1.9 billion in 1995. Kuwait fell from a decade high of

**Figure 10. Middle East Arms Import Market: 1995**



over \$1 billion in 1992 to \$226 million in 1994 and rose to \$900 million in 1995.

Israeli imports also fell from over \$1 billion in 1993 to \$615 million in 1994 and \$340 million in 1995. Israeli imports have declined by an average 15% since 1991. Iranian imports totaled \$270 million in 1995, marking a second consecutive drop from the over \$1 billion in purchases recorded in 1993. In contrast to Iran and Israel, Jordan and Oman posted consecutive increases since 1992, Jordan from \$22 million in 1992 to \$70 million in 1995 and Oman from \$11 million to \$460 million.

The largest arms importers in the Middle East during 1993-1995 were the following (in millions of current dollars; Main Table III):

Saudi Arabia	\$22,555	61.0%
Egypt	4,495	12.2
Israel	2,060	5.6
Kuwait	2,055	5.6
Iran	1,780	4.8
United Arab Emir.	1,735	4.7
Others (9)	2,260	6.1

The six leading countries together accounted for 94% of the \$37 billion worth of weapons and military equipment imported into the region during this period.

Saudi Arabia continues to dominate the Middle East region and the world in terms of arms imports. Its 1995 import volume of \$8.6 billion accounted for over 62% of the

regional total and 27% of the world. It was 4.5 times that of the next largest regional and world importer, Egypt, whose \$1.9 billion accounted for 14% of the regional total and 6% of the world total (Figure 12; Country Rankings). These two nations accounted for a combined 76% of all arms imported into the region and 33% of the world total.

Other leading arms purchasers during this period were Kuwait and the United Arab Emirates, each accounting for roughly 6% of the regional market and 3% of the world market. The remaining eleven countries combined accounted for 11% of all regional arms purchases during 1995 and 5% of the world total. In terms of rankings, Kuwait followed the world leaders Saudi Arabia and Egypt as the eighth largest arms importer in the world during 1995, the United Arab Emirates ranked ninth, Oman ranked 17th, Israel ranked 21st, and Iran ranked 27th.

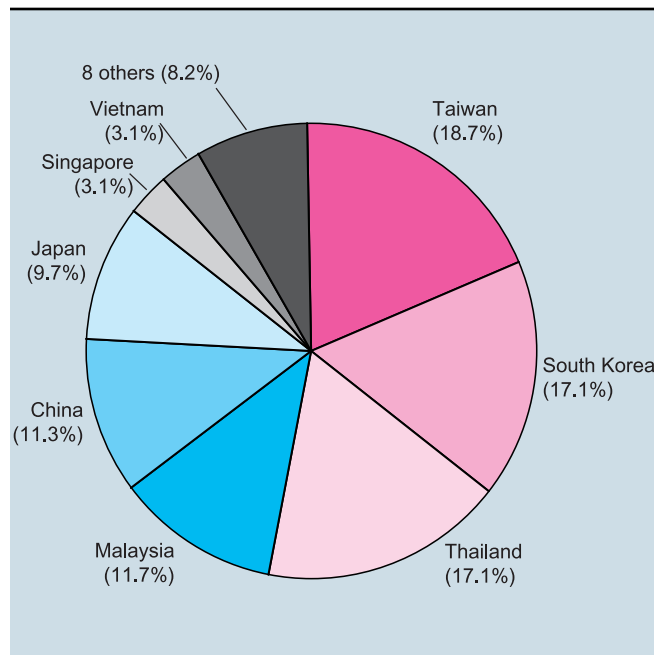
The United States, the number one arms supplier to the Middle East, provided \$18.4 billion in weaponry to the region during 1993-1995, roughly half of the region's total and 43% of total US sales (Main Table III). The United States' largest trade partners in the region were Saudi Arabia (\$10.1 billion), Egypt (\$4.1 billion), Israel (\$1.7 billion), and Kuwait (\$1.6 billion). The United Kingdom was the second largest supplier to the region in this period with \$11.4 billion, which accounted for 31% of the region's total imports and 77% of total UK sales. Saudi Arabia was the key recipient, consuming 90% of total UK sales to the region and 69% of its worldwide sales. The arms supplied to the region by these two exporters accounted for 81% of regional purchases, 52% of their combined worldwide sales, and 34% of world trade. France (\$2 billion) and Russia (\$1.7 billion) were also major suppliers, accounting for a combined 10% of regional imports. The key recipients in this case were Saudi Arabia, with \$1.4 billion in purchases from France, and Iran, with \$1 billion from Russia.

### East Asia

East Asia remains the second largest regional arms import market for the second year. Its \$6.4 billion in 1995 purchases were 20% of the world total, eight percentage points more than the 12% share recorded in 1985. The 1995 total marks the second straight rise for the region after having fallen continuously from a peak of \$10 billion in 1987 to less than half that amount in 1993, \$4.3 billion. Increases in both 1994 and 1995 put East Asian arms imports up 50% from 1993. The region averaged a 6% annual decline during the entire decade, but grew on the order of 2.4% annually over the latter part of the decade, reaching 65% of the 1987 record peak.

In 1995, the region's leading arms importers were Taiwan with \$1.2 billion and South Korea and Thailand with \$1.1 billion each. These were followed by another trio,

**Figure 11. East Asian Arms Import Market 1995**



Malaysia, China, and Japan, with \$750-625 million. Together these six accounted for 86% of East Asian imports in 1995.

The same sextet also accounted for about the same portion of the nearly \$16 billion imported during 1993-1995, as shown below in a listing of major importers over that period (in millions of current dollars; Main Table III):

South Korea	\$3,505	22.1%
Taiwan	3,215	20.2
Japan	1,960	12.3
Malaysia	1,920	12.1
China	1,610	10.1
Thailand	1,575	9.9
Singapore	560	3.5
Indonesia	300	1.9
Vietnam	295	1.9
Others (7)	955	6.0

In terms of their arms import trends over the entire decade, the countries of the region have followed several general paths. Relatively steady trends (in constant dollars), with decade-long average annual change rates, up or down, of 5% or less have been followed by most of the largest importers and some intermediate-sized importers, including Taiwan, South Korea, China, Thailand, Singapore, and the Philippines. Several large importers at the beginning of the decade fell drastically in the 1990-1993 interval, including Vietnam, North Korea, Indonesia, and Cambodia, with a moderate recovery in the 1994-1995 period (except Cambodia). Japan's imports have declined at an 8% rate over the decade and somewhat faster (17%) in the latter half.



**Figure 12. Leading Arms Importers and Their Major Suppliers: 1993-1995**



Malaysia began the decade at a high level, dropped to a plateau, then began an upturn that averaged 73% per year in 1991-1995.

As a consequence of these patterns, arms imports in East Asia have been spread more widely than in the Middle East. At various points in the decade, five different countries have been the region's largest importers (Vietnam, Japan, China, South Korea, and Taiwan). In 1995, East Asia's six leading importers all had high world ranks in terms of arms imports—Taiwan (3), South Korea (4), Thailand (5), Malaysia (11), China (12), and Japan (15).

For several East Asian countries in 1995, even though their arms imports have dropped to relatively moderate levels, the ratio of arms to total imports was sizable, due to low total imports (Main Table II):

	Arms imports (million \$)	Arms as % of total imports
Burma	\$140	10.5%
North Korea	100	5.8
Cambodia	20	3.2
Vietnam	200	2.7
Region average	—	0.6

The United States is the number one supplier to East Asia, providing over \$8 billion in weaponry to the region during 1993-1995, roughly half of the region's total arms imports. The United States' largest trade partners in the region were Taiwan (\$3.2 billion), Japan (\$1.9 billion), South Korea (\$1.4 billion), and Thailand (\$1.1 billion). Russia was the second largest supplier during this period, providing some \$2.2 billion or 14% of the region's total imports. China was the recipient of over half of these sales, followed by Malaysia (\$550 million) and Vietnam (\$290 million). During this period, the combined sales to the region by these two exporters accounted for 65% of regional purchases and almost one-fifth of their combined worldwide sales. The United Kingdom and Germany, both with roughly \$1.7 billion in sales to East Asia during 1993-1995, accounted for a combined 21% of the regional arms imports. Key recipients from these suppliers were Malaysia, with \$1.2 billion from the United Kingdom, and South Korea, with \$1.5 billion from Germany.

Data on agreements, in contrast to the delivery data discussed above, suggest further increases in the future. Arms purchase agreements by East Asian countries rose from \$6.6 billion in 1994 to \$8.8 billion in 1995, which can be attributed mainly to Russian agreements, which rose sharply to \$4.7 billion from \$2 billion in 1994. US arms agreements

with East Asia peaked at \$9.6 billion in 1993 but fell to roughly one-third of that amount in 1994 and fell further to \$2.5 billion in 1995. This accounted for 28% of total regional arms agreements, while Russian sales made up 53%.

### ***Trends within Europe***

Western Europe, with imports totaling over \$4 billion in 1995 and \$13.3 billion during 1993-1995, is the third largest arms importing region. Western Europe overshadowed the Eastern half in 1995 by importing 13% of total worldwide imports and 83% of imports by Europe as a whole. The 1995 reduction of 7% in Western Europe's arms imports continued a consecutive yearly decline since the peak of \$11.4 billion in 1989. Eastern Europe has experienced sporadic ups and downs in imports during this period, dropping steadily from \$9 billion in 1986 to a mere \$38 million in 1992, back up to \$1.4 billion in 1993, down to \$272 million in 1994, then up to \$835 million in 1995. Europe as a whole averaged a 13% annual decline during the entire decade and a 10% annual decline during the latter half. The Western half declined at a more rapid 13% during the later half of the decade and at a slower 7% over the 1985-1995 period. Eastern Europe conversely reduced its imports by 31% annually over the decade, but grew rapidly at 53% during 1991-1995.

Among Western European countries, only Austria (6%), Greece (6%), and Portugal (2%) had growing arms imports over the decade, while Spain (29%), Austria (18%), Greece (18%), and Belgium (1%) showed growth during the latter half. Most of those with declining trends had much more rapid reductions during the latter half of the decade. Over the entire decade, nine Western European countries declined between 5-10% annually, five between 10-20%, and one over 20%. This differs sharply with the latter half of the decade when only one country had annual declines between 5-10%, four, between 10-20%, and eight, over 20%. Several nations with previously high arms imports reduced them dramatically over the latter part of the period, notably Switzerland and Germany.

Western Europe's four leading arms importers—Turkey (\$3 billion), Greece (\$2.2 billion), Spain (\$1.6 billion), and Germany (\$1.3 billion)—together accounted for 61% of the \$13.3 billion worth of weapons and military equipment imported into the region during 1993-1995. In 1995 alone, the region's leading importers were Greece (\$825 million, 10th in the world and one-fifth of regional imports), Turkey (\$700 million, 13th), Spain (\$675 million, 14th), Belgium (\$340 million, 20th), and Germany (\$310 million, 22nd). These nations accounted for a combined 71% of all arms imported into Western Europe during 1995.

The United States is the number one supplier to Western Europe, providing roughly \$9 billion in weaponry to the region during 1993-1995, two-thirds of the regional total. The United States' largest trade partners in the region were Turkey (\$2.3 billion), Spain (\$1.3 billion), Greece (\$1.2 billion), and Germany (\$1 billion). Germany and France—the next largest suppliers during this period—each exported some \$1.1 billion in arms to others in the region, accounting for 17% of the region's total. Big purchasers from Germany included Greece (\$525 million) and Sweden (\$280 million), while Belgium (\$280 million) purchased a large share of French intra-regional sales. The UK's intra-regional sales totaled a much smaller \$325 million during 1993-1995.

