Chapter 6

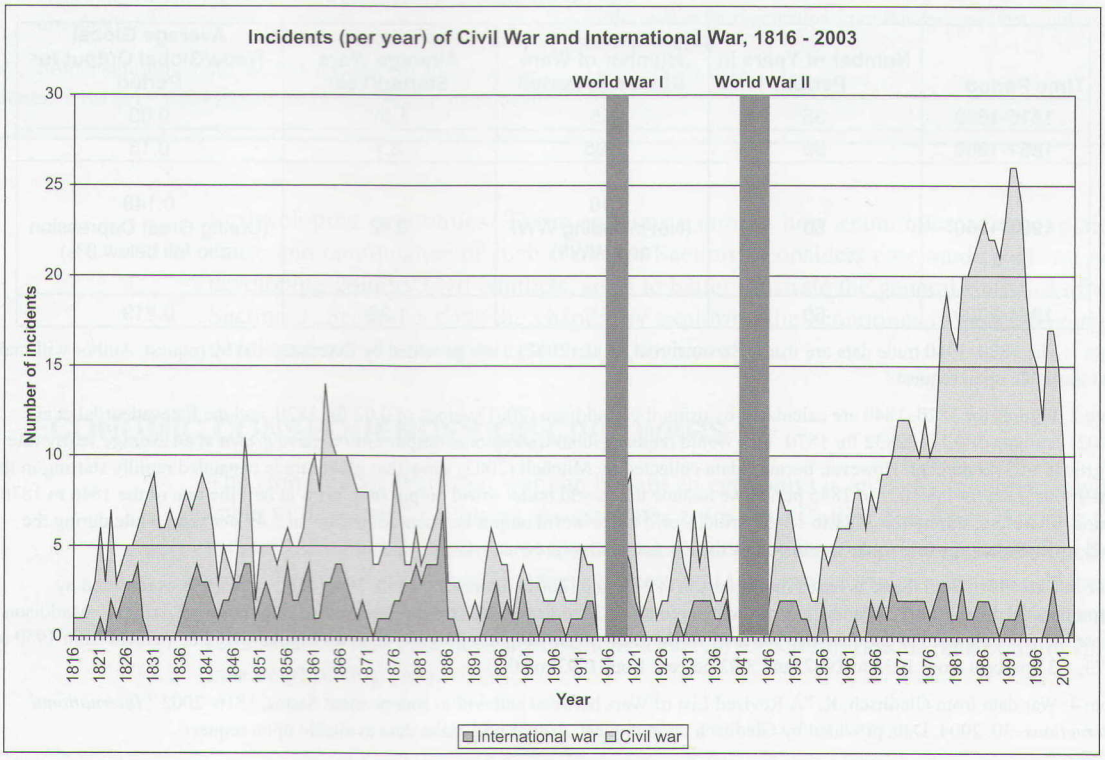
Civil Wars in the Developing World

6.1 INTRODUCTION

In the late 1940s, Winston Churchill wrote: "Peace with Germany and Japan on our terms will not bring much rest. . . . As I observed last time, when the war of the giants is over, the wars of the pygmies will begin."[1] To what kind of war was Churchill referring? If *war* is defined as an armed conflict that results in at least 1,000 deaths, then over the past 200 years the incidents of international wars (war between two countries) has gradually declined, while the incidents of civil wars (war between factions within a country) has rapidly grown (particularly in just the past forty years). These trends are illustrated in Figure 6.1. Consequently, whereas a century ago conflicts were primarily between nations and 90 percent of casualties were soldiers, today almost all wars are civil and 90 percent of the victims are civilians.[2]

This chapter explores civil conflicts and their disparaging impact on the economies of less-developed countries. Sections 2, 3, and 4 consider the economic costs of civil wars

Figure 6.1



Source of data: See Gleditsch, K. "A Revised List of Wars between and within Independent States, 1816–2002." *International Interactions.* 30. 2004.pp. 231–262. available at http://weber.ucsd.edu/~kgledits/vita.html. Data used here by Permission.

Box 6.1
Historical Perspective
Does Trade Make International War Obsolete?

One prominent explanation for the decline in the regularity of international war is growing international economic integration through trade and finance. In 1996, Thomas Friedman of the *The New York Times* introduced what he called the "Golden Arches Theory." According to his theory, no two countries with a McDonald's restaurant have gone to war with each other once they opened their McDonald's.[1] His theory has since been "tested," but it still appears to be a useful rule of thumb. India (whose first McDonald's opened in 1995) and Pakistan (whose first McDonald's opened in 1998), were on the brink of all-out conventional war (if not nuclear war) in 2002; but the two soon pulled back. The 1999 NATO air strikes in the Yugoslavian territory of Kosovo also tested the theory; but because these strikes were an instance of international intervention in a civil war (and Yugoslavia was not able to fight back against the NATO alliance), the NATO action also appears to not disprove the theory.

More substantive is the evidence presented by Table I. This data reveals an interesting trend. Specifically, look at the two 50-year periods with the highest estimate of average yearly global trade (the measure of total imports and exports moving throughout the global economy) as a percentage of total world output (the measure of the combined GDP for all countries). These periods, 1901–1950 and 1951–2000, are also the two 50-year periods with the lowest average number of international wars started per year.

Of course one of those periods was the highly volatile and crisis-ridden period of 1901 through 1950, in which the world witnessed two World Wars, and the Great Depression. Even still, there is a noticeable relationship between higher trade in the global economy and the decreased prevalence of international war (military engagements between at least two countries in which at least 1,000 military personnel die).

Table I: Average International Wars Started per Year Compared to Average Global Impact of Trade per Year (1816–2000)

Time Period	Number of Years in Period	Number of Wars Started in Period	Average Wars Started/Year	Average Global Trade/Global Output for Period
1816-1850	35	55	1.57	0.03
1851-1900	50	105	2.1	0.13
1901-1950	50	46 (Not including WWI and WWII)	0.92	0.148 (During Great Depression ratio fell below 8%)
1951-2000	50	61	1.22	0.213

Note 1: The 1870–1940 trade data are from Estevadeordal, et al. (2002). Data provided by Estevadeordal by request. Author will make data available upon request.

Note 2: Figures for 1820–1849 are calculated by using the Maddison (2001) values of 0.02 for 1820, and the Estevadeordal et al. (2002) estimate of 0.11122832 for 1870. This would require global trade/global output ratio to have grown at an average yearly rate of growth of 3.49 percent. However, because data collected by Mitchell (2003) show that global trade expanded rapidly starting in the mid-1800s, then for the 1821 to 1845 period we assume that world trade/ world output ratio grew at half the rate of the 1846 to 1870 period. Therefore, during the 1821 to 1845 period, world trade/ world output is assumed to grow at 2.49 per year, while during the 1845 to 1869 period world trade/ world output ratio is assumed to grow at 4.49 per year.

Note 3: The 1951–2000 figure is based on Maddison (1995) and (2001) figures for 1950, 1973, 1995, and 1998 as reported by Estevadeordal, et al. (2002). Maddison's own data is found in Maddison (2003) and on the web at http://www.eco.rug.nl/~Maddison/. These numbers are used to estimate that the total world trade/ world output ratio grew at an average rate of 2.85 percent from 1950 to 1973, 1.33 percent from 1973 to 1992, and 3.92 percent from 1992 to 2000.

Note 4: War data from Gleditsch, K. "A Revised List of Wars between and within Independent States, 1816–2002." *International Interactions*. 30. 2004. Data provided by Gleditsch upon request. Author will make data available upon request.

