The Bottom Billion

Why the Poorest Countries Are Failing and What Can Be Done About It

PAUL COLLIER

OXFORD UNIVERSITY PRESS 2007

CHAPTER 2

The Conflict Trap

ALL SOCIETIES HAVE CONFLICT; it is inherent to politics. The problem that is pretty distinctive to the bottom billion is not political conflict but its form. Some of them are stuck in a pattern of violent internal challenges to government. Sometimes the violence is prolonged, a civil war; sometimes it is all over swiftly, a coup d'état. These two forms of political conflict both are costly and can be repetitive. They can trap a country in poverty.

Civil War

Seventy-three percent of people in the societies of the bottom billion have recently been through a civil war or are still in one. Many other countries have had civil wars at one time or another—the United States had one in the nineteenth century, Russia one early in the twentieth century, and Britain one back in the seventeenth—but, as these examples show, wars are not necessarily traps. The American, Russian, and British civil wars were ghastly at the time but were over fairly quickly and were not repeated. For low-income countries, however, the chances of war becoming a trap are much higher. I discovered this working with Anke Hoeffler, a young woman who was initially my doctoral student and is now my colleague. Anke's doctoral thesis was about the sources of growth, then a fashionable topic in economics. One of the factors known to impede growth is war. As I mulled over Anke's work it struck me that it would be interesting to turn

the inquiry around: instead of explaining whether a country grew fast or slowly in terms of whether it was at war or peace, we could investigate whether proneness to war was explicable in terms of differences in growth.

Causes of Civil War

So what causes civil war? Rebel movements themselves justify their actions in terms of a catalogue of grievances: repression, exploitation, exclusion. Politically motivated academics have piled in with their own hobbyhorses, which usually cast rebels as heroes. I have come to distrust this discourse of grievance as self-serving. Sorting out the causes of civil war is difficult: historians cannot even agree on what caused the First World War. Most wars have multiple layers of causality: personalities, hatreds, mistakes. Our approach was to try to explain civil war statistically, looking at a range of possible causes: social, political, geographic, and economic.

The first and most critical step in statistical research is getting satisfactory data. We found a comprehensive list of civil wars produced at the University of Michigan, for many years the world's leading center for data on such political questions. The Michigan definition of civil war is an internal conflict that involves at least 1,000 combat-related deaths, with each side incurring at least 5 percent of these deaths. (One advantage of using criteria devised by another researcher is that your results cannot be contaminated by the temptation to bend definitions so as to get the results that you expect.) While the figure of 1,000 combat deaths is arbitrary, the point of drawing a line is that there really is a big difference between low-level communal violence in which, say, fifty people are killed and a war in which thousands get killed. We then matched this list of civil wars against a mass of socioeconomic data, country by country and year by year, with the goal of trying to determine the factors that affected the likelihood of a civil war developing in a given country within the next five years.

Our work has proved controversial. In part this is because the people attracted to the academic study of conflict tend to be politically engaged and are sympathetic to the acute grievances enunciated by various rebel movements, who often adopt extreme measures to oppose governments that indeed may be unsavory. To such academics, the whole idea of investigating

statistically whether there is a relationship between objective measures of grievance and a propensity to rebel is taken to be more or less an insult, since they know there is one. Admittedly, we fanned the flames on occasion: we entitled one of our papers "Greed and Grievance" and another "Doing Well out of War," implying that rebel motivations may just conceivably not be any more heroic than the governments they oppose. At the less politicized end of the academic profession, however, our work has been taken seriously and frequently cited. We reached the policy world— I was invited to address the General Assembly of the United Nations—and have been featured in the media

We were also asked to use our model to predict where the next civil wars would be-the CIA was apparently interested. But we were never that foolish. Our predictions might have been used as labels and thus likely to damage the very countries I was concerned to help; they might even have become self-fulfilling prophecies. More fundamentally, our model cannot be used for prediction. It can tell you what typically are the structural factors underlying proneness to civil war and-what is sometimes more interesting—what seems not to be very important. From this, it can tell you the sort of countries that are most at risk. But it cannot tell you whether Sierra Leone will have another civil war next year. That depends upon a myriad of short-term events.