Eastern Europe imported some \$2.5 billion in arms during 1993-1995, with most imports going to Hungary (\$950 million or 38% of its regional total) and Slovakia (\$550 million, 22%). The largest supplier of arms was Russia, which provided over \$1.3 billion during this period, the whole amount imported by these two leading recipients.

### ***Other Regional Trends***

The nine other regions of the world accounted for one-fifth of total worldwide arms sales in 1995, compared to two-fifths in 1985. This downward shift can be credited mostly to reduced arms imports by Africa (nearly 8 percentage points lower in 1995 than in 1985) and South Asia (4 percentage points lower). By contrast, South and North America and Oceania each increased their share of the market over the decade.

South America's sharp rise in arms imports from \$472 million in 1994 to \$1.3 billion in 1995 made it the fourth largest importing region with slightly over 4% of the worldwide market. This jump can be credited to big increases in purchases by a handful of countries, mainly Chile (up by \$267 million), Peru (\$218 million), Ecuador (\$209 million), and Brazil (\$67 million). Of the other South American arms purchasers, five had small increases in 1995 and only one had a decline.

Overall, regional imports grew at a rate of nearly 7% a year in 1991-1995. Ecuador (72%), Chile (42%), Argentina (29%), and Peru (29%) had much higher growth during this period. Argentina's arms imports remained relatively low compared to the high mid-to-late 1980's purchases, as did Colombia's, following a surge of imports during 1988-1992.

Over the 1993-1995 period, the key arms importers were Chile (\$525 million), Brazil (\$430 million), Peru (\$375 million), and Ecuador (\$370 million), consuming well over

three-fourths of the \$2.2 billion in regional purchases. The United States was the largest supplier of arms during this period, providing 17% of the total, while nations of the Middle East contributed an additional 17%.

North America, the fifth largest importing region, accounted for slightly under 4% of the worldwide market in 1995. The United States, Canada, and Mexico each reduced their level of imports in 1995, and all three had moderate annual rates of decline over the latter half of the decade. The United States dominated this market in 1995 and 1993-1995, accounting for 81% of imports in both cases. The United Kingdom was the top supplier of arms to North America, with \$1.2 billion in sales, all going to the United States. The United States ranked sixth in terms of worldwide arms imports in 1995.

Pakistan and India continued to dominate South Asia in terms of arms purchases in 1995, accounting for roughly four-fifths of regional imports. Both increased their imports from 1994, Pakistan from \$297 million to \$480 million and India from \$236 million to \$410 million, or by 62% and 74%, respectively. Over the decade and half-decade periods, India's imports declined at substantial rates, around 26%, while Pakistani purchases declined slightly by 3% a year over the decade but rose over the latter half at a 9% rate. Sri Lankan imports continued to climb rapidly, rising to \$160 million in 1995 (at an annual rate of 60% since 1991).

China and Russia continued to be the primary suppliers of arms to South Asia, providing 32% and 28%, respectively, of the \$2.7 billion in imports during 1993-1995. Most of China's sales went to Pakistan (\$625 million), while most of Russia's went to India (\$675). France was also a big supplier during this period with \$430 million in sales, all going to Pakistan. South Asia's leading arms importers were close in world rank, Pakistan at 16th and India at 18th.

In the remaining regions, Australia increased its arms purchases considerably in 1995 from \$410 million to \$900 million and accounted for 94% of Oceania's regional imports in both 1995 and the 1993-1995 period. Australia's imports grew at an annual rate of 9% during 1991-1995 compared to a 9% decline over the entire decade. The United States (\$1.1 billion) and Germany (\$500 million) supplied Oceania with most of its weapons, most going to Australia. Australia ranked seventh in worldwide arms imports.

In Central Asia, Kazakstan's \$280 million accounted for four-fifths of the region's 1995 arms imports. It also dominated the market over the 1993-1995 period, claiming \$360 million of the \$535 million in total imports. Of all arms imported into Central Asia during 1993-1995, 83% came from Russia and an additional 13% came from other Eastern European countries.

Algeria (\$395 million) and Morocco (\$235 million) imported 85% of the total arms purchased by North Africa

during 1993-1995. Algerian arms imports have risen consecutively since falling sharply to \$5 million in 1992. Morocco continues to be a sporadic arms importer.

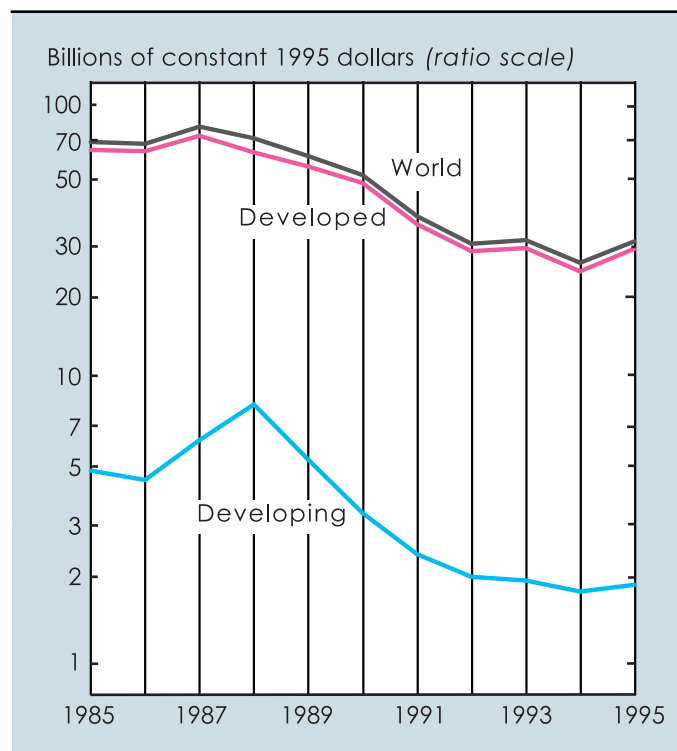
Angola (\$1.1 billion) and Sudan (\$260 million) led the Sub-Saharan Africa arms import market during 1993-1995 and continue to be sporadic arms importers. South Africa imported an additional \$800 million in arms during the 1993-1995 period and continues to be a stable importer of relatively large amounts of arms into the region.

The combined imports of Cuba and El Salvador in the amount of \$100 million each accounted for two-thirds of the Central American and Caribbean arms market during 1993-1995, although Cuba imported zero arms in 1995 and El Salvador's purchases have dropped steadily since 1992. Russia and the United States are the key suppliers to Cuba and El Salvador, respectively.

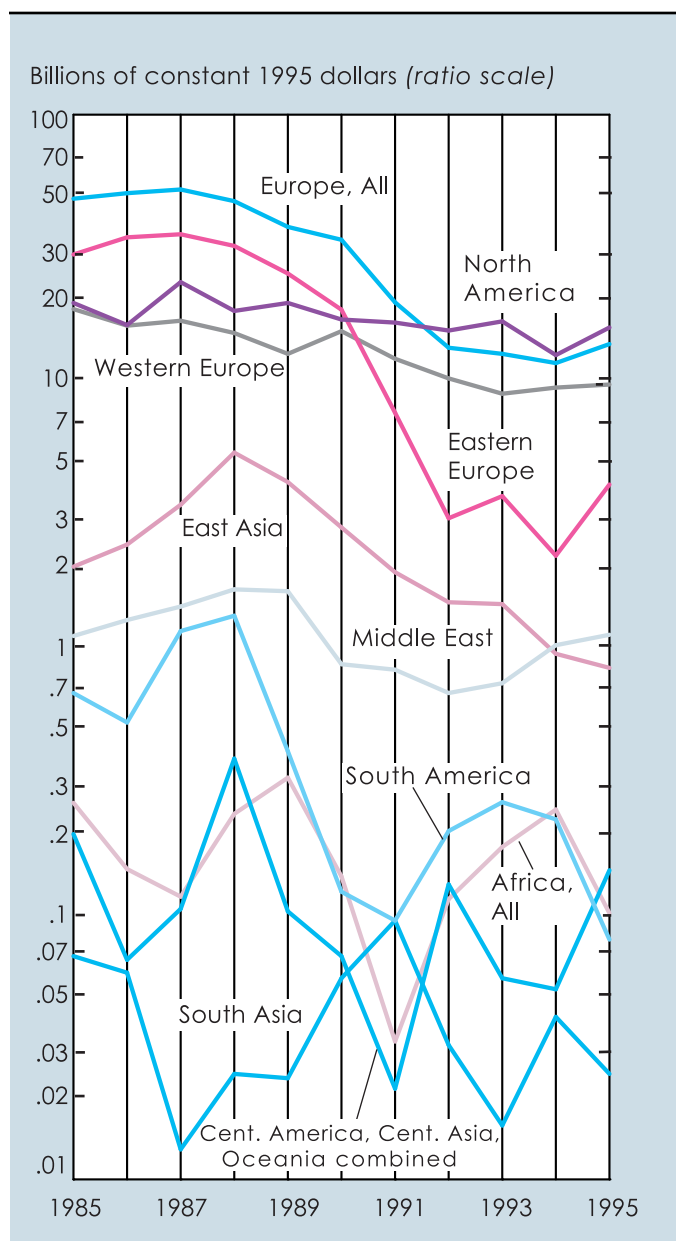
### Arms Export Trends

At the world level, totals for arms exports and arms imports are opposite sides of the coin and behave identically, with matching drops in volume and annual rates of decline. Thus, as with total imports, total exports were \$32 billion in 1995, an increase of \$5.6 billion or 20% from the previous year, after falling steeply by over 60% from their 1987 high point to the 1994 low. As with world imports, totals for the latest years are likely to be revised upward in future editions.

**Figure 12. World Arms Exports: 1985-1995**



**Figure 13. Arms Exports by Region:  
1985-1995**



The 1995 upturn can be credited mostly to the developed country grouping, here considered as arms exporters rather than importers (and redefined in the *WMEAT 1995* edition; see Statistical Notes, Coverage. . .). Developed countries' arms sales, 94% of the total, increased \$5.2 billion in 1995, up 21% from 1994. Developing countries exports, 6% of the world's, increased as well in 1995, but only by about \$100 million, an increase of 5%. Arms exports by developed countries were 55% less in 1995 than in 1985, while those of developing countries fell by 61%. Over the decade arms exports fell by an annual rate of 11% for developed countries and 13% for developing, while over the latter half of the