(continued)

Box 6.1 *(concluded)*

Numerous empirical studies have supported the general observation in Table I that trade leads to peace.[2] Most of these studies focus on what are called **dyads.** A dyad is a pair of contiguous states (or pairs of states), one of which is a major power. Observing this relationship leads to this logical question: "Why does trade reduce the prevalence of international war?" Scholars have forwarded four main answers.[3]

1. Trade increases the costs of war. War can sever trade ties. Because trade is correlated with economic growth, then leaders who seek economic growth will not wish to lose exchange ties with trading partners or potential third parties.
2. Trade reduces the benefits of war. As a country develops economically, trade (not war) becomes a more efficient means of generating wealth. War simply eliminates wealth and can cause physical destruction of infrastructure
3. Trade promotes peace through communication and transnational ties that increase understanding among societies and that increase the potential for cooperation.
4. A domestic-political argument holds that as an economy develops, it creates a middle class who demands democracy. In turn, democratic leaders are less likely to go to war because the voting public will have to fight the war. Hence, no two democracies have ever gone to war with one another.[4]

Some scholars have added caveats to these arguments. Mueller (2004) maintains that the correlation between free trade and war is reversed. In Mueller's theory, free trade doesn't lead to less war. Instead, less war creates an environment in which free trade can prosper. Bearce and Fisher (2002) argue that the relationship between trade and war is contingent upon third factors such as the economic proximity of countries. They propose that because two countries have economic proximity, those countries can easily trade with one another and desire not to go to war with one another. Economic proximity can refer to geography, such as two countries that are adjacent to one another and in the same trading network. Proximity can also be seen in an interactive sense. This meaning of proximity pertains to linkages between two countries that are not adjacent but are highly linked through transportation (for instance, shipping lanes) and communication networks (such as language). For example, East and West Germany were geographically proximate, but the roads and highways connecting the two countries were blocked and even dismantled. This rendered the two countries interactively distant.

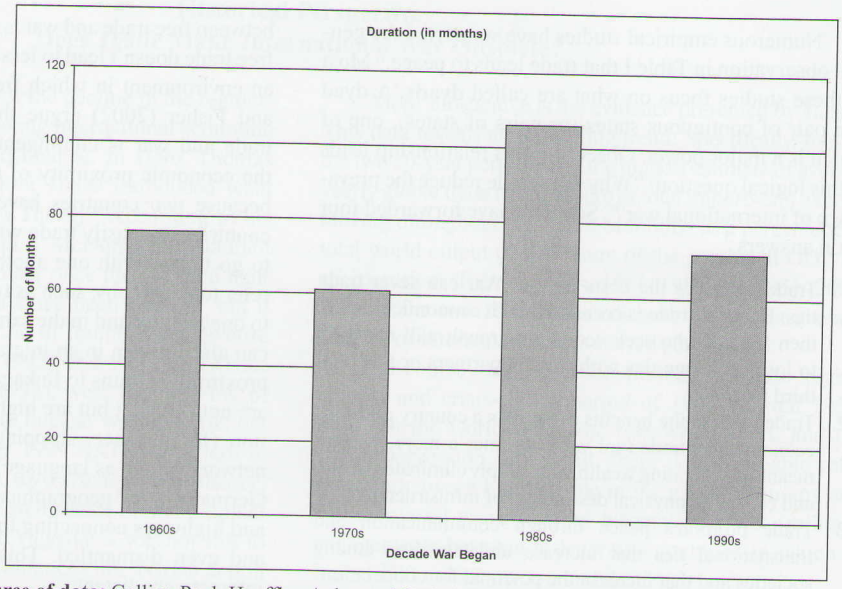
[1] McDonald (2004), p. 547 summarizes the first three of these arguments.
[2] See Oneal and Russett (1997), p. 268.
[3] Information for this section from Bandarage (1994), unless otherwise cited.
[4] Held (1999), page 113.

in developing economies. Those sections examine how economics often explains the cause and continuance of such conflicts. Section 4 considers case studies of two notable developing-country civil conflicts, so as to better illustrate the general statistics offered in Section 2. Section 5 ends the chapter by exploring the economics of peacekeeping—the developed world's common response to such conflicts.

6.2 ECONOMIC CONSEQUENCES OF CIVIL WARS

The Iron Law of War (that war can benefit an economy) is an economic idea only applicable to developed countries. As estimates from Paul Collier and Anke Hoeffler (2004) indicate, civil conflict is a major impediment to development in many less-developed countries.[3] In total, Collier and Hoeffler estimate that the average global economic cost of civil wars each year is $64 billion per war. This economic toll is the result of longer conflicts, reductions in real GDP and government services, forced migrations, and conflict spillover into neighboring countries.

Figure 6.2
Average Duration of Civil Wars, By Decade



Source of data: Collier, Paul; Hoeffler, Anke; and Söderbom, Måns. "On the Duration of Civil War." Center for the Study of African Economics. University of Oxford. October 2003. Appendix Table A.1 at http://users.ox.ac.uk/~ball0144/warduration_oct03.pdf.

6.2.1 Conflict Duration

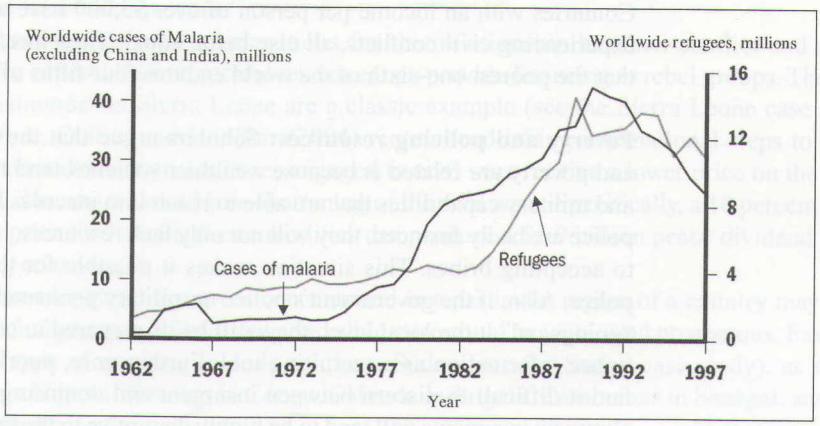
The typical conflict, on average, lasts seven years. Prior to the 1980s, the average duration of a civil war was four years. Today, the average duration of a civil war is eight years. This increase in the duration of civil wars is depicted in Figure 6.2. According to the data, the duration of civil wars, measured in months, peaked in the 1980s but remained high into the 1990s.

Full economic recovery can take, on average, a decade after a war's end. During the recovery, total lost output is around 105 percent of the country's per-war annual GDP. During the five years following a war that lasts one year, the growth rate is, on average, 2.1 percent lower than had the war not happened. By contrast, after a 15-year war, the postwar growth rate increases by 5.9 percent annually. This difference in recovery rates is the result of capital continuing to exit the country upon the conclusion of a short conflict, and capital returning to the country after an extended conflict.[4]

6.2.2 Impact on GDP and Government Services

During the conflict, an economy's real GDP typically grows 2.2 percentage points a year less than it would have in peacetime. According to Gupta et al. (2002), this downward trend, in turn, negatively affects growth of per capita government revenue, which also leads to lower growth of per capita government spending on education and health. This diversion of government expenditures toward arms is estimated by Collier and Hoeffler (2004) to reduce welfare by another 18 percent of GDP. In total, a typical civil war leaves a country 15 percent poorer than it would otherwise have been and with perhaps 30 percent more people living in absolute poverty.[5]

Figure 6.3
Refugees and Malaria, 1962–1997



Source: Collier, P.; Elliot, V.L.; Hegre, H.; Hoeffler, A.; Reynal-Querol, M.; and Sambanis, N. *Breaking the Conflict Trap: Civil War and Development Policy.* Washington, D.C.: World Bank and Oxford University Press. May 2003. Figure 2.3, p. 37, available at www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/06/30/000094946_0306190405396/Rendered/PDF/multi0page.pdf. Reprinted here with permission.

Furthermore, the collapsing health care system, combined with the typical phenomenon of forced migrations—which worsen disease—contribute to health costs of around $5 billion per conflict. As Figure 6.3 shows, worldwide cases of malaria (excluding cases in China and India) and the global refugee population, have a pronounced tendency to rise in tandem with conflicts.

6.2.3 Spillover Effects

The effects of civil wars are not isolated to the country in which the war originates. The effects typically spill over borders, even if the fighting does not. An average of 2.7 countries border each state mired in civil war. Economic losses to these neighboring countries—commonly from reduced trade and foreign investment—can often amount to 115 percent of their GDP, and these countries typically spend a total of 12 percent of one year's GDP on military spending—so as to guard against conflict spillover.

6.3 ECONOMIC CAUSES OF CIVIL WARS

One might be quick to dismiss conflict in less-developed countries as nothing more than irrational behavior spurred on by ethnic or religious rivalry. However, in reality, ethnic and religious divisions simply overlay economic conditions that are the true causes of conflict: poverty; resource exploitation; greed; extraction of resources from an ethnic minority; and inequality.