The first link we found was between risk of war and initial level of income. Civil war is much more likely to break out in low-income countries: halve the starting income of the country and you double the risk of civil war. One might ask whether we got the causality mixed up—is it just that war makes a country poor, rather than that poverty makes a country prone to war? In fact, both relationships hold simultaneously. While civil war reduces income, low income indeed heightens the risk of civil war. The clearest evidence for this arises because during colonialism many countries experienced decades of enforced peace; the near-simultaneous decolonization of many countries with very different income levels provided a natural experiment for the effect of income on civil war.

The relationship between low income and civil war may seem obvious if you read the newspapers, you will see that the countries where there is conflict are far more likely to be poor—but not all theorists of civil war have based their work on empirical data. Some social scientists, particularly the

most politically engaged, know what they want to see in civil war and duly see it.

What else makes a country prone to civil war? Well, slow growth, or worse, stagnation or decline. As an approximation, a typical low-income country faces a risk of civil war of about 14 percent in any five-year period. Each percentage point added to the growth rate knocks off a percentage point from this risk. So if a country grows at 3 percent, the risk is cut from 14 percent to 11 percent; if its economy declines at 3 percent, the risk increases to 16 percent. On this point too, one might ask whether we have the causality backward—might it be the case instead that it is the anticipation of civil war that causes decline? After all, when a civil war looks to be in the cards, investors flee, and the economy declines. It looks like decline causes war, but actually it's the anticipation of war that causes decline. This objection can be dealt with by looking at a factor that affects growth but has no direct connection to civil war, and seeing whether the subsequent effects make civil war more or less likely. In low-income countries rainfall shocks (too much or too little rain) affect economic growth, but they do not directly affect the risk of civil war-that is, prospective rebels do not say, "It's raining, let's call off the rebellion." The effects on growth of rainfall shocks are thus clean of any ambiguity: they are not caused by anticipation of civil war. Yet setbacks to growth caused by rainfall shocks make civil war much more likely.

So if low income and slow growth make a country prone to civil war, it is reasonable to want to know why. There could be many explanations. My guess is that it is at least in part because low income means poverty, and low growth means hopelessness. Young men, who are the recruits for rebel armies, come pretty cheap in an environment of hopeless poverty. Life itself is cheap, and joining a rebel movement gives these young men a small chance of riches. In 2002 a little gang of rebels in the Philippines managed to kidnap some foreign tourists. A French woman among the kidnapped later described how she wrote down their demands for transmission to the authorities. "What do you want me to write?" she asked. "A million dollars per tourist" was what they wanted. She wrote it down, then asked, "Anything else?" A long pause, then a political thought: "Sack the mayor of Jolo." The last demand: "Two divers' wristwatches." That was the list of "totally justified" grievances from that particular

rebel group. Kidnapping tourists was just an unfortunate necessity to secure social justice. Anyway, the United States refused to pay up for the American hostage, but the European governments paid up, with Muammar Qaddafi of Libya as a go-between, and in short order there was a surge of young men wanting to join the rebels. This sort of recruitment to a rebellion is a bit like joining drug gangs in the United States. A nowfamous study of a Chicago drug gang found that young men were attracted into the gang and willing to work for practically nothing because of the small chance of big money if they managed to climb up the hierarchy of the gang.

On top of that, if the economy is weak, the state is also likely to be weak, and so rebellion is not difficult. Rebel leader Laurent Kabila, marching across Zaire with his troops to seize the state, told a journalist that in Zaire, rebellion was easy: all you needed was \$10,000 and a satellite phone. While this was obviously poetic exaggeration, he went on to explain that in Zaire, everyone was so poor that with \$10,000 you could hire yourself a small army. And the satellite phone? Well, that takes us to the third and final economic risk factor in civil war: natural resources.