**Table 5  
World Arms Exports: Shares and Growth  
(in percent)**

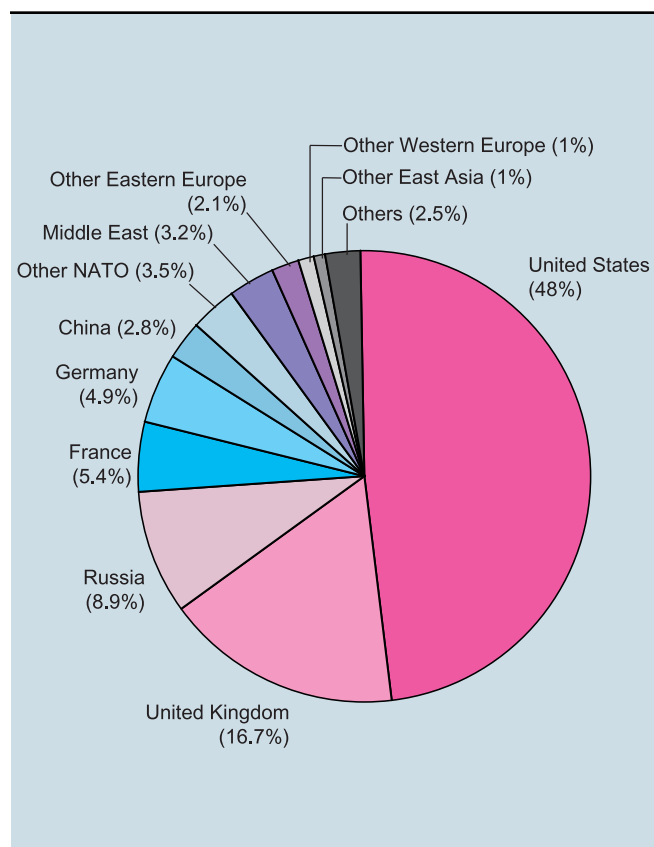
	World Share		Real Growth Rate*	
	1985	1995	Decade 85-95	2nd Half 91-95
<b>World</b>	100.0	100.0	-11.2	-5.5
Developed	93.4	94.1	-11.1	-5.5
Developing	6.6	5.9	-13.1	-6.0
<b>Region</b>				
North America	27.2	49.7	-3.3	-2.9
Western Europe	25.7	30.3	-7.1	-5.2
Eastern Europe	41.2	12.8	-26.4	-14.4
Middle East	1.5	3.5	-4.7	10.8
East Asia	2.8	2.6	-12.0	-18.9
Central Asia & Cauc.	—	.2	—	—
Oceania	.3	.2	-13.7	9.0
South America	.9	.2	-19.3	-2.2
Central Amer. & Car.	0	.1	7.7	43.6
South Asia	.1	.1	-3.7	-21.4
Subsaharan Africa	0	0	-12.2	6.7
North Africa	.2	0	-42.2	-57.5
Europe, all	66.9	43.1	-16.3	-8.1
Africa, all	.4	.3	-4.6	34.8
<b>Organization / Reference Group</b>				
OECD	53.4	80.2	-5.0	-3.8
OPEC	.3	1.1	-.1	69.5
NATO, all	51.6	78.7	-4.7	-3.2
Warsaw Pact (fmr)	40.3	12.9	-26.1	-13.7
NATO Europe	24.4	29.0	-6.7	-3.8
Latin America	1.0	.4	-16.7	2.9
CIS	—	11.6	—	—

\* Average annual rate, calculated as a compound rate curve fitted to all points (see Statistical Notes for details).

decade the rates of decline were 5.5% and 6%, respectively (Table 5 and Figure 12).

Most of the significant arms exporting regions increased their exports in 1995 slightly to substantially—including North America, Western Europe, Eastern Europe, and the Middle East. Since their peaks in 1987-1989, these regions' exports had fallen sharply to 1992, after which fluctuating but generally level trends set in. The exception was East Asia, whose arms export level continued its falling trend almost every year, including 1995. Also uncharacteristic was the Middle East, whose level rose steadily from 1992 (Figure 13). By 1995 the world share of other regions had declined,

**Figure 14. World Arms Exports Shares: 1993-1995**



particularly South America's and North Africa's, to .2% or less (Table 5).

The top five suppliers of arms in 1995—United States, United Kingdom, Russia, France and Germany—each sold over \$1 billion in weaponry, the five combined totaling over \$27 billion or 86% of the worldwide market. Weapons exports by the US amounted to \$15.6 billion, three times that of the next largest supplier, the United Kingdom (\$5.2 billion). The next five largest arms exporters after the top five—Israel, China, Sweden, Iran, and Canada—totaled \$2.3 billion in 1995, 7% of worldwide sales.

Less subject to annual fluctuations are the shares of the world arms export market in the 1993-1995 period held by major exporters and groups (Figure 14). Besides US and UK preeminence and the diminished Russian share, the low French and non-European shares are noteworthy. The figure is based on Main Table III, which also shows sales of major suppliers to recipient countries in that period.

The shifting annual world market shares of the major exporters over the 1985-1995 decade are shown in Table 6, where it may be seen that US ascendancy coincided with the decline of the Soviet Union/Russia. Notable also is the steady growth of the UK share over the decade.

**Table 6**  
**Share of World Arms Exports: 1985-1995**  
(in percent)

	SU						Other		
	US	Russ.	UK	Fran.	Germ.	NATO	China	Isr.	Other
1985	26	32	3	13	3	7	1	1	14
1986	22	40	7	8	3	5	2	1	12
1987	27	37	8	5	2	5	3	1	12
1988	23	37	8	3	3	6	5	1	14
1989	29	35	9	4	2	3	5	2	11
1990	30	31	10	11	3	4	4	1	6
1991	40	17	14	6	7	4	4	2	6
1992	45	9	16	6	3	7	4	2	8
1993	49	10	15	4	5	4	4	2	7
1994	46	6	19	6	5	5	3	3	7
1995	49	10	16	7	4	3	2	2	7

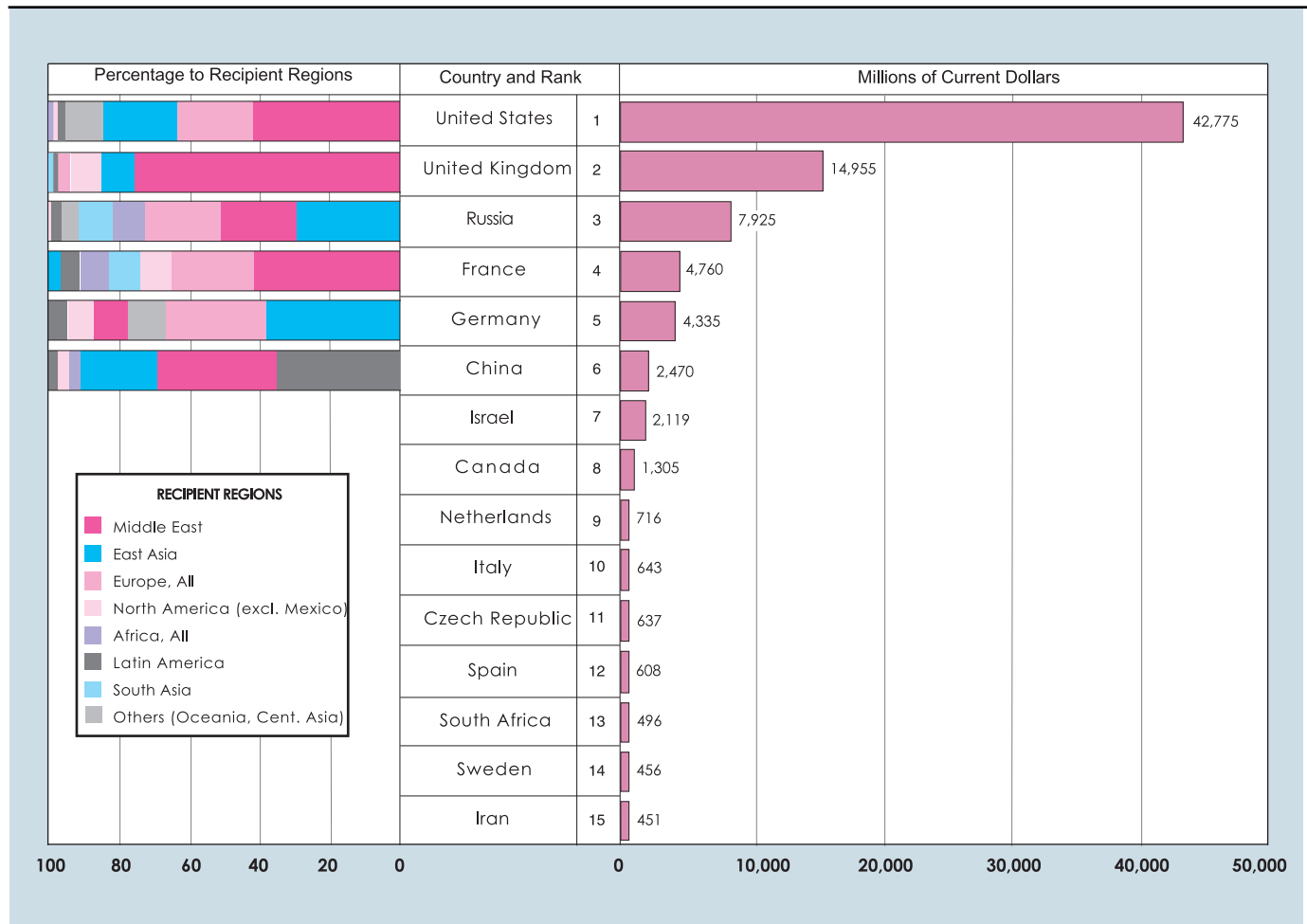
In 1995 there were a total of 50 nations (three fewer than 1994's total) exporting arms to 98 recipients (one fewer than in 1994; see Country Rankings section). Of all developed nations, only six—Austria, Finland, Greece, Iceland, Ireland, and Luxembourg—had zero arms exports. Of the ten largest arms suppliers in 1995, China (\$625 million) and Iran (\$290 million) were the only developing nations. The next largest developing arms exporters were Eastern European countries Belarus (\$170 million), the Ukraine (\$160 million), and Bulgaria (\$150 million), ranking 12th, 13th, and 14th, respectively, in the world in 1995. There were 19 other developing arms exporters in 1995, all selling less than \$70 million in weapons.

### **United States**

The United States dominates the arms export market with nearly half of the world total. US sales increased 28% from \$12.2 billion in 1994 to \$15.6 billion in 1995. Over the decade, US sales took a slow 3% annual decline and an even slower 2% decline over the last five years. The US share of North American sales, which has historically been 95%, rose to 98% in 1995. Canada, a relatively small exporter compared to the US, nevertheless was the 10th largest in 1995 with \$280 million.

During 1993-1995, the United States exported equal amounts of arms to developed and developing countries, \$21 billion each. It exported \$12.4 billion to OPEC countries and another \$9 billion to NATO countries. The US's largest recipient region was the Middle East, followed by Western Europe and East Asia. US arms exports by region in 1993-1995 are shown below (in millions of current dollars):

**Figure 15. Leading Arms Exporters and Their Major Recipients: 1993-1995**



Middle East	\$18,415	43%
Western Europe	8,885	21
East Asia	8,130	19
Oceania	1,140	3
North America	490	1
Africa, All	370	1
South America	370	1
All Others	4,975	11

US weapons exports to the Middle East in 1993-1995 went primarily to four major recipients—Saudi Arabia (\$10 billion), Egypt (\$4 billion), Israel (\$1.7 billion), and Kuwait (\$1.6 billion), which made up 95% of US sales to the Middle East and 41% of total US sales. Western Europe's leading recipients were Turkey (\$2.3 billion), Spain (\$1.3 billion), Greece (\$1.2 billion), and Germany (\$1 billion), accounting for a combined 65% of US arms to the region and 14% of total US sales. East Asia's leaders—Taiwan (\$3.2 billion), Japan (\$1.9 billion), South Korea (\$1.4 billion), and Thailand (\$1.1 billion)—took 93% of US sales to the region and 18% of total US exports.