6.3.1 Poverty as a Cause

Studies have explored the probability of civil war onset conditional upon different income levels.[6] It has been found that a country with GDP per person of just $250 has a predicted probability of war beginning (at some point over the next five years) of 15 percent. The

probability of war is cut in half when a country's GDP per person rises to $600. War's likelihood falls by half again—to below 4 percent—when a country's GDP per person is $1,250. Countries with an income per person of over $5,000 have a less than 1 percent chance of experiencing civil conflicts, all else being equal. Therefore, it should come as no surprise that the poorest one-sixth of the world endures four-fifths of the world's civil wars.[7]

Poverty and policing resources: Scholars argue that the primary reason conflict onset and poverty are related is because wealthier societies tend to have more effective policing and military capabilities that are able to reach into inaccessible regions.[8] Specifically, if the police are badly financed, they will not only lack resources, but they will also be susceptible to accepting bribes. This situation makes it possible for the insurgents to "buy off" the police. Also, if the government's police or military personnel are poorly informed about the "goings on" at the local level, they will be ill-prepared to counter any insurgent's attempts to use information as a recruiting tool. Furthermore, poorly equipped policing units will find it difficult to discern between insurgent and noninsurgent. Consequently, attempts to eliminate insurgents will tend to be highly disruptive to the lives of noninsurgents and, therefore, prove counterproductive as the attempts create additional antigovernment sentiment. In short, because wealth leads to better policing capabilities, wealthier societies are better able to protect assets. This protection lessens the attractiveness of violence for would-be rebels.

Poverty and opportunity costs: Opportunity costs (the next best activity that a person gives up in order to carry out an action) can also explain the correlation between poverty and conflict. As an example, consider the educational level of the male population in a country. The average years of schooling of the men is one measure of the opportunity costs for men to engage in risky behavior such as armed conflict. The higher the level of education among men, the less likely the men are to engage in armed conflict. Hence, even a slight increase in the level of male education can decrease the risk of conflict.[9]

Another opportunity cost that is related to education is employment opportunity. Whereas a government's army can build unity gradually, a rebel force must form quickly. Consequently, this need for rapid growth makes the rebel organization more sensitive to the current state of the labor market. If jobs are plentiful, a rebellion is unlikely since the rebel organization will be unable to amass sufficient personnel in a timely fashion.[10]

Additional links between poverty and conflict: Though persuasive, opportunity costs alone can not fully explain the positive relationship between poverty and conflict. For instance, Chapter 7 will discuss how suicide bombers are typically better off and more educated than the average populations from which they originate. Therefore, there are additional explanations for why poverty and conflict-onset are correlated.

Acute scarcity of resources in one area leads to migrations that result in conflicts between groups over resources in the other area. Finally, poverty and low or negative economic growth are often symptoms of a corrupt, incompetent government, which can provoke rebellion.[11] Of course, the causality between poverty and civil war could run in the opposite direction—rich countries tend to be rich because they have been fortunate enough to avoid conflict.

6.3.2 Resources as a Cause

Perhaps the single most powerful conflict risk factor is when a country has a substantial share of GDP coming from the export of **primary commodities** (natural resources such as minerals, jewels, or oil). Specifically, countries are most at risk when the level of primary-commodity dependence reaches 26 percent of GDP. This level of dependence raises the risk

of conflict (for a typical less-developed country) from 14 percent to 23 percent. In contrast, if the country had no primary-commodity exports (but was otherwise the same), its risk of conflict falls to 0.5 percent.[12]

There are six main explanations for this relationship between conflict and natural resource exports.[13] First, natural resources can provide financing to rebel groups. The "conflict diamonds" in Sierra Leone are a classic example (see the Sierra Leone case study). Therefore, Collier and Hoeffler (2004) recommend taking international steps to ensure that commodities from countries engaged in civil wars receive a lower price on the global market. The result should be a shortening of the civil wars. Specifically, a 10 percent reduction in price for "conflict" commodities can produce a $5.9 billion peace dividend for the warring economy.[14]

Second, natural resources concentrated in a particular region of a country may lead a dissatisfied group to believe that a seceding state could be viable and prosperous. Examples of this type of thinking include southern Sudan (see the Sudan case study), as well as Biafra in Nigeria, Katanga in Congo, Cabinda in Angola, Casamance in Senegal, and Aceh in Indonesia.

Third, natural resources can create inequalities. This creation of inequalities can occur if the wealth the resources generate is unjustly distributed, or if the government forcibly moves an ethnic group who was living in the resource-rich area. Nigeria and Sierra Leone offer such examples. In fact, the claims of the Revolutionary United Front (RUF) rebel group in Sierra Leone, as expressed in the group's anthem, explicitly pertain to such grievances:

> "Where are our diamonds, Mr. President? / Where is our gold, NPRC? [....] Our people are suffering without means of survival. / All our minerals have gone to foreign lands."[15]

Fourth, governments that rely on natural resources rather than taxation for financing have little incentive to create strong institutions or respond to the demands of their citizens. The classic example is Zaire under Sesko Mobutu. Fifth, economies dependent on a few natural resources are more susceptible to terms of trade shocks (for example, international price fluctuations or changes in the weather conditions). Dissatisfaction within groups that suffer from such shocks can lead to conflict. Sixth, neighboring states may spur on a civil conflict in order to exploit the country's natural resources. The prime example of this type is the Democratic Republic of Congo; Zimbabwe and Rwanda justified their continued presence in the country on the need to guard raw materials.

6.3.3 Greed as a Cause

A rebel group's desire for profit may also provoke and perpetuate conflict.[16] To put it bluntly, though civil war is bad for the economy as a whole, *some* people actually benefit. If some people do well out of civil war, they may lack an incentive to restore peace.[17]

The rebellion may begin as a grievance (a desire to eliminate what the rebel group deems to be an unjust government), but its continuance could be the result of profiteering. Because civil wars can both provoke greed and be provoked by greed, it is sometimes difficult to determine if greed or grievance is the rebellion's driving force.[18]

Greed provokes civil war: Rebel groups may provoke and perpetuate a civil war so as to gain revenues through resource abundance. For example, when civil war resumed in Angola in 1993, the rebel National Union for the Total Independence of Angola (UNITA) earned, between 1993 and 2000, an estimated $4 billion from illegal diamond sales.[19]

Oil is another resource susceptible to profiteering by rebels.[20] Rebel groups rarely, if ever, pump the oil (it requires capital, skills, and technology; such assets are typically controlled instead by multinational firms who prefer to work with legitimate governments). Instead, rebels attempt to profit from oil by extorting money from these oil firms. In Colombia and Nigeria, rebel groups will either kidnap oil firm employees or threaten to blow up pipelines. In both cases a ransom or payment is demanded, which firms will usually provide. Hence, during the 1990s, European companies paid an estimated $1.2 billion to rebel groups. Now that ransom insurance is available, this has the potential of raising ransom demands, thereby increasing the profits to be made from violence.

Civil war provokes greed: On the flip side, civil wars also create incentives to become greedy.[21] Because life during a civil war can be less predictable, people will begin to think only in the short term. Whereas people may normally not engage in behavior harmful to their reputation, when the future is unclear (if not unlikely), individuals will have less incentive to maintain a reputation of trustworthiness. During the 1994 massacre of the Tutsi ethnic group in Rwanda, the killing was initially organized by the Hutu-dominated government. This government initiation gave the massacre the classification of **genocide** (government-sanctioned, systematic killing of a particular ethnic group). However, once the genocide began, numerous individuals joined the killing, not to rectify personal grievances against the Tutsi people, but as a form of personal economic gain:

> "[As the killing groups] went into action, they drew around them a cloud of even poorer people....For these people the genocide was the best thing that could ever happen to them....They could steal, they could kill with minimum justification, they could rape and they could get drunk for free. This was wonderful. The political aims pursued by the masters of this dark carnival were quite beyond their scope. They just went along."[22]

6.3.4 Ethnic Dominance as a Cause

Collier (2000) finds that in societies where the single largest ethnic group comprises 45 percent to 90 percent of the population, there is a 28 percent probability of conflict onset.[23] Relative ethnic homogeneity (a country in which the dominant group comprises less than 90 percent of the population) contributes to the probability of conflict because the dominant group may benefit from transferring resources from the minority group. However, near-perfect dominance (one ethnic group comprises 90 percent or more of the population) lessens the probability of conflict, because the minority group is so small that the benefit of exploiting the group may be swallowed up in the cost of actually carrying out the resource transfer.