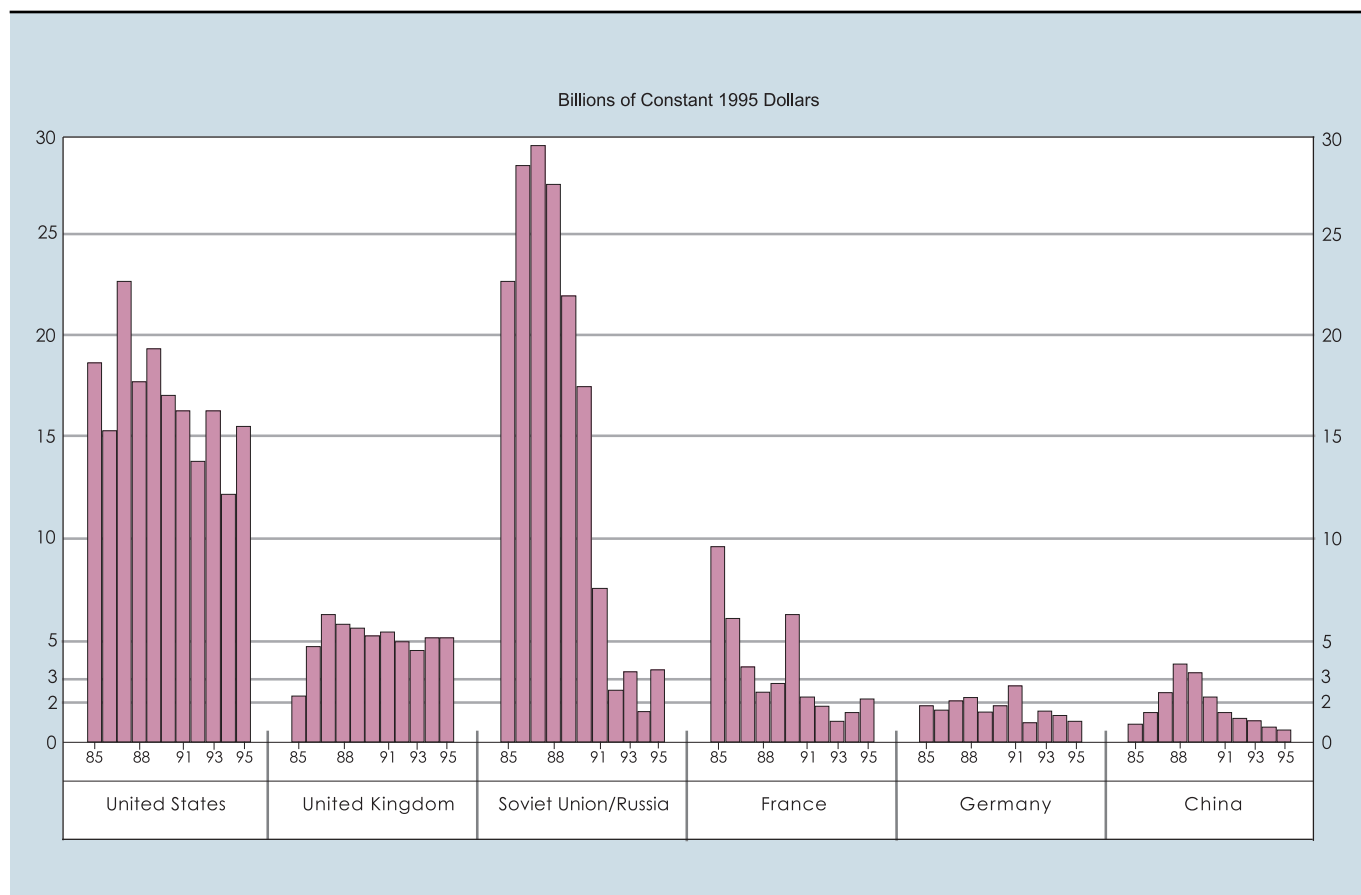
**Table 7**

**US Share of Recipient Regions' Arms Imports: 1993-1995 (in percent)**

	Deliveries	Agreements
World	48	54
Developed	60	73
Developing	40	40
Africa	11	11
North America (NAFTA)	11	13
South America	17	15
Central America	59	—
Central Asia & Caucasus	—	—
East Asia	51	58
Middle East	50	58
South Asia	4	2
Western Europe	67	71
Eastern Europe	1	—
Oceania	52	82



**Figure 16. Leading Arms Exporters by Country and Year: 1985-1995**



Oceania imported \$1.1 billion in arms from the United States during 1993-1995, almost all going to Australia. Central America purchased \$180 million in arms from the US, with over half of this amount going to El Salvador. The remaining regions—Africa (\$370 million), South America (\$370 million), South Asia (\$115 million), and Eastern Europe (\$30 million)—purchased relatively smaller amounts of arms from the US.

Shown in Table 7 is the US share of total regional arms imports, also cumulative for 1993-1995, by deliveries and agreements (Main Table III and Main Table IV). The US continues to account for high shares of agreements with developed countries and particular regions, notably Oceania, Western Europe, East Asia, and the Middle East.

### **Western Europe**

Western Europe was the second largest arms exporting region in 1995 with \$9.4 billion in sales or 30% of the world total, almost five percentage points higher than in 1985. This was the second consecutive year of small rises since regional

exports reached a decade low of slightly under \$9 billion in 1993. Compared to the United States, Western European arms sales declined at slightly faster rates over the decade (7%) and over the half decade (5%). Western Europe's lead over the Eastern half continued to grow, with 70% of European arms exports in 1995 compared to 61% in 1991, 45% in 1990, and 38% in 1985.

The three major Western European arms exporters—the United Kingdom, France, and Germany—dominated the region in 1995 with a combined 89% of Western European sales and 30% of world sales. Over the period 1993-1995, these three totaled \$24 billion, 27% of the world total. In terms of the distribution of exports to developed and developing countries, the United Kingdom had the largest share of its cumulative 1993-1995 sales going to developing countries, primarily OPEC members:

	Total sales (billions)	To Dvlpng (%)	To OPEC (%)
United Kingdom	\$15.0	87	73
France	4.8	66	41
Germany	4.3	12	5

**Table 8**  
**European Arms Export Shares**  
(in percent)

	1985	1991	1993	1994	1995
<i>Share of World Arms Exports</i>					
Europe, all	67	50	39	44	43
Eastern Europe	41	19	11	8	13
Western Europe	26	31	28	35	30
<i>Share of Western Europe Arms Exports</i>					
France	52	19	13	16	23
Germany	10	22	20	15	12
United Kingdom	12	45	54	55	54
Other NATO Europe	21	6	11	10	7
<i>Share of Eastern Europe Arms Exports</i>					
USSR/Russia	77	90	88	69	80

These countries also differed in the percentage of their total arms exports going to other NATO members (UK, 9; France, 22; Germany, 24) and to other Western European countries (UK, 14; France, 10; Germany, 13).

The United Kingdom's weapons exports of \$5.2 billion in 1995 ranked second in the world and made up 54% of Western European sales and 16% of world sales. The UK is the only major supplier with a growing trend in sales over the decade (3% annually) and has been virtually level over the last half-decade. During 1993-1995, the United Kingdom exported \$11.4 billion (77%) of its arms to the Middle East, with 90% of this amount going to Saudi Arabia. Oman imported \$725 million in arms from the United Kingdom during this same period. East Asia was the United Kingdom's second largest recipient region with almost \$1.7 billion in purchases (11% of total), followed by North America, with \$1.2 billion (8%), all by the United States.

France exported \$2.2 billion in weapons in 1995, an increase of \$662 million from 1994 and the second consecutive rise since reaching a decade low of \$1.1 billion in 1993. France ranked fourth in the world in 1995 and accounted for 23% of Western European and 7% of world exports. Over the decade, France's arms sales declined at an annual rate of 14%, but more slowly (3%) during the latter half. During 1993-1995, the French exported \$2 billion (42%) of their arms to the Middle East, with Saudi Arabia, also a key French recipient, consuming 70% of sales to the region and 29% of total sales. Arms exports amounting to well over \$1 billion to others within Western Europe made that region the second largest recipient, consuming 23% of the French total.

North America purchased \$430 million from France during 1993-1995, while Africa purchased \$360 million, with \$130 million going to South Africa.

Germany's \$1.2 billion in exports in 1995 was \$235 million less than in 1994 and marked a second consecutive fall. German sales in 1995 were 55% lower than in 1991, the decade's peak year. Germany ranked fifth in the world in 1995 and accounted for 12% of total Western European and 4% of world sales. Over the decade, German arms sales declined at a 4% annual rate and at a more rapid 12% during the latter half. During 1993-1995, Germany exported 38% (\$1.6 billion) of its arms to East Asia (mostly South Korea), 27% (\$1.1 billion) to others in Western Europe, and 11% (\$500 million) to Oceania (all going to Australia).

Other notable Western European arms exporters in 1995 include Sweden, ranked 8th in the world with \$310 million; Netherlands, 11th with \$230 million; and Italy and Belgium, 15th and 16th with \$150 million and \$130 million respectively. Only the Netherlands, Turkey, and Spain showed growth during the latter half of the decade.

## **Russia**

Russian arms exports in 1995, at \$3.3 billion, showed little sign of revival from the extreme lows of \$2.5 billion in 1992 and \$1.5 billion in 1994, following the Soviet collapse. Nevertheless, in the diminished post-Soviet market, Russia ranked third in arms deliveries in 1995, after the US and the UK, with 10% of world exports and 81% of Eastern European exports. Russia's arms agreements, however, show a continuous rise to the \$9 billion level in 1995 from a low of under \$2 billion in 1992 and indicate probable future increases in exports (Main Table IV).

Over the 1993-1995 period, Russia's nearly \$8 billion in cumulative exports were distributed to regional importers as follows (in millions of current dollars; Main Table III):

East Asia	\$2,235	28%
Middle East	1,715	22
Eastern Europe	1,315	16
Africa, All	795	10
South Asia	740	9
Central Asia	445	6
Western Europe	385	5
All Others	295	4
World	7,925	100

These data show that Russia's arms exports were fairly widespread among regions, more so than other suppliers', and with several key recipients in most regions.

The main recipients in these Russian regional markets in 1993-1995 were as follows (in millions):

East Asia:		Africa:	
China	\$1,200	Angola	\$525
Malaysia	550	Algeria	260
Vietnam	290		
North Korea	170	South Asia:	
		India	675
Middle East:		Central Asia:	
Iran	1,000	Kazakstan	360
U.A.R.	280		
Kuwait	240		
Syria	120	Western Europe:	
		Turkey	350
Eastern Europe:			
Hungary	825		
Slovakia	470		

Future deliveries are likely to follow the rise in agreements in 1995 cited above, which were mainly in East Asia and Central Asia and Caucasus.

### *Arms Suppliers and Developing Country Imports*

Major shifts have taken place in the suppliers of arms to the developing countries as a group. Table 9 shows that the major suppliers have differed considerably in the typical share of their exports going to developing countries, and changes in this pattern have occurred over the decade. In the case of Russia or the Soviet Union, the United Kingdom, France, and China, the predominant share of their arms exports—from three-quarters to nearly 100 percent—have gone to developing countries. For the UK, the share has increased over the decade, while for France, it decreased. In the case of the United States and Israel, this share has averaged just under half for the decade as a whole, although it

reached that mark in 1995. Germany and Canada on average have been considerably less oriented toward the developing countries and, along with other Western European suppliers, have become less so over the decade.

The share of each of these major suppliers in the total arms imports of developing countries as a group, shown in Table 10, has also shifted over the decade, with the United States replacing the Soviet Union/Russia as the largest supplier, the United Kingdom rising to second place, and France dropping from second to fourth.

### *Developing Country Exporters*

Developing countries exported roughly \$1.9 billion in arms in 1995, up by \$1 billion from 1994 and marking an end to consecutive reductions in total sales since peaking at roughly \$8.3 billion in 1988. The group's share of world exports in 1995 was 6%. Over the decade, developing country arms exports dropped annually by an average 13%, but the rate of decline was considerably slower during the latter half, 6%. Only a handful of countries play significant roles in exporting weapons as indicated by 1995 totals. China is by far the most important supplier, with \$625 million in sales in 1995, followed by Iran, with \$290 million, and Eastern European nations Belarus (\$170 million), Ukraine (\$160 million), and Bulgaria (\$150 million). All other developing arms exporters sold less than \$100 million in 1995.