Overall, in the 47 civil conflicts studied, Collier finds the risk of conflict in relatively ethnically homogenous countries near 23 percent, all things being equal; while the most ethnically diverse countries only had a probability of three percent. Widespread ethnic and religious diversity contributes to stability because in countries with diversity, it is difficult to recruit a force of sufficient scale to be viable. For example, in Africa the average group of ethnic and linguistic similarities has only around 250,000 people, of whom around 25,000 are young males. Thus, even before considering further divisions along, for example, religious lines, an organization of 5,000 fighters would need to recruit 20 percent of the young male age group. This percent will be difficult to achieve and so makes rebellion less likely.[24] Table 6.1 summarizes these figures, as well as other interesting findings from Collier's study.

Table 6.1
Collier's Findings Regarding Inequality and Probability of Conflict

Observation	Probability of Conflict
Sample average	14.00%
A country with 10% more youths in schools than average (55% instead of 45%)	10.00%
A country with a population growth rate 1% higher than	16.50%
A country with a growth rate of per capita income 1% less	15.00%
A country with a relatively dominant ethnic group (45 to 90% of the population)	28.00%
A country with an overwhelming dominant ethnic group	3.0%*

Source of data: Collier, Paul. "Economic Causes of Civil Conflict and their Implications for Policy." World Bank: The Economics of Civil War, Crime and Violence Project. June 15, 2000. Available at www.econ.worldbank.org/files/13198_EcCausesPolicy.pdf.
* maximum of sample

6.3.5 Inequality as a Cause

Related to ethnic group dominance is inequality. There are two forms of inequality: vertical inequality and horizontal inequality. **Vertical inequality** is income inequality between people. A common quantitative measure of vertical inequality is to measure the distribution of income in a society to determine how much is held by the wealthiest, relative to how much is held by the poorest. In a perfectly equitable society, 20 percent of the entire population would hold 20 percent of the wealth, 60 percent of the entire population would hold 60 percent of the wealth, and so on. In a vertically unequal society, 80 percent of the population may, for example, have only 5 percent of the wealth, while the other 20 percent of the population has 95 percent of the wealth. Though this may lead to animosity between rich and poor, studies using quantitative measures of income inequality find that vertical inequality does not lead to conflict. This is most likely because vertical inequality alone does not tell *who* is and is not wealthy.

In contrast, **horizontal inequality**—inequality between ethnic, religious, political or regional groups—may increase the risk of conflict-onset.[25] According to Stewart (2000), it is possible to have sharp vertical inequality without horizontal inequality.[26] An example of such an instance would be if the av erage income of all groups were the same and distribution within each group was highly unequal (i.e., there are both rich and poor people from the same ethnic group and all ethnic groups have about the same distribution of rich and poor people).

Horizontal inequality can lead to conflict when a group in power actively discriminates against another group. Consider a few examples. In Burundi, half of government investment went to the city of Bujumbura and its vicinity, from which the elite Tutsi ethnic group came. Additionally, there were deliberate attempts to limit the educational access of the Hutu ethnic group.[27]

Unfortunately, as compelling as the argument may be for horizontal inequality as a cause of civil war, it does suffer from some limitations. First, there are no quantitative measures of horizontal inequality that can be used for comparisons across countries. Without data analysis, it is difficult to make definitive arguments concerning horizontal inequality's role in provoking civil war. Second, horizontal inequality alone is not enough to provoke civil war. Civil war will result only if other risk elements are present.[28] These risk elements include greed, propaganda espoused by a charismatic leader, weak state institutions, and availability of resources with which to finance an insurgency—in short, the other factors highlighted in this section.

6.4 SMALL ARMS TRANSFERS TO THE DEVELOPING WORLD

Despite the numerous economic causes of civil wars, no war can be fought without weapons. Though numerous sophisticated weapons systems are sold to developing countries each year (see Box 6.2), most civil wars are fought with simple small arms. In fact, the most widely held weapon of insurgents in the developing world is the AK-47 assault rifle. Also known as the "Kalashnikov" (after the original Russian designer), these guns have been produced in a number between 70 million and 105 million since 1949.[29]

What makes the AK-47 such an attractive weapon? First, it is deadly, with the ability to shoot 650 rounds per minute.[30] Second, it is reliable (it is considered to very rarely fail to fire) and simple. Third, and perhaps most important, it is inexpensive. Its low price is primarily because the AK-47 (unlike major weapons systems) is produced in a competitive market.

6.4.1 The Supply of AK-47s

On the supply side, there is no monopoly producer of AK-47s. The Soviet Union began producing the rifles for its own army in 1949; but in the 1950s, the Soviets began exporting the rifles and manufacturing technology to states in its sphere of influence (particularly those in Eastern Europe). The Soviet Union entered into licensing agreements with 18 countries; but as the technology became more widely dispersed, eleven other countries began making AK-47 clones without the Soviet Union's approval. The Soviet Union, plus these additional 29 countries, comprised the initial primary market for AK-47s.

However, it is the **secondary arms market** that explains the virtual ubiquity of these weapons. It is in these markets that *used* AK-47s are sold. For example, Heckler & Koch, a British-owned, German-based maker of assault rifles, has licensed production agreements with Iran and Greece. In turn, Iran exports its rifles to Sudan, and Greece exports its rifles to Burundi and Libya.[31] These countries then export the rifles to Algeria, Egypt, Lebanon, and the West Bank. During the 1980s, the U.S. government bought AK-47s produced in China and Egypt and then supplied them to Islamic guerrillas fighting the Soviet Union in Afghanistan.

Other guns are smuggled through **black markets**—markets for goods that are illegal and, therefore, lack government regulation. For instance, Thailand has one of the world's largest and most efficient black markets. Guns are often brought here and then exported to Sri Lanka, the Philippines, Indonesia, and the Kashmir region separating India and Pakistan.[32]

Consequently, there is substantial evidence to suggest that as the supply of AK-47s rises in many developing countries, the price has fallen. For example, in northeastern Kenya, the barter rate for an AK-47 has dropped from 10 cows in 1986 to two cows in 2001.[33] In some areas of the world, an AK-47 can be bought for $15 or for a bag of grain.[34]

6.4.2 The Demand for AK-47s

The price of an AK-47 is also a function of demand.[35] Under stable conditions and in legal markets (such as the United States), a used AK-47 will sell for $200 to $400. Black market prices under $100 usually indicate a sudden arrival of peace after a period of intense conflict. Black market prices above $1,000 can serve as a warning of imminent or expanding conflict. High prices mean that people are desperate to own weapons and that normal supply chains cannot keep up with demand. For example, in Somalia in 1992, the cost of an AK-47 fell from $300 to $100 in a matter of days as U.S. Marines massed offshore; and to $50 shortly after they landed. However, the gun prices rose back to about $200 after the U.S. withdrawal.

6.4.3 Global Equilibrium and Implications

It is estimated that around 500 million small arms are circulating around the world, thereby making small arms more readily available than major weapons systems. What has been the consequence? It has been estimated that in Latin America alone the direct and indirect costs of small arms violence is between $140 and $170 billion per year; and worldwide, small arms are implicated in well over 1,000 deaths every day.[36]

Box 6.2
Historical Perspective
Cold War Alliance-Forming[1]

During the Cold War, the United States and the Soviet Union fought numerous **proxy wars** (wars where, in place of direct confrontation, the two superpowers supported groups or governments in developing countries fighting one another). Both superpowers actively courted many developing country governments by offering favorable financing arrangements for weapons.

The result was a massive dumping of arms by superpowers into the developing world. Exports to developing countries rose from $1.1 billion in 1960 to $35 billion in 1987. The number of countries supplying arms to developing countries rose from 10 in 1970 to 25 in 1990.[2] Because the favorable financing offered by the superpowers contributed to the accumulation of third-world external debt, nearly 20 percent of the African and Latin American loans in the 1970s were geared toward the military.

As the end of the Cold War led the governments of the developed world to reduce their demand for light infantry weaponry (as they reduced the size of their armed forces), foreign arms sales to the developing world became an ever more important focus of arms dealers and producers.[3] From the years 1995 to 2002, the value of arms-transfer agreements with developing nations comprised 66.2 percent of all such agreements, worldwide. More recently, arms-transfer agreements with developing nations constituted 64.6 percent of all such agreements globally from 1999–2002, and 60.6 percent of these agreements in 2002. The $17.7 billion in arms-transfer agreements to developing countries in 2002 marked the second lowest year, with 1999 (approximately $29 billion) serving as the peak year.