China's total arms exports in 1995 fell by \$118 million, marking its seventh consecutive drop since peaking at over \$3.7 billion in 1988. Over the decade, Chinese arms exports fell annually by 9%, and at a much faster 20% during 1991-1995. China was the world's seventh leading arms exporter in 1995, down three places from the 1994 ranking. China exported some \$2.5 billion in weaponry during 1993-

**Table 9**  
**Share of Major Suppliers' Arms Exports Going to Developing Countries** (in percent)

	US	SU Russ.	UK	Fra.	Ger.	Other W.Eur.	China	Isr.
1985	42	87	69	94	57	86	100	57
1986	47	85	76	86	50	47	100	57
1987	39	89	82	79	62	62	100	44
1988	33	91	75	55	50	59	100	43
1989	30	90	82	62	31	63	100	36
1990	37	94	83	88	18	47	100	33
1991	42	98	78	76	46	31	100	29
1992	50	100	85	44	20	45	91	33
1993	49	68	78	45	12	25	91	33
1994	44	93	92	67	7	42	100	43
1995	56	89	93	73	17	36	100	50
1985-95	42	89	82	78	35	58	98	43

**Table 10**  
**Major Suppliers' Share of Developing Country Arms Imports** (in percent)

	US	SU Russ.	UK	Fra.	Ger.	Other W.Eur.	China	Isr.
1985	15	38	3	18	2	8	2	1
1986	14	47	7	10	2	5	3	1
1987	15	47	9	5	2	5	4	1
1988	11	49	9	3	2	5	7	1
1989	13	49	12	4	1	3	8	1
1990	16	43	11	14	1	3	6	1
1991	28	28	17	7	5	2	6	1
1992	37	14	22	4	1	5	6	1
1993	44	12	21	3	1	2	6	1
1994	34	9	30	6	1	3	4	2
1995	41	13	22	7	1	2	3	2
1985-95	21	37	12	8	2	4	5	1

1995, about 3% of total world sales. Of these sales, 93% went to developing countries and a considerable amount (\$590 million or 25% of China's total sales to developing countries) went to OPEC countries. China's main recipients during 1993-1995 were Pakistan (\$625 million), Iran (\$490 million), Burma (\$310 million), and Sri Lanka (\$210 million), the four combined accounting for two-thirds of China's total arms sales.

Eastern European countries can be credited with much of the developing country group's billion dollar rise in 1995. Belarus exports amounted to \$170 million in 1995 (from zero sales during the first three years of its existence), Bulgaria's total arms sales rose by \$88 million, and the Ukraine's rose by \$68 million. Iran also experienced a sizable increase in arms sales in 1995, from \$82 million in 1994 to \$210 million in 1995. In terms of world ranking, these nations ranked 12th, 14th, 13th, and 9th, respectively.

### Number of Weapons Delivered

Another measure of the arms trade besides the total dollar value of all arms exports is the number of units of major weapons transferred. This indicator continues to show a similar picture of a major downturn over the decade in terms of the overall total, although exports of numerous weapon types increased during 1993-1995 compared to 1990-1992. The number of weapons by major type delivered to all countries of the world over the last four three-year periods are as follows (in units; Main Table V):

	1984-86	'87-89	'90-92	'93-95
<u>Land Armament</u>				
Tanks	6,589	5,398	3,960	2,513
Artil., Field and Anti-Air	14,422	25,133	13,956	2,425
Armored Pers. Carriers	15,529	9,325	4,900	7,282
<u>Naval Craft</u>				
Major Surface Combatants	58	41	19	54
Other Surface Combatants	328	271	175	149
Submarines	22	8	4	17
Missile Attack Boats	20	24	13	10
<u>Aircraft</u>				
Combat Aircraft, Supers.	1,602	1,441	1,163	692
Combat Aircraft, Subsonic	288	260	168	227
Other Aircraft	2,412	1,936	1,818	600
Helicopters	1,657	1,240	645	714
<u>Missiles</u>				
Surface-to-Air	29,206	22,067	7,953	8,030
Surface-to-Surface	950	2,190	680	30
Anti-Ship	1,724	1,592	713	572
Total, all types	74,807	70,926	36,167	23,315

Such broad quantity measures, of course, can obscure the large variability in size, complexity, and military effectiveness that is possible within a single combination of weapon-type, supplier, and year, as well as across these three dimensions. Nonetheless, the quantity of transfers by weapon type can be a useful indication of the flow of arms.

The decline in major weapons deliveries mirrors that of the overall pattern of decline for worldwide deliveries, with a 69% decline in gross numbers recorded across the four periods recorded and a 35% decline over the latter two periods. Delivery totals by type did show growth for some major weapon types during the last period. Deliveries of armored personnel carriers increased from 4,900 units in 1990-1992 to 7,282 in 1993-1995; major surface combatants, from 19 to 54; submarines, from 4 to 17; subsonic combat aircraft, from 168 to 227; helicopters, from 645 to 714; and surface-to-air missiles, from 7,953 to 8,030.

The Soviet Union/Russia supplied the largest number of weapons over the entire 12-year period, providing 33% of all major weapons sold (Table 11). France had the second largest share with 25%, followed by the United States with 9%, China with 5%, and Germany and the United Kingdom, each with 3%. Soviet dominance was as high as 38% from 1984-1989, but fell behind France (32%) after 1990. During 1993-1995, France's share of total major weapons transferred fell to 22%, Russia and the United States each had a 19% share, Germany, 12%, China, 4%, and the United Kingdom, 3%. These shares across the six major suppliers represent drops from the previous period for France, China, and Russia and increases for Germany, the United States, and the United Kingdom.

Soviet/Russian transfer quantities predominated in numerous weapon types during 1984-1995, including tanks (42% of the world total number), armored personnel carriers (38%), missile attack boats (41%), supersonic aircraft (38%), helicopters (36%), surface-to-air missiles (42%), and surface-to-surface missiles (81%). The United States led the market in terms of subsonic aircraft sold during this period (35%) and anti-ship missiles (25%), France led in artillery (57%), Germany, in major surface combatants (27%) and missile attack boats (39%), and China, in submarine sales (55%).

### Regional Recipients

The number of all types of major weapons delivered to each region over the last four three-year periods are as follows:

	1984-86	'87-89	'90-92	'93-95
Middle East	24,302	16,192	15,721	5,214
Western Europe	12,213	24,459	6,041	7,533
South Asia	5,553	13,056	7,392	2,004

**Table 11**  
**Suppliers of Major Weapons to the World: 1984-1995**

Major Weapon Type	Total	Sov.Un. Russia	Other Warsaw Pact	United States	United K'dom	France	Germany	Other NATO	China	Other Dev'ed	Other Dev'ing	
<div><div></div><div><div>LAND ARMAMENT</div><div>Tanks</div><div>Artil., Field and Anti-Air</div><div>Armored Pers. Carriers</div><div>NAVAL CRAFT</div><div>Major Surface Combatants</div><div>Other Surface Combatants</div><div>Submarines</div><div>Missile Attack Boats</div><div>AIRCRAFT</div><div>Combat Aircraft, Supers.</div><div>Combat Aircraft, Subsonic</div><div>Other Aircraft</div><div>Helicopters</div><div>MISSILES</div><div>Surface-to-Air</div><div>Surface-to-Surface</div><div>Anti-Ship</div><div>(Total, all types)</div></div></div>	In Units	In Percent (Total=100)										
	Tanks	18,460	42	13	16	1	3	8	1	10	—	6
	Artil., Field and Anti-Air	55,936	15	2	4	—	57	2	3	9	4	4
	Armored Pers. Carriers	37,036	38	23	10	1	4	6	8	4	1	5
	NAVAL CRAFT											
	Major Surface Combatants	172	19	13	2	17	4	27	6	6	6	—
	Other Surface Combatants	923	19	1	5	6	9	9	9	6	17	19
	Submarines	51	8	—	—	—	2	27	—	55	8	—
	Missile Attack Boats	67	41	—	—	2	—	39	15	3	—	2
	AIRCRAFT											
	Combat Aircraft, Supers.	4,898	38	—	28	2	5	5	4	8	3	7
	Combat Aircraft, Subsonic	943	26	—	35	24	2	5	3	1	1	3
	Other Aircraft	6,766	9	38	5	2	2	2	8	2	22	10
	Helicopters	4,256	36	16	15	2	17	4	5	—	1	4
	MISSILES											
	Surface-to-Air	67,256	42	10	7	5	23	1	1	2	6	3
	Surface-to-Surface	3,850	81	—	—	—	—	—	—	7	—	12
	Anti-Ship	4,601	23	—	25	4	25	—	—	13	9	1
	(Total, all types)	(205,215)	(33)	(11)	(9)	(3)	(25)	(3)	(3)	(5)	(4)	(4)
	TOTALS BY PERIOD											
	1984-86	74,807	38	19	7	3	16	1	3	5	4	4
	1987-89	70,926	37	7	7	2	33	1	1	4	3	5
	1990-92	36,167	22	4	12	1	32	5	3	9	6	6
	1993-95	23,315	19	7	19	3	22	12	9	4	2	3

Eastern Europe	13,273	4,740	507	333
Subsaharan Africa	7,414	4,418	2,164	1,056
East Asia	4,781	3,534	2,685	2,845
North Africa	4,292	1,354	318	488
Central America	1,758	2,263	404	289
South America	820	591	795	2,182
North America	103	233	116	593
Central Asia	—	—	—	630
Oceania	—	140	54	128

The Middle East received the largest number of major weapons over the entire 12-year period, with 61,429 or 31% of the total (Main Table V). Of these weapons, roughly 59% were land armaments, 36% were missiles, 5% were aircraft and 1% were naval craft. France supplied 26% of all major

arms supplied to the Middle East during the decade, followed by the Soviet Union/Russia with 24%, the United States with 11%, and China with 10%. During 1993-1995 the Middle East fell behind Western Europe as the leading importer of major weapons, with some 2,319 fewer total weapons delivered, a 22% share. Additionally, the distribution of suppliers to the Middle East continues to shift, with the United States during 1993-1995 providing over half of total deliveries, Russia providing 14%, and the United Kingdom providing 8%.

Western Europe imported 50,246 major weapons into the region over the entire decade, a close second to the Middle East, and led the world with 7,533 major weapons purchased during the last three-year period, 24% and 32% of

total sales, respectively. Overall, internal trade among France (with 60% of the total market), Germany (11%), and the United Kingdom (4%) accounted for three-fourths of the market. The United States provided 8% of the total major weapons delivered into the regions, and the Soviet Union/Russia provided 3%. The latest period of the decade closely mirrors the overall period in the breakdown of suppliers, but with France (38%) and Germany (36%) having nearly equal internal shares of the market. Of the total major weapons delivered into Western Europe, 57% were land armament weapons, 37% were missiles, and 6% were aircraft. In the last three-year period, Western Europe shifted slightly from land armaments (52%) to missiles (41%).

South Asia imported 28,005 major weapons during the entire decade and 2,004 during the 1993-1995 period, 15% and 9% of the total market, respectively. During the 1984-1995 period, the region received 82% of its major weapons from the Soviet Union/Russia, but during 1993-1995 South Asian imports came primarily from France (40%), due largely to the sale of surface-to-air missiles. Of the total major weapons delivered into South Asia during 1984-1995, 57% were land armament weapons, 35% were missiles, and 6% were aircraft.

Africa as a whole imported 21,504 major weapons during the decade, 70% of these going into the Subsaharan region. Total African imports have fallen dramatically over

the decade, a continuance of a trend started prior to the breakup of the Soviet Union, despite a slight increase in North African imports during 1993-1995. There were 1,544 weapons delivered to Africa during 1993-1995, 7% of total world deliveries. Of these, 59% were land armament weapons, 32% were missiles, and 8% were aircraft.