China is the leading "developing" country that is buying weapons. From 1999 to 2002, China concluded $11.3 billion in arms-transfer agreements. China's lead was followed by the United Arab Emirates ($9 billion) and India ($8 billion). The United States has been the primary supplier of weapons to the developing world, accounting for $7 billion (constant 2002 dollars) in 2002. The United States was followed by the United Kingdom ($3.3 billion) and Russia ($2.9 billion). The majority of weapons sold to developing countries are land systems such as tanks, self-propelled guns, and armored vehicles. Some supersonic combat aircraft such as the MIG-29 (by Russia) are sold as well.

(continued)

Box 6.2 *(concluded)*

To summarize, Table I lists the leading developing country recipients of arms-transfer agreements and deliveries in 2002 and during the 1995–2002 period. Table II summarizes the weapons system types delivered (by supplier country).

Table I: Arms Trade to Developing Nations (Leading Recipients) (in millions of current U.S. dollars)

Arms Transfer Agreements			Arms Deliveries		
COUNTRY	1995-2002	2002	COUNTRY	1995-2002	2002
China	17,800	3,600	Saudi Arabia	64,500	5,200
U.A.E.	16,300	N/A	Taiwan	20,200	1,100
India	14,100	1,400	Egypt	9,500	2,100
Egypt	12,900	1,200	China	9,300	1,200
Saudi Arabia	10,700	900	South Korea	8,800	600
Israel	10,000	700	U.A.E.	8,700	900
South Korea	8,700	1,900	Kuwait	7,300	1,300
South Africa	5,200	N/A	Israel	7,000	700
Malaysia	4,900	800	India	4,700	900
Pakistan	4,700	N/A	Pakistan	3,800	600

Source of data: Grimmett, Richard F. "Conventional Arms Transfers to Developing Nations, 1995–2002." *Congressional Research Service Report for Congress.* September 22, 2003. Table 1I, p. 49.

Table II: Number of Weapons Systems Delivered to Developing Nations by Major Suppliers and by Type (1999–2002)

Weapons Category	US	Russia	China	Major West European*	All Other European	All Others	Total
Tanks and self-propelled guns	200	290	100	370	1,170	100	**2,230**
Artillery	263	190	380	20	680	580	**2,113**
APCs and armored cars	88	660	340	100	920	590	**2,698**
Major surface combatants	8	3	0	8	10	3	**32**
Minor surface combatants	2	4	19	27	75	52	**179**
Guided missile boats	0	0	1	8	0	0	**9**
Submarines	0	2	0	5	2	0	**9**
Supersonic combat aircraft	221	250	50	30	100	100	**751**
Subsonic combat aircraft	17	10	0	60	10	0	**97**
Other aircraft	48	40	70	110	110	80	**458**
Helicopters	145	350	10	60	120	80	**765**
Surface-to-air missiles	2,884	1,600	660	1,200	580	6,190	**13,114**
Surface-to-surface missiles	0	0	0	0	0	60	**60**
Anti-ship missiles	419	250	130	220	0	10	**1,029**
Total	**4,295**	**3,649**	**1,760**	**2,218**	**3,777**	**7,845**	**23,544**

Source of data: Grimmett, Richard F. "Conventional Arms Transfers to Developing Nations, 1995–2002." *Congressional Research Service Report for Congress.* September 22, 2003.Table 3, p. 65.

* France, U.K., Germany, and Italy combined.

[1] Information for this section from Bandarage (1994), unless otherwise cited.
[2] Held (1999), page 113.
[3] Data in this section from Grimmett (2003).

6.5 CASE STUDIES OF CONFLICT AND UNDERDEVELOPMENT IN AFRICA

So far, the economic impact of civil wars has been discussed in terms of overall statistics. To make the impact of civil wars more concrete, this section offers two case studies of prominent African civil wars: Sierra Leone and Sudan. Each case study begins with an overview of the conflict, delves into the causes of the conflict, and ends with a brief description of the conflict's impact on the economy.

6.5.1 Sierra Leone[37]

Overview of the conflict: Civil conflict began in Sierra Leone in 1991. The conflict in Sierra Leone exemplifies how civil wars in Africa are as much war against regional powers, as against internal insurgents. The Revolutionary United Front (RUF) pushed into Sierra Leone with support from neighboring Liberia and advanced through southern and eastern Sierra Leone in the first half of 1991. With the aid of Guinean and Nigerian troops, the forces of the Sierra Leone government pushed back the RUF rebels in the second half of 1991 and into 1992. From 1992 until 1996, the war remained a virtual stalemate until a tentative ceasefire was reached in 1996. Though cease fire agreements have been repeatedly broken and instituted since 1996, the period from 1991–1996 marks the heaviest fighting and will be the focus of this case study.

Causes of the conflict:[38] From the time of colonial rule, the Sierra Leone economy was based primarily on the extraction of largely unprocessed raw materials. This export dependence, combined with widespread corruption among the Sierra Leone politicians and traditional chiefs, served to create deep pools of resentment among those excluded from the economic system. For example, Sierra Leone President Siaka Stevens relied on food aid to pay off political clientele, despite the inability of Sierra Leone's rice production to keep pace with population increases.

In conjunction with this corruption was the government's inability to stop (and, at times, condone) diamond smuggling. This smuggling seriously reduced state revenues. For example, by the late 1980s, diamond smuggling reached nearly $300 million per year and, by 1985-86, domestic revenue collection had plummeted to just 18 percent of its 1977–78 levels. In particular, President Stevens built a fortune for himself and top political clientele by using government control of import/export licenses and the allocation of foreign exchange to acquire key roles in the private firms of the Sierra Leone diamond industry.

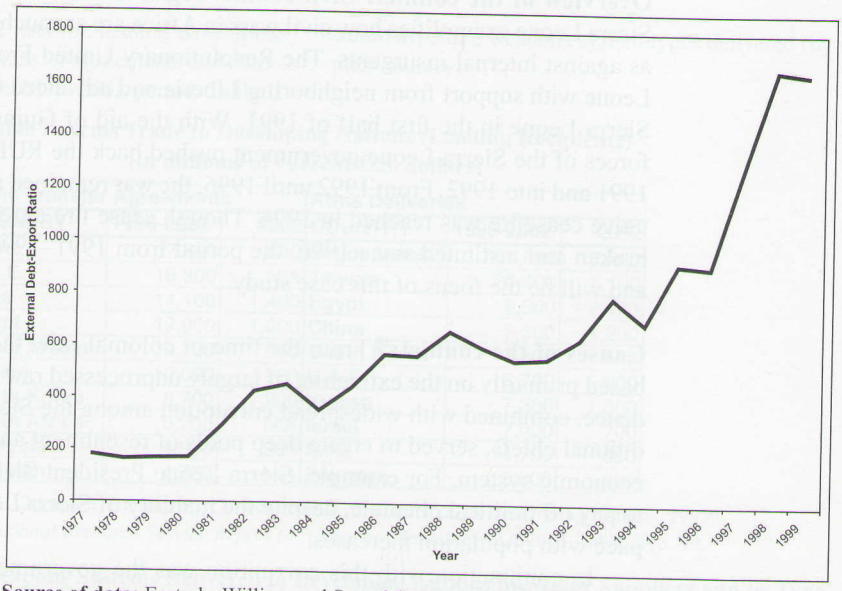
By the early 1980s, Stevens' nonbudgeted discretionary spending rose to more than 60 percent of the budget. In contrast, economic development spending fell to only 3 percent of the overall budget by 1984. The already inadequate education system of Sierra Leone was further hurt by public spending cuts. By the late 1980s, under the rule of Stevens' self-appointed successor, President Momoh, the economy's inequalities were ripe ground for civil discontent.

However, these inequalities did not lead directly to conflict. The war began when Charles Taylor, president of Liberia (Sierra Leone's southern neighbor) sought to deflect the attention of ECOMOG (Economic Community of West African States Monitoring Group) troops who would have been deployed against his own troops fighting a civil war in Liberia. To accomplish this distraction, Taylor sponsored an incursion into Sierra Leone of a small band of armed men (some from Sierra Leone, some armed mercenaries from Burkina Faso, others militants from Taylor's National Patriotic Front of Liberia group) called the RUF.

Economic inequalities came into play as the economically and educationally excluded portions of the Sierra Leone population began to support the chaos wrought by the RUF. These excluded populations used the chaos as a way to make money. These marginalized groups benefited from looting and participating in the illegal trading and production of diamonds (a trading network that had previously been tightly controlled by the government).

Economic consequences of the conflict:[39] Tactics on both sides involved indiscriminate violence against civilians, which caused major disruption and displacement in the labor force. By 1995, nearly 900,000 civilians had been displaced and 300,000 killed out of a total population of 4.3 million. Infant mortality rates rose to one-fifth of live births.

Figure 6.4
External Indebtedness (Sierra Leone)



Source of data: Easterly, William and Sewadeh, Mirvat. Global Development Network Growth Database. Macro Time Series Dataset 2001. World Bank. Available at http://www.worldbank.org/research/growth/GDNdata.htm.

From 1985–1994, the combination of war and corruption led to an average per year decline in real GDP per capita of 1.9 percent. However, that most macroeconomic indicators declined sharply in the years prior to the war suggests that corruption played the primary role in Sierra Leone's economic travails.

Export earnings declined during the war years, and this decline contributed to a rise in the **external debt/export earnings ratio** (see Figure 6.4). This ratio, a measure of the sustainability of a country's external indebtedness (for example, how easily it can pay off its financial obligations to foreigners), had been in decline heading into the war period, but resumed its upward trend during the war.

6.5.2 Sudan

Overview of the conflict: Though much recent attention has been paid to human rights violations in the Darfur region of western Sudan, this case study will focus on the long-running conflict between the Arab Muslim Northerners of Sudan (the base of the Sudanese government), and the black Africans of the South. The Africans practice mainly Christian or animist beliefs and have been marginalized for centuries. Independence of Sudan was marked by an initial civil war (1955–1971). A peace agreement in 1972 ended the first civil war after independence, and Sudan made some movement towards federalism. However, tensions between the authorities in Khartoum and those in the Southern region, and divisions between different groups of southerners, led to further outbreaks of violence in the early 1980s, particularly between the government and the Sudan People's Liberation Army (SPLA). Since 1983, over 1.2 million people have been killed, and the civil war has devastated the Sudanese economy.[40]

Causes of the conflict: Sudan is a vast country populated by mainly Muslim Arab and Nubian peoples in the north; and in the South, mainly Animist or Christian Nilotic and Negro peoples. Because the Nile river basin runs down into the northern portions of Sudan, this fertile northern region has historically been an important farming and transportation locale; the Northerners of Sudan received privileged attention under both Turkish and then British rule. Consequently, Sudan developed a highly uneven resource-extractive and export-oriented form of economic development, where economic activity was concentrated in the northern, eastern, and central portions of the country, while the South was left economically underdeveloped.

Upon independence, the differences between Northerners and Southerners were evident. Southerners lacked land (which was being taken from Southerners as the Northerners used World Bank loans to clear southern land for mechanized farming). Southerners also lacked capital, and they had been discriminated against in educational opportunities. They also did not have the connections necessary to maximize the revenue of selling cattle in the lucrative northern livestock markets. In sum, the Southerners were not in control of their economic development and were dependent on the Northerners.

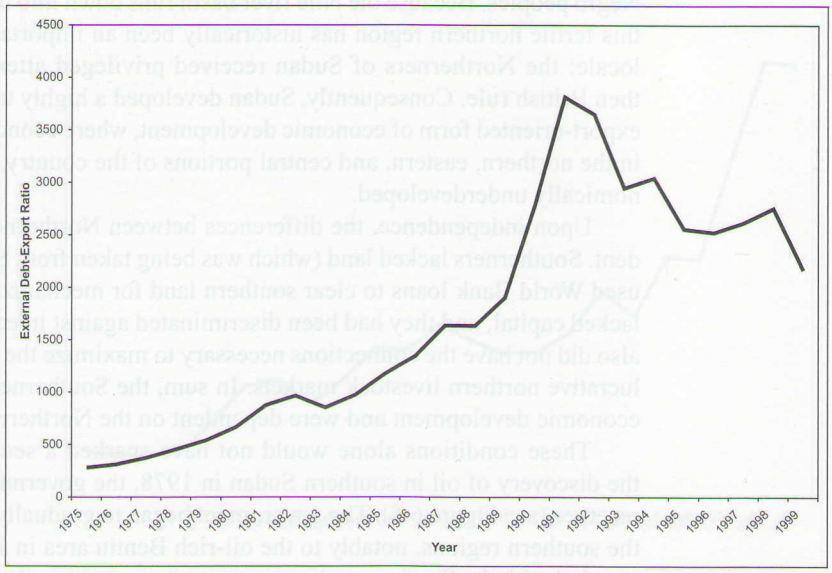
These conditions alone would not have sparked a second civil war. However, with the discovery of oil in southern Sudan in 1978, the government sought control over these reserves (see Figure 6.5). The government began to gradually transfer troops in the north to the southern regions, notably to the oil-rich Bentiu area in 1983. This troop mobilization, coupled with the Southerners' non-representation within the Sudanese government (so the Southerners could not stake an effective claim to these resources), led to the creation of the SPLA in 1983 and initiated a civil war.

Economic consequences of the conflict: Over 2 million people died during the 20 years of civil war, either directly from combat, or from the widespread government-sponsored famine in the South.[41] This death toll is a considerable number, given that Sudan had averaged a population of 25 million during the course of the conflict. The government not only extracted

Figure 6.5
Sudan's Oil Deposits

Source: *The Economist*. "Fleeing the Horsemen who Kill for Khartoum." May 13, 2004. Reprinted here with permission.

Figure 6.6
External Indebtedness (Sudan)



Source of data: Easterly, William and Sewadeh, Mirvat. Global Development Network Growth Database. Macro Time Series Dataset 2001. World Bank. Available at http://www.worldbank.org/research/growth/GDNdata.htm.

resources from the South, but Northern merchants also manipulated the grain prices in the northern markets, thereby rendering grain too expensive for Southerners to purchase.

Though usable internal data is not available for Sudan for many of the war years, it is still possible to use external economic data to illustrate the conflict's negative impact. Specifically, the conflict contributed to the diminishment of Sudan's export earnings; which, in turn, contributed to a drastic rise in Sudan's external debt. This increased the debt/export ratio from approximately 1,176 in 1983 (already an unsustainable level) to nearly 4,000 in the early 1990s (see Figure 6.6).

6.5.3 Lessons from the Case Studies

Table 6.2 provides a variety of data that summarize the economic toll of war on these two countries. The combination of declining population, increases in military expenditures, and resource displacement (as represented by the decline in food consumption) created large cumulative losses of GDP. Specifically, these countries are estimated to have lost the equivalent of between 147 percent and 172 percent of their 1995 GDP due to war (see the final column of Table 6.2).

Despite being a small sample of pertinent cases, these two conflicts do present four general lessons:

1) Ethnic and tribal differences (which are often blamed for civil wars in underdeveloped economies) have very little to do with the conflicts' origins. For example, the conflict in Sierrra Leone was a function of economic inequality, government abuse and corruption, and spillover of conflict into neighboring countries.

Table 6.2
Economic Performance of Case Study Countries: Summary Statistics

Country	Years Measured	Deaths	Deaths as Percent of Population	Miltary Expenditure in Start Year (Percent of GDP)	Military Expenditure in Peak Year (Percent of GDP)	Start Year Daily Calories per Person	End Year Daily Calories per Person	Estimated Cumulative GDP Loss (as a percent of 1995 GDP)
Sierra Leone	1991–95	30,000	0.7	0.8	2.6 (1993)	1,895	1,694	147
Sudan	1984–1995	611,000	4.8	2.9	3.2 (1989)	2,244	2,310	172

Source of data: Stewart, F.; Huang, C.; and Wang, M. "Internal Wars in Developing Countries: An Empirical Overview of Economic and Social Consequences," in *War and Underdevelopment,* vol. I. Stewart, Fitzgerald, and associates (eds). Oxford: Oxford University Press. 2001. Tables 4.5, 4.9, 4.11, and 4.16.

2) Though government corruption may be a fundamental cause of underdevelopment, conflict also plays a role in that it delays the development process or impedes a country from realizing its economic potential.

3) Sierra Leone illustrates that civil conflicts in Africa are intimately related to regional interstate conflicts.

4) Conflict appears to contribute to the external indebtedness of a less-developed country. However, conflict is neither the sole nor the primary cause of the external indebtedness of a less-developed country.