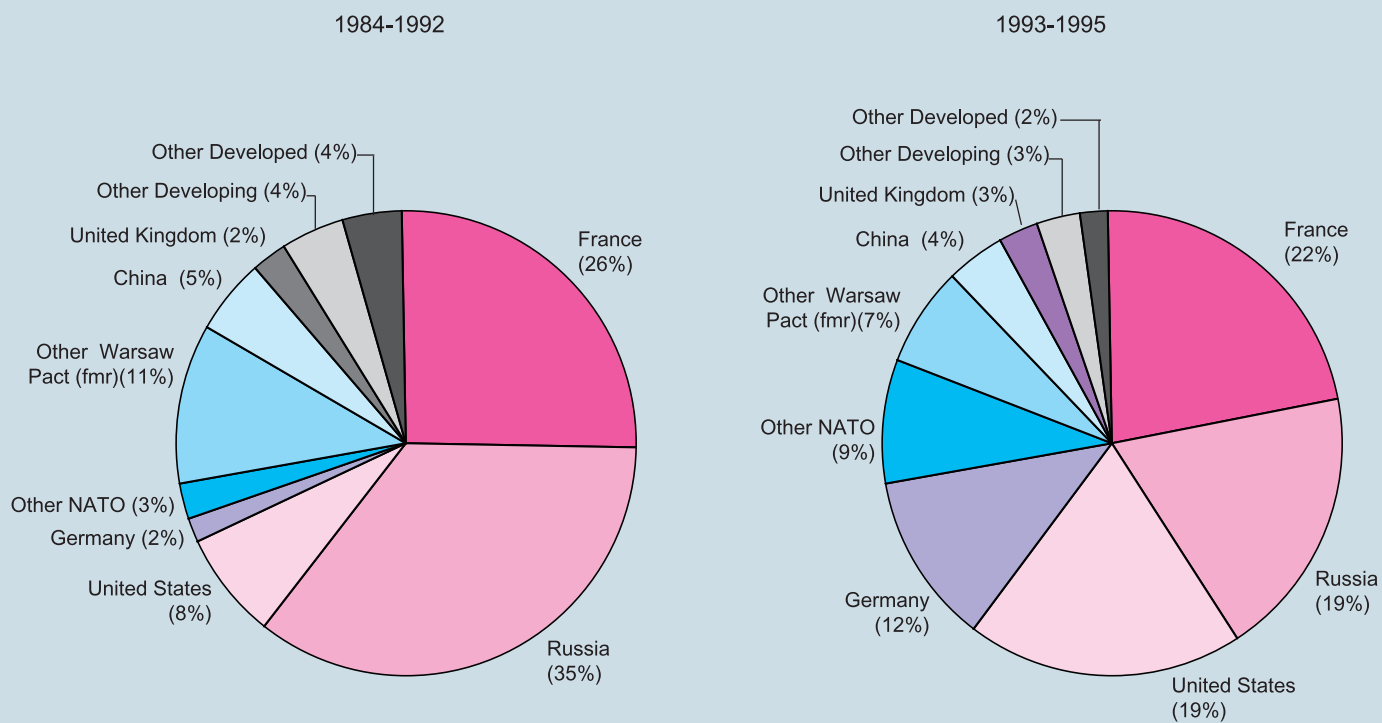
East Asia imported 13,845 major weapons during the entire decade and 2,845 during the 1993-1995 period, 7% and 12% of the total market, respectively. During the decade, the region depended primarily on the United States (30% share of the market), Russia (24%), France (12%), China (10%), and the United Kingdom (9%) for its weapons. Of the total major weapons delivered into South Asia, 51% were missiles, 34% were land armament weapons, and 13% were aircraft.

The remaining regions—North, South, and Central America, Central Asia, and Oceania—imported many fewer weapons. Their combined total of 11,099 major weapons imports during 1984-1995 was 5% of the world total. However, the region's 3,822 major weapons delivered during 1993-1995 accounted for a much higher 16%. This shift can be credited mostly to South America's purchase of 1,580 surface-to-air missiles, 41% of total deliveries.

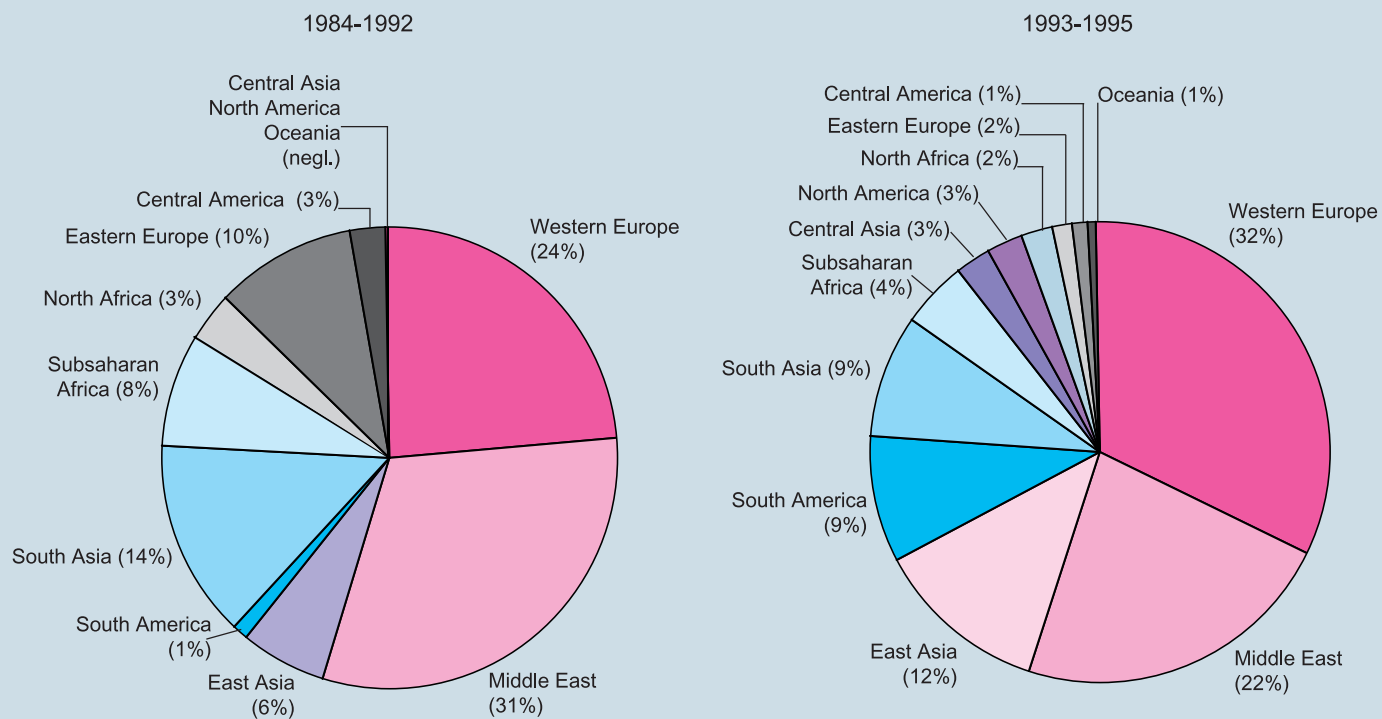


**Figure 17. Number of Arms Delivered by Supplier and Recipient Region**

By Supplier



By Recipient Region

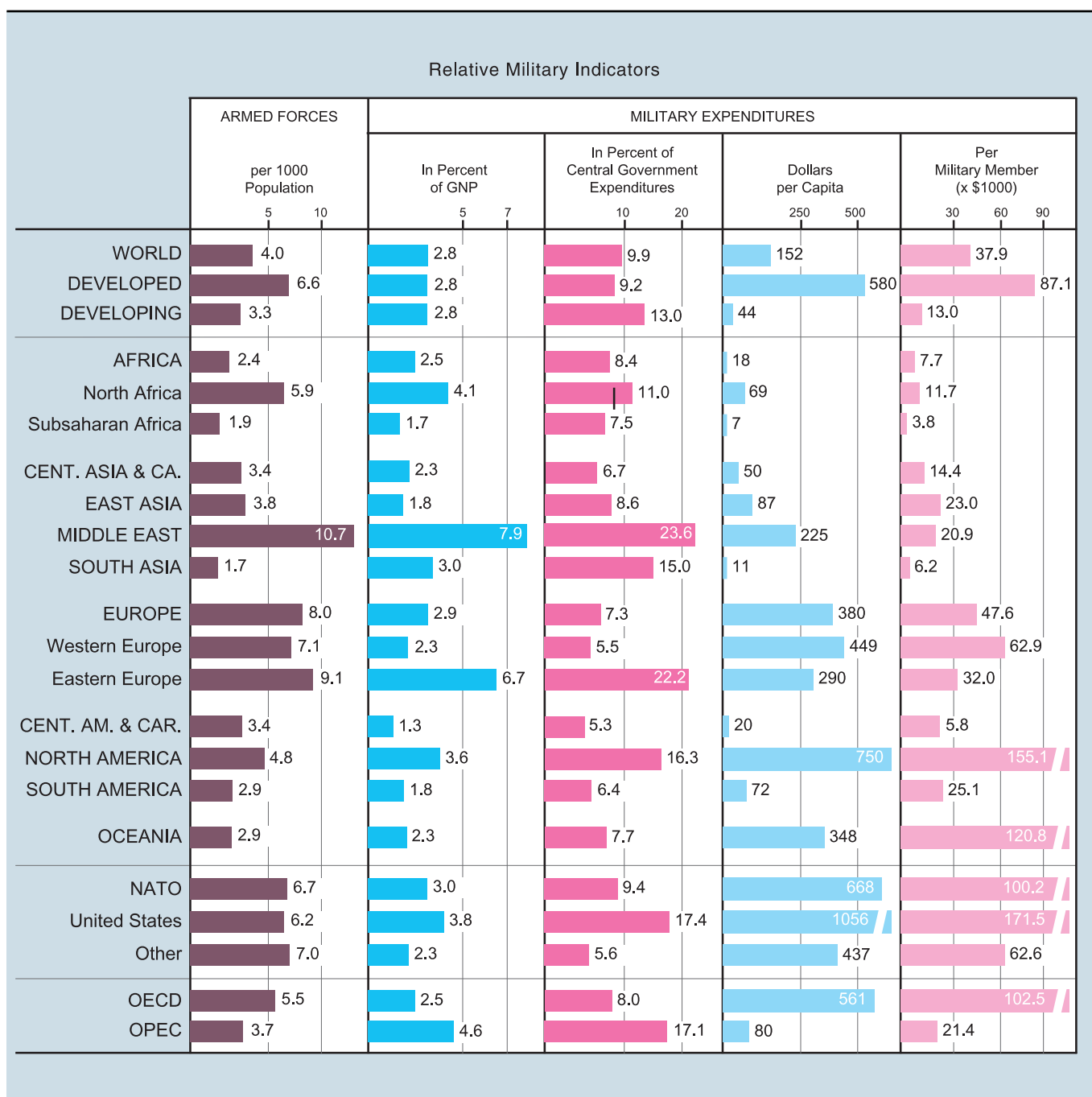


## Military Burden and Other Relative Indicators

The discussion above and the main content of the statistical tables that begin on page 49 are devoted to the basic military indicators that are the subject of this report, namely, military expenditures, arms transfers, and armed forces. In order to give perspective to those military indicators, several basic economic indicators for each country are also presented in the tables, including population, gross national product (GNP), central government expenditures (CGE), and total

trade. These make it possible to place the military measures in socio-economic context, both within one country and among other countries. Figure 18 presents 10 such relative indicators for 1995, averaged for major groupings of countries and regions, in a way that permits their comparison both across the world for a single indicator and across a given group for all the indicators. In the Country Rankings tables below, countries are ranked in terms of these relative indica-