6.6 PEACE OPERATIONS: AN ECONOMICALLY INEFFICIENT RESPONSE?

Given the negative consequences of conflict, policy makers around the world have considered various options for stopping or preventing civil wars. Military intervention that is aimed at stopping these conflicts falls under the category of **Peacekeeping** or **Peacemaking.** Peacekeeping is the use of military personnel to observe and monitor whether or not a ceasefire is being obeyed. Soldiers in these operations are traditionally lightly armed and powerless to do much if either side in the conflict chooses to resume hostilities. This lack of force means that peacekeepers, in order to fulfill their assignment, require the consent of opposing sides.[42]

Peacemaking is taking actions to bring about a ceasefire. Such actions can entail the use of diplomacy, negotiations, and arbitration. The United Nations has been involved in numerous peacekeeping and peacemaking operations since its inception in 1950 (see Table 6.3). Such operations have also, more recently, been taken on by the North Atlantic Treaty Organization (NATO).

6.6.1 Expansion of Peacekeeping Operations

According to Sandler and Hartley (1999), U.N. peacekeeping operations have evolved through four distinct phases. From 1947–1956, the United Nations was involved in four missions (three were peacekeeping; one, UNEF I in the Sinai, was peacemaking). From 1957–1974, the United Nations became very active, engaging in nine new peacekeeping operations; while from 1975–1987, the United Nations engaged in only two new operations. From 1988–1997, U.N. peace operations expanded greatly, with thirty-three missions. Another ten missions have been added since 1998. In short, the first 40 years of

Table 6.3
UN Peacekeeping Operations

Current UN Peacekeeping Operations	
Region/Country	**Duration**
AFRICA	
Western Sahara	April 1991–present
Sierra Leone	Oct. 1999–present
DRC	Nov.1999–present
Ethiopia and Eritrea	July 2000–present
Côte d'Ivoire	May 2003–present
Liberia	Oct. 2003–present
ASIA	
India/Pakistan	Jan. 1949–present
East Timor	May 2002–present
EUROPE	
Cyprus	March 1964–present
Georgia	Aug. 1993–present
Kosovo	June 1999–present
MIDDLE EAST	
Middle East	May 1948–present
Golan Heights	June 1974–present
Lebanon	March 1978–present
Iraq/Kuwait	April 1991–present

Completed UN Peacekeeping Operations	
Region/Country	**Duration**
AFRICA	
Congo	July 1960–June 1964
Angola	Dec. 1988–May 1991
Namibia	April 1989–March 1990
Angola	May 1991–Feb. 1995
Somalia	April 1992–March 1993
Mozambique	Dec. 1992–Dec. 1994
Somalia	March 1993–March 1995
Rwanda/Uganda	June 1993–Sept. 1994
Liberia	Sept. 1993–Sept. 1997
Rwanda	Oct. 1993–March 1996
Chad/Libya	May–June 1994
Angola	Feb. 1995–June 1997
Angola	June 1997–Feb. 1999
Sierra Leone	July 1998–Oct. 1999
Central African Republic	April 1998–Feb. 2000
MIDEAST	
Middle East—1st UN Emergency Force	Nov. 1956–June 1967
Lebanon	June–Dec. 1958
Yemen	July 1963–Sept. 1964
Middle East—2nd UN Emergency Force	Oct. 1973–July 1979
Iran/Iraq	Aug. 1988–Feb. 1991
AMERICAS	
Dominican Republic	May 1965–Oct. 1966
Central America Observer Group	Nov. 1989–Jan. 1992
El Salvador	July 1991–April 1995
Haiti	Sept. 1993–June 1996
Haiti	July 1996–July 1997
Guatemala	Jan.–May 1997
Haiti	Aug.–Nov. 1997
Haiti	Dec. 1997–March 2000
ASIA	
West New Guinea	Oct. 1962–April 1963
India/Pakistan	Sept. 1965–March 1966
Afghanistan/Pakistan	May 1988–March 1990
Cambodia	Oct. 1991–March 1992
Cambodia	March 1992–Sept. 1993
Tajikistan	Dec. 1994–May 2000
East Timor	Oct. 1999–May 2002
EUROPE	
Former Yugoslavia	Feb. 1992–March 1995
Croatia	March 1995–Jan. 1996
Former Yugoslavia Rep. of Macedonia	March 1995–Feb. 1999
Bosnia & Herzegovina	Dec. 1995–Dec. 2002
Croatia	Jan. 1996–Jan. 1998
Croatia	Jan. 1998–Oct. 1998

Source: United Nations Department of Peacekeeping Operations. Available at www.un.org/Depts/dpko/dpko/ops.htm.

U.N. peacekeeping operations witnessed only 15 missions; while in the next 18 years, the number of U.N. peace missions nearly tripled.

What explains the rise of U.N. peacekeeping missions? There are two reasons, both related to the end of the Cold War. First, the end of the Cold War made former Cold War rivals more likely to agree (rather than conflict) over involvement in such ventures. Second, after the Cold War, governments that were previously supported by the United States or the Soviet Union were overthrown. Examples of this second point include the flaring up of ethnic conflict in the Balkans, and power vacuums in the Middle East

(leading to Iraq's invasion of Kuwait in 1990) and Africa. Peacekeeping operations were needed to stabilize these countries (the United Nations in the Middle East and Africa; NATO in the Balkans).

With the expansion of missions has come an expansion in costs. Prior to 1989, the United Nations spent about $200 million annually on peacekeeping. Since 1989, peacekeeping costs have risen, creeping to a little over $3 billion in the early 1990s.[43] Table 6.4 shows, overall, the estimated U.N. expenditures on peacekeeping operations from 1975 to 2003.

6.6.2 Peacekeeping as a Public Good

A **public good** is a good that is neither excludable nor rival. A good is *excludable* if people can be prevented from using the good. A good is *rival* if one person's use of a good diminishes another person's ability to enjoy a good. A country's national defense is held up as a typical example of a public good. If a country is secure from foreign aggressors, it is impossible to prevent a single member of the nation from enjoying that protection, even if that person did not pay taxes. Also, one person enjoying the benefit of national defense does not diminish the ability of another person to benefit from national defense. Are peacekeeping operations public goods, just like national defense?

Excludable: Peacekeeping provides peace, which benefits all nations, even those not contributing to the operation.[44] Because it is impossible to prevent a nation from benefiting from the peacekeeping operation, peacekeeping is a non-excludable good and is subject to the **free-riding problem** (where a person chooses to let other people pay for a good from which he or she also benefits). As a consequence of the free-riding problem, nations will rely on other nations to contribute the funds and troops for a peacekeeping mission.

Rival: Classifying a peacekeeping operation according to the operation's rival characteristics is slightly more complicated. For example, if NATO sends peacekeepers to Afghanistan, the fact that Pakistan (a neighbor to Afghanistan) benefits from peace in Afghanistan does

Table 6.4
U.N. Expenditures on Peacekeeping
(millions of current year U.S. $)

Year	Expenditure	Year	Expenditure	Year	Expenditure
1975	101.8	1986	183.7	1997	1,226.0
1976	134.6	1987	180.4	1998	907.0
1977	120.5	1988	205.5	1999	1,100.0
1978	213.9	1989	568.5	2000	1,800.0
1979	221.9	1990	388.9	2001	2,500.0
1980	190.0	1991	421.3	2002	2,284.0
1981	212.4	1992	1,676.0	2003	2,260.0
1982	248.9	1993	2,900.0		
1983	229.5	1994	3,500.0		
1984	212.4	1995	3,200.0		
1985	213.6	1996	1,350.0		

Source of data: 1975–1996 from Sandler, Todd and Hartley, Keith. *The Political Economy of NATO.* New York: Cambridge University Press, 1999, p. 90. 1997–2003 from Renner, Michael. "Peacekeeping Operations Expenditures: 1947–2003." *Global Policy Forum.* Available at www.globalpolicy.org/finance/tables/pko/expend.htm.

not diminish the ability of Iran (another neighbor of Afghanistan) to benefit from peace in Afghanistan. Alternatively, consider a country like Iraq. If NATO has committed extensive resources to Afghanistan, then Iraq—like all other countries—benefits from a stable Afghanistan. However, if Iraq also needs NATO peacekeeping forces, the NATO countries may lack the resources to supply the forces. Therefore, rivalry does exist with regard to the peacekeeping forces. This rivalry factor makes the forces used in a peacekeeping operation a **common resource,** rather than a public good (goods that are non-excludable, but *are* rival). Hence, the act of carrying out a peacekeeping operation is a public good. But the forces used to conduct the operation are a common resource.