**Figure 18. Relative Indicators: 1995**



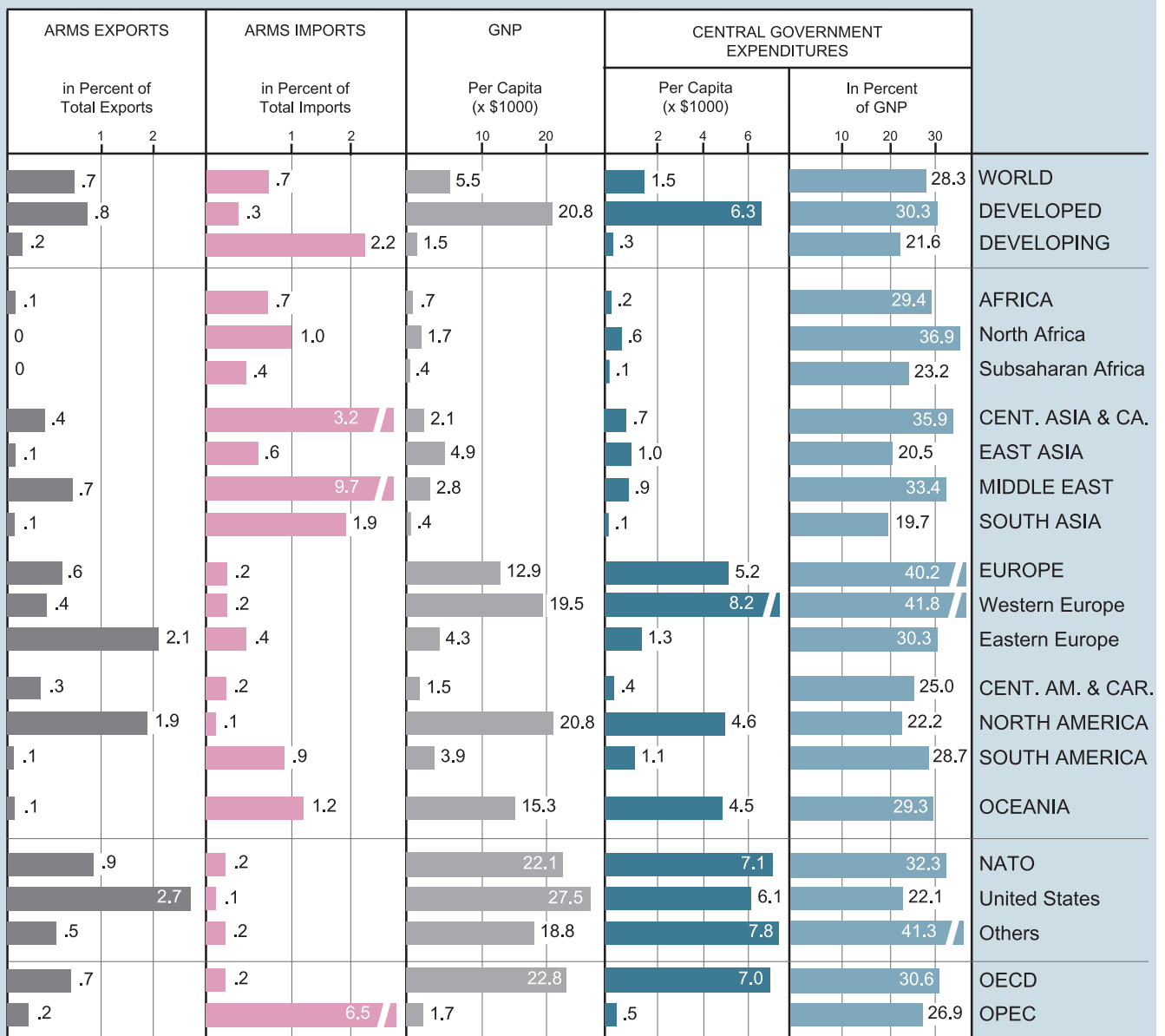
## Average Relative Indicators

The ten average ratios for the world, regions, and other country groupings in Figure 18 are based on data for basic military and economic variables by country in Main Statistical Tables I and II, below. In the Country Rankings tables, all countries are ranked in 1995 for these relative indicators as well as for the main absolute measures.

The average indicators in Figure 18 are calculated as the ratio of the group total of the numerator variable to the group total of the denominator variable. Such a ratio is equivalent to the weighted average of individual country

ratios, with the denominator variable serving as the weighting factor. Such an average ratio can differ considerably from a simple average of individual country ratios, particularly when a very large country (e.g., China, Russia, US) is in the group. Also, when the denominator is a value measure such as GNP, the relative weights of the countries can shift from edition to edition of this report due to the change in the basic year for currency conversion and changes in relative average exchange rates that occur from year to year. See Statistical Notes, Conversion . . . to dollars, for further discussion of the impacts of changes in exchange rates.

Relative Arms Trade and Economic Indicators



tors as well as the main military measures.

One such relative indicator, the force ratio, or the ratio of armed forces to population, has been discussed above in the Armed Forces section of these highlights and also appears in the first column of Figure 18. Selected other indicators are treated briefly below, including the main "burden" ratio, military expenditures-to-GNP; military expenditures-to-CGE; military expenditures per capita; military expenditures per member of the armed forces; and two arms-to-total trade ratios.

### ***The ME/GNP Ratio***

One of the most commonly used measures of the "military burden" is the ratio of military expenditures to GNP, ME/GNP (column 2 of Figure 18). The average ME/GNP burden ratio for the world fell to 2.8% in 1995, continuing a trend of consecutive reductions since 1986. The 1995 ratio fell to just over half of that recorded at the beginning of the decade and is the same ratio for both developed and developing countries as well as the world (Table 11 and Main Table I). Both the world and the developed country ratios dropped from 3% in 1994. These two ratios are historically close to each other or identical since this ratio is weighted by GNP. The developing country ME/GNP ratio, on the other hand, had been higher than the developed at the beginning of the decade, then dropped faster until a rise in 1990 under Middle East influence, then again dropped faster until 1994-1995, when it stayed at the same 2.8% level.

Overall, the ME/GNP ratio declined in all regions over the decade. The largest drops were posted in the Middle East, with almost 9 percentage points less in 1995 than in 1985, Eastern Europe, 5 points less, and North Africa, 4.

The Middle East had the highest ratio, 7.9%, of any region in 1995; it and Eastern Europe were the only regions of the world to record ME/GNP ratios over 5%. The Middle East has shown steady annual declines from the very high ratios in the high-to-mid teens recorded at the beginning of the decade and during the 1990-1992 Gulf War bulge. The 1995 ratio was nearly 10 percentage points less than the decade high of 17.4% recorded in 1986.

Four Middle East countries—Oman (17%), Saudi Arabia (14%), Kuwait (12%), and Israel (10%)—had ratios of 10% or higher in 1995 despite sizable previous declines. Kuwait and Saudi Arabia peaked in 1991 and dropped as a result of the post-Gulf War reductions in spending. Israel and Oman, on the other hand, reduced over the entire decade. Israel's peak was in 1985 at over 20%, while Oman's was in 1986 at 27%.

Of the remaining countries, all except Jordan (8%) and Syria (7%) had ratios of 6% or lower. Iran's ratio of 2.6% in 1995, though roughly estimated, comes after a continuous decline from the high ratios of the early years of the decade and is 8 percentage points lower than in 1986, the peak year.

Six of the eleven countries in the world with estimated ME/GNP ratios of 10% or over were in the Middle East, including the four mentioned above plus Iraq and Yemen, whose absolute values are only roughly estimated. Bosnia and Herzegovina (NA), North Korea (29%), Serbia and Montenegro (NA), Russia (11%—although see discussion below), and Croatia (10%) are the remaining countries with ratios reaching this level.

Estimates of the burden ratio for most of the former Warsaw Pact countries and successor states after the collapse of the Soviet Union continue to be very rough and highly tentative; they should be treated with extra caution. Estimates reported here are often derived from a variety of sources that may not be consistent either within or among

**Table 11**  
**The Burden Ratios: ME/GNP**  
(in percent)

	1985	1991	1993	1995
<b>World</b>	5.2	3.9	3.3	2.8
Developed	5.2	3.8	3.3	2.8
Developing	5.5	4.3	3.0	2.8
<b>Region</b>				
Middle East	16.6	17.0	8.9	7.9
Eastern Europe	11.9	9.1	9.1	6.7
North Africa	7.7	4.1	3.9	4.1
North America	5.7	4.4	4.2	3.6
South Asia	3.8	3.3	3.3	3.0
Central Asia & Cauc.	—	—	1.8	2.3
Oceania	2.5	2.4	2.5	2.3
Western Europe	3.3	2.8	2.6	2.3
East Asia	2.3	1.8	1.8	1.8
South America	2.0	1.7	1.7	1.8
Subsaharan Africa	2.9	2.4	2.5	1.7
Central Amer. & Car.	3.5	2.4	1.7	1.3
Europe, all	6.3	4.6	3.7	2.9
Africa, all	4.5	3.2	3.0	2.5
<b>Organization / Reference Group</b>				
OECD	3.7	2.9	2.8	2.5
OPEC	11.0	11.8	5.4	4.6
NATO, all	4.7	3.7	3.5	3.0
Warsaw Pact (fmr)	12.2	9.3	8.4	6.2
NATO Europe	3.5	2.9	2.7	2.4
Latin America	1.9	1.5	1.5	1.7
CIS	—	—	11.0	8.4

themselves as to relationships among variables or over time. In particular, the nominal ME/GNP burden ratios shown here for Russia in 1992-1995 are probably somewhat high; other sources estimate the ratio for Russia to be in a range well under 10%. Consequently, the burden ratio for those country groupings in which Russia has a large weight, such as Eastern Europe and the former Warsaw Pact, may also be overstated. The North Korean military expenditures estimate is also highly tentative.

The decline of North Africa's burden ratio by almost four percentage points over the decade can be credited mainly to Libya, whose ratio has fallen from 13% in 1989 to 6% in 1995.

The burden ratios of North America and Western Europe each have undergone modest decline over the decade, by two and one percentage points, respectively.

The ratio for NATO as a whole declined over the decade by almost two percentage points, from a high of almost 5% in 1985 to 3% in 1995. Greece (5.5%), the United States (4%), and Turkey (4%) had the highest ratios of all NATO countries, the remaining countries recording ratios of 3% or less.

Figure 19 below cross-classifies all countries in 1995 according to both burden ratio and income level, as measured by GNP per capita. The widespread scatter of countries

**Figure 19. Relative Burden of Military Expenditures: 1995**

ME/GNP* (%)	GNP PER CAPITA (1995 DOLLARS)					
	Under \$200	\$200-499	\$500-999	\$1,000-2,999	\$3,000-9,999	\$10,000 and over
10% and over			Bosnia & Herzegov.+ North Korea Iraq+	Serbia & Montenegro+	Oman Saudi Arabia Russia Croatia	Kuwait
5-9.99%	Sierre Leone Mozambique	Pakistan Sudan+ Rwanda	Egypt	Jordan Botswana	Syria Libya Greece Bahrain	Israel Brunei Cyprus
2-4.99%	Burundi Chad Ethiopia	Gambia Laos Mauritania Cambodia Burkina Faso Haiti Guinea-Bissau Zambia Vietnam Central African Rep. India Mongolia Uganda Kenya Togo Nicaragua	Sri Lanka Zimbabwe Tajikistan Afghanistan+ Macedonia Angola Liberia Congo Bolivia	Djibouti Morocco Turkey Burma Uzbekistan Ecuador Algeria Ukraine Azerbaijan Iran Swaziland Colombia Thailand Georgia China Moldova Namibia	Chile Lebanon South Korea Malaysia Slovakia Suriname Bulgaria Gabon Romania Uruguay Czech Republic Poland South Africa	Taiwan United Arab Emir. Singapore Qatar United States France United Kingdom Sweden Norway Portugal Australia Netherlands
1-1.99%	Tanzania Malawi	Mali Bangladesh Equatorial Guinea Guinea Ghana Benin Niger	Cameroon+ Lesotho Indonesia Senegal Honduras Guyana Ivory Coast Cape Verde	Tunisia Fiji Peru Turkmenistan Belize Cuba Philippines Papua New Guinea Paraguay Panama Dominican Republic Guatemala Albania El Salvador	Argentina Trinidad & Tobago Brazil Hungary Venezuela Malta Estonia	Finland Germany Denmark Italy Canada Belgium Switzerland Spain Slovenia New Zealand Ireland
Under 1%	Bhutan+ Zaire Somalia	Nepal Madagascar Sao Tome & Princ.+	Nigeria+ Yemen+	Kyrgystan+ Mexico Kazakhstan Armenia Jamaica Costa Rica	Latvia Barbados Belarus Lithuania Mauritius	Japan Austria Luxembourg Iceland

\* Countries are listed within blocks in descending order of ME/GNP.