Evidence: Sandler and Hartley (1999) argue that to determine whether peacekeeping operations do indeed fit the definition of a public good, one should look for evidence of disproportionate burden-sharing in terms of the percentage of income a country contributes to peacekeeping. Using data from 1980 through 1994, Sandler and Hartley rank the GDP and peacekeeping expenditures as a percent of GDP for 16 NATO members. In the 1980s, there is very little evidence that GDP and peacekeeping expenditures were related. For the 1990s, by contrast, it is found that the countries with the larger economies (as measured by GDP) spent a larger proportion of their money on peacekeeping operations. This difference between decades suggests that as peacekeeping missions became more prominent, major economic countries were required to carry more of the peacekeeping burden.[45]

The relationship between economic size and peacekeeping budget contributions is noticeable in the United Nations as well. In the 1990s, the bulk of peacekeeping was financed by the five permanent members of the Security Council (63 percent) and 22 other developed countries who were non-permanent members of the Security Council (35 percent). The primary contributors to U.N. peacekeeping funding since 1990 have been the United States, the United Kingdom, and France (see Table 6.5). Consequently, because peacekeeping operations are a public good, they are economically inefficient for countries to provide.[46]

6.6.3 Marginal Cost/Marginal Benefits of Peacekeeping

Evaluating the economic cost/benefits of deploying peacekeeping should be considered from two perspectives: that of the contributing country and that of the United Nations.

Table 6.5
U.N. Peacekeeping Funding 1991–1998
(constant 1998 U.S. $)

	1994	1995	1996	1997–98
US	1.08	0.43	0.29	0.3
France	0.15	0.27	0.09	0.07
UK	0.23	0.24	0.1	0.07

Source of data: Report on Allied Contributions to the Common Defense (1999) in Hentges, Harriet and Coicaud, Jean-Marc. "Dividends of Peace: The Economics of Peacekeeping." *Journal of International Affairs.* Spring 2002, p. 357.

Contributing country's perspective: Though the United States may be the largest contributor to the funding for U.N. peacekeeping, it does not contribute the most troops. This lack of troop contribution is because, from the U.S. perspective, it is economically inefficient for the United States to contribute troops. The United Nations reimburses countries contributing troops to peacekeeping operations at a flat rate of $1,000 per month for each soldier deployed. The cost of deploying one U.S. soldier can approach $4,500 per month. Consequently, for countries such as the United States, the **marginal benefit** (the additional benefit, measured in dollars, gained by an actor when it obtains—or in this case, contributes—one more of some item) of these operations is lower than the **marginal cost** (the additional cost, measured in dollars, incurred by an actor when it obtains or contributes one more of something). This is because such countries send well-trained troops. In contrast, countries sending poorly trained or less capital-intensive troops could spend as little as $300 per month deploying a troop.

Therefore, it should not come as a surprise that during 1994, for instance, the 10-largest troop contributors were, in descending order: Pakistan, France, India, Bangladesh, the United Kingdom, Jordan, Malaysia, Canada, Egypt, and Poland. In 1997, the top troop contributors, in descending order, were Pakistan, India, Russia, Bangladesh, Jordan, Poland, Canada, Brazil, Finland, and Austria. In 1998, the top troop contributors, in descending order, were Poland, Bangladesh, Austria, Ghana, Ireland, Norway, Argentina, Nepal, Fiji, and the United States. In short, for the United States and other developed countries, a marginal cost greater than a marginal monetary benefit is another example of peacekeeping proving to be an economically inefficient endeavor for such a country.[47]

The U.N.'s perspective: Though soldiers from developed countries are more expensive than soldiers from poorer nations, recall that higher-paid soldiers have a higher marginal productivity of labor (refer to the military labor market model in Chapter 4). Therefore, soldiers from developed countries should be much more capable than soldiers from poorer countries. For example, in 1999 the rebel forces and government of Sierra Leone signed the Lome peace accord. The United Nations sent a peacekeeping force into Sierra Leone at the beginning of 2000 in order to enforce the peace agreement. However, the U.N. forces, comprised mostly of troops from sub-Saharan Africa, the Middle East, and South Asia, had little experience either working together or carrying out peacekeeping missions. The peace deal soon broke down and the U.N. peacekeeping force was unable to stop the advance of rebel troops on the government. In fact, several of the peacekeeping-force members were taken hostage. The situation stabilized only when the United Kingdom sent British troops to support the peacekeepers and train the Sierra Leone army.[48]

In fact, from the perspective of the global economy, effective peacekeeping is an extremely economically efficient policy. Extrapolating from the British experience in Sierra Leone, it is estimated that military intervention in a dozen similar countries—once conflict has ended (so as to maintain the peace)—would cost $4.8 billion, but the intervention may generate economic gains of approximately $397 billion.[49]

Summary: It is now possible to understand why the United States is wary to engage in peacekeeping operations, even if the operation does not place soldiers in an overtly hostile location. Despite the fact that peacekeeping can generate economic benefits for the global economy, the free-rider problem and marginal cost greater than marginal benefit both mean peacekeeping is an economically inefficient use of U.S. military resources.

6.7 KEY POINTS

Key Macroeconomic Points:

- Civil wars have not only become more frequent, but have also grown longer.
- Civil wars not only leave the inflicted country poorer, but they also damage the economies of neighboring countries.
- Civil wars contribute to a country's external indebtedness

Key Microeconomic Points:

- Civil wars are primarily the result of economic factors such as poverty, horizontal inequality, and primary-product dependence.
- The small arms market is actually three markets: initial export market, secondary market, and black market.
- The forces of supply and demand mean that the price of an AK-47 can serve to indicate the degree of hostilities in a country.
- Peacekeeping operations are public goods (non-exclusive and non-rival). But peacekeeping forces are a common resource (non-exclusive, but rival).
- Peacekeeping operations are economically inefficient for the United States and other developed countries, because the marginal cost of military operations exceeds the marginal benefit.

Key Terms:

Vertical inequality
Horizontal inequality
Primary commodities
Opportunity cost
Genocide
Secondary arms market
Black market
Proxy wars
External debt/export earnings ratio
Peacekeeping
Peacemaking
Public good
Excludable
Free-riding problem
Rival
Common resource
Marginal benefit
Marginal cost

Key Questions:

1. Why does vertical-income inequality typically not start civil wars?
2. Why do civil wars commonly have a negative impact on neighboring countries?
3. In and of itself, can primary-commodity export dependence lead to civil war?
4. Why would people view the civil war in southern Sudan as a religiously driven conflict?
5. It has been shown that, with regard to the consideration of marginal benefit and marginal cost, the United States should not be involved in peacekeeping operations. However, are there any other economic arguments that can be made for the United States to involve itself in peacekeeping operations?

Endnotes

1. Churchill (1953), p. 430.
2. The Global Menace of Local Strife." Special report in *The Economist*. May 24, 2003, p. 23.
3. Collier and Hoeffler (2004), p. 8.
4. Collier (1999), p. 9.

5. "The Global Menace of Local Strife." Special report in *The Economist,* May 24, 2003, p. 25.
6. See Collier and Hoeffler (2002a) and Humphreys (2003).
7. "The Global Menace of Local Strife." Special report in *The Economist,* May 24, 2003, p. 24.
8. See Fearon and Laitin (2003), pp. 14–15.
9. De Soya (2000), p. 116 and Collier (2000), p. 94.
10. Collier and Hoeffler (2002b), p. 10.
11. "The Global Menace of Local Strife." Special Report in *The Economist,* May 24, 2003, p. 24.
12. Ibid., p. 6.
13. Found in Humphreys (2003), pp. 4–5.
14. Collier and Hoeffler (2004), p. 17.
15. From the RUF's key ideological document "Footpaths through the Forest" cited in Humphreys (2003), p. 5. Note: the NPRC (National Provisional Ruling Council) was the ruling authority in Sierra Leone during the early and middle 1990s.
16. Humphreys (2003), p. 4 warns of the pejorative consequences of using the term "greed."
17. Collier (2000), p. 104.
18. Mwanasali (2000), p. 145.
19. Duffield (2000), p. 82.
20. Information for this paragraph from "The Global Menace of Local Strife." Special report in *The Economist,* May 24, 2003, pp. 24–25.
21. See Collier (2000), pp 101–103.
22. Prunier, Gérard. *The Rwandan Crisis: History of a Genocide.* New York: Columbia University Press, 1995, pp. 231–232. Cited in Mueller (2004), pp. 98–99.
23. Collier (2000), p. 7.
24. Ibid., pp. 11- 14.
25. Humphreys (2003), p. 4.
26. Stewart (2000), pp. 252–253.
27. Ibid., p. 8.
28. Ibid., p. 8.
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