+ Ranking is based on a rough approximation of one or more variables, for which 1995 data or a reliable estimate is not available.

throughout the entire matrix suggests that relative income level or stage of development is not a critical determinant of the burden ratio. Involvement in civil or external war, military threats by neighbors, or overemphasis on military power are probably more relevant determinants, along with the fundamental influence of the absolute income (or GNP) level.

The series of annual matrices of this kind contained in successive editions of this report have reflected the general tendency of burden ratios to decline in recent years, in that the most dense cells in the matrix have moved downward. However, that tendency does not appear in a comparison of the matrix for 1995 shown here with the matrix for 1994 published in *WMEAT 1995*. In fact, the present matrix for 1995 has some upward movement. (The contrast between the decline in the world average burden ratio and the upward shift of countries in this figure probably reflects the upturn in the burden ratio of developing countries cited above, as well as the distinction between weighted and simple average ratios noted in the box, above. The burden ratio is weighted by GNP while the country locations in Figure 19 are unweighted).

### ***The ME/CGE Ratio***

The percentage of central government expenditures spent on defense (ME/CGE) is another useful measure of military effort. It complements the ME/GNP ratio and can show a differing comparative burden level from the latter, since ratios of CGE to GNP vary considerably (see Figure 18, last column). Thus, for example, ratios for ME/CGE in 1995 ranged from almost 24% in the Middle East to just over 5% in Central America (Figure 18, column three and Table 12).

The world average share of central government expenditures spent on the military was 10% in 1995, also the lowest level of the decade for this ratio. This drop occurred in the developed countries, whose ME/CGE ratio fell slightly to just over 9%. This continues a decade-long downward trend from ratios of the early years of the decade as high as 18%. The ME/CGE ratio for developing countries, on the other hand, fell to a low of under 12% in 1993 but has turned back up to 13% in 1995.

Four regions—Middle East (24%), North America (16%), South Asia (15%), and North Africa (11%)—had ratios of 10% or higher in 1995. Ratios of the remaining regions ranged from 9% to 5%.

Over the decade, ratios fell for all regions of the world except South America and Central Asia, which had small increases between 1993 and 1995. The largest decline in ME/CGE was recorded by Eastern Europe, 22 percentage points. The change over the decade in the Middle Eastern ratio was also high (9 percentage points), as was North Africa

**Table 12**  
**The Burden Ratios: ME/CGE**  
(in percent)

	1985	1991	1993	1995
<b>World</b>	18.1	14.1	10.9	9.9
Developed	17.9	13.2	10.8	9.2
Developing	19.0	19.7	11.7	13.0
<b>Region</b>				
Middle East	32.4	51.0	25.4	23.6
North America	23.6	18.3	18.6	16.3
South Asia	17.3	15.5	15.6	15.0
North Africa	19.5	12.6	10.3	11.0
East Asia	12.5	8.9	8.7	8.6
Oceania	8.2	8.2	8.5	7.7
Subsaharan Africa	12.5	9.4	7.8	7.5
Eastern Europe	42.5	9.1	9.1	6.7
Central Asia & Cauc.	—	—	5.2	6.7
South America	6.1	8.2	6.1	6.4
Western Europe	8.2	7.0	6.0	5.5
Central Amer. & Car.	10.8	9.4	7.1	5.3
Europe, all	17.7	13.2	8.5	7.3
Africa, all	14.7	10.9	8.9	8.4
<b>Organization / Reference Group</b>				
OECD	12.5	9.8	9.0	8.0
OPEC	28.2	43.4	18.4	17.1
NATO, all	14.4	11.5	10.6	9.4
Warsaw Pact (fmr)	42.5	37.7	21.0	20.3
NATO Europe	8.4	7.3	6.1	5.6
Latin America	5.9	7.6	5.9	6.2
CIS	—	—	26.1	31.1

(just under 9 points), and North America (slightly over 7). In the Middle East, the 1991 Gulf War high-point reached the astounding (weighted) average of 51%, and for some countries (Kuwait, United Arab Emirates), the ratio soared well above 100% (due to external war-cost repayments).

The countries with the five highest ME/CGE ratios, Bosnia and Herzegovina, Yemen, Russia, Mozambique, and Serbia and Montenegro—all listed as "not available" in Main Table I—are based on very rough estimates of the absolute values.

### ***ME per Capita***

The military expenditures per capita ratio, another complementary measure of military burden or effort, also shows a wide gap between developed and developing countries (Figure 18, column four). The gap amounted to \$536 in 1995 when the measure averaged \$580 for developed and



\$44 for developing countries. This gap has narrowed steadily over the decade, with the ratio falling faster for developed countries. The world average in 1995 was \$152 per capita.

In 1995, North America led the world's regions in terms of this ratio with \$750, followed at a distance by Western Europe (\$449) and Oceania (\$348). The lowest ratios were recorded by Subsaharan Africa (\$7), South Asia (\$11), and Central America (\$20).

The four top countries with military expenditures per capita of over \$1,000 in 1995 were Kuwait (\$1,919), Israel (\$1,646), Singapore (\$1,191) and the United States (\$1,056). In stark contrast, 38 countries in 1995 spent under \$10 (and as little as \$2) per capita on their military establishments, including Subsaharan African countries but also such significant military powers as India and Vietnam (Country Rankings).

### ***ME/AF Ratio***

Military expenditures per member of the armed forces (ME/AF) is a different kind of relative indicator. Rather than burden, it measures the level of armament and military effort per soldier (to the extent that the dollar values of military expenditures, usually exchange-rate-converted, succeed in measuring that effort accurately).

In terms of this indicator, developed countries in 1995 (averaging \$87,100) exceeded the developing countries (averaging \$13,000) by roughly 7 times, with a difference between the two groups of \$74,100 (Figure 18, column five).

In 1995, the highest regional ratios were again recorded by North America (\$155,100) and Oceania (\$120,800). Western Europe had a ME/AF ratio of \$62,900 in 1995 while all other regions recorded ratios below \$50,000. The lowest was Subsaharan Africa's \$3,800.

Twelve countries spent over \$100,000 per soldier in 1995, including Japan, which topped the list at \$209,400. The twelve also included seven Western European countries, the United States, Canada, and Australia. Kuwait—ranked second in the world with \$174,400—was the only developing nation in this grouping. In contrast, the lowest included Zaire, with under \$400 (except for several countries with no military spending; see Country Ranking.)

### ***Arms Trade/Total Trade***

The world average ratio of arms trade to total trade rose slightly from 1994 to 1995, to 0.7%. This increase marks a switch from the steady decline of this ratio over the decade, after peaking at 2.7% in 1985. In terms of its four

main components, this ratio looks as follows (in percent; Main Table I):

	Developed	Developing
Arms imports/total imports:		
1985	0.9	10.2
Peak	.9 ('85-7)	11.5 ('87)
1995	.3	2.2
Arms exports/total exports:		
1985	3.2	0.9
Peak	3.2 ('85)	1.5 ('88)
1995	.8	.2

Over the decade, all four of the above component ratios were reduced by two-thirds or more, and each peak was recorded during the early years of the decade, 1985-1988.

**Table 13**  
**The Burden Ratios: Arms Trade/Total Trade**  
(in percent)

	Imports		Exports	
	1985	1995	1985	1995
<b>World</b>	2.7	.7	2.7	.7
Developed	.9	.3	3.2	.8
Developing	10.2	2.2	.9	.2
<b>Region</b>				
Eastern Europe	2.8	.4	12.2	2.1
North America	.4	.1	4.3	1.9
Middle East	21.6	9.7	.8	.7
Western Europe	.7	.2	1.7	.4
Central Asia & Cauc.	—	3.2	—	.4
Central Amer. & Car.	14.2	.2	0	.3
East Asia	2.1	.6	.4	.1
South America	2.6	.9	.8	.1
South Asia	13.5	1.9	.3	.1
Oceania	3.0	1.2	.5	.1
North Africa	12.3	1.0	.3	0
Subsaharan Africa	9.8	.4	0	0
Europe, all	1.0	.2	3.7	.6
Africa, all	8.8	.7	.2	.1
<b>Organization / Reference Group</b>				
OECD	.7	.2	2.1	.7
OPEC	17.6	6.5	.1	.2
NATO, all	.6	.2	2.7	.9
Warsaw Pact (fmr)	3.0	.4	12.7	2.2
NATO Europe	.6	.2	1.9	.5
Latin America	5.4	.6	.5	.1
CIS	—	.4	—	3.5

The Middle East imported the highest amount of arms as a percentage of its total imports (AI/TI) in 1995, 9.7%, compared to a ratio of almost 22% in 1985. Central Asia recorded the next highest AI/TI ratio, with 3.2%, followed by South Asia with 1.9%. South Asia, the Middle East, Sub-Saharan Africa, North Africa, and Central America reduced their ratios substantially over the decade, each by 10 percentage points or more from the peak year to 1995. South Asia experienced the largest decline, with almost 20 percentage points less in 1995 than in 1989, along with both the Middle East and Sub-Saharan Africa, down 18 and 17 points, respectively, from peaks in 1987.

Six nations recorded AI/TI ratios of over 10% in 1995, topped by Bosnia and Herzegovina, although again, its ranking is based on highly estimated absolute values. Bosnia was followed by four Middle East countries—Saudi Arabia (31%), Egypt (16%), Kuwait (12%), and Oman (11%)—and Burma (10.5%).

In terms of exports, Eastern Europe had the highest ratio of arms exports as a percentage of total exports (AE/TE) in 1995, with a ratio of 2.1%. This ratio compares with 12.2% in 1985, down about ten percentage points.

North America recorded the next highest ratio, 1.9%. All other regions recorded AE/TE ratios of 1% or less during 1995. Nicaragua led all countries in this ratio, with slightly under 8%.

### *Other Indicators*

GNP per capita for the world as a whole rose by 1% in 1995 to \$5,459. This is the second consecutive rise for this ratio after having fallen steadily from a peak of \$5,634 in 1989 through 1993. Both the developed and developing country groupings continued an upward trend in 1995, growing by 1.4% and 2.9%, respectively. Over the decade, GNP per capita grew by \$3,470 for developed countries and by almost \$400 for developing countries (Main Table I). Small declines in the average were registered in 1995 by Eastern Europe, Central Asia and Caucasus, Middle East, North Africa, and Sub-Saharan Africa.

North America (\$20,800), Western Europe (\$19,500), and Oceania (\$15,300) continue to be the richest regions of the world. South Asia (with \$358 per capita) and Sub-Saharan Africa (\$417) had the lowest average ratios.