Dependence upon primary commodity exports-oil, diamonds, and the like-substantially increases the risk of civil war. That's why Kabila needed a satellite phone: in order to strike deals with resource extraction companies. By the time he reached Kinshasa he reportedly had arranged \$500 million worth of deals. There have been several cases where international companies have advanced massive amounts of funding to rebel movements in return for resource concessions in the event of rebel victory. That is apparently how Denis Sassou-Nguesso, the present president of the Republic of the Congo (not to be confused with the Democratic Republic of the Congo, formerly Zaire), came to power. So natural resources help to finance conflict and sometimes even help to motivate it. One example is "conflict diamonds." The UN defines them as "diamonds that originate from areas controlled by forces or factions opposed to legitimate and internationally recognized governments, and are used to fund military action in opposition to those governments." In the case of conflict diamonds, the attention that has been drawn to the problem by the NGO Global Witness has paid off. After years of denying that there was a problem, De Beers, the world's largest diamond producer, has made amazing changes that have gone a long way toward addressing the problem and have turned the company into a corporate role model.

So low income, slow growth, and primary commodity dependence make a country prone to civil war, but are they the real causes of civil war? I hear the phrase "root causes" a lot. It is bandied about at many of the conferences on conflict to which I am invited. Surprisingly frequently, a hypothesized root cause turns out to be predictable if you already know the hobbyhorse of the speaker. If the individual cares about income inequality, he or she imagines that that is what rebels are concerned about; someone strongly engaged with political rights assumes that rebels are campaigners for democracy; if someone's great-grandparents emigrated to escape from some oppressive regime, the person imagines that the descendants of those who did not emigrate are still being oppressed in the way that folk memory tells them once happened. Partly in response, the rebel groups generate a discourse of grievance that feeds these concerns, in effect inviting fellow travelers to imagine themselves wearing bandoliers on the barricades. Unfortunately, you simply can't trust the rebel discourse of concern for social justice: what else do you expect them to say?

Donations from diasporic communities have been one of the key sources of finance for rebel movements, so rebels have learned how to manipulate their public relations. The Irish Republican Army (IRA) attracted money from Irish Americans, and not just money, either-apparently some of the guns used by the IRA came from the Boston police department (though the attacks of September 11, 2001, brought a stop to that one, once Americans realized what terrorism actually meant). The Tamil Tigers got money from Tamils in Canada; the bomb that killed or injured more than 1,400 people in Sri Lanka's capital city, Colombo, in 1996 was paid for from a Canadian bank account. Albanians across the European Union financed the Kosovo Liberation Army, a group that some European politicians actually mistook for a decent political movement until it got its chance to murder. The best-organized diaspora movement of all was the Eritrean People's Liberation Front. The diaspora financed the war for thirty years, and in 1992 they won. Eritrea is now an independent country. But did the war really achieve a liberation of the Eritrean people? In September 2001, after an unnecessary international war with Ethiopia, half the Eritrean cabinet wrote to the president, Isaias Afwerki, asking him to think again about

his autocratic style of government. He thought about it and imprisoned them all. He then instituted mass conscription of Eritrean youth. Ethiopia demobilized, but not Eritrea. Eritrean youth may be in the army as much to protect the president from protest as to protect the country from Ethiopia. Many young Eritreans have left the country. As I write, the government is in the process of expelling international peace observers, presumably so that it can restart the war. Was such a liberation really worth thirty years of civil war? As a side effect, it cut Ethiopia off from access to the sea. (Wait until Chapter 4 to see what that does.)

You might be ready to accept that rebel movements are good at public relations and use grievance as a weapon, but surely, you think, their underlying grievances must be well founded. Sometimes they are, because governments can be truly terrible. But is it generally true that well-founded grievances provoke rebellion? The evidence is much weaker than you might imagine. Take the repression of political rights. Political scientists have measured this sort of behavior, scoring it year by year, government by government. There is basically no relationship between political repression and the risk of civil war. Take economic or political discrimination against an ethnic minority. Two political scientists at Stanford, Jim Fearon and David Laitin, have measured this for more than two hundred ethnic minorities around the world. They found no relationship between whether a group was politically repressed and the risk of civil war. Ethnic minorities are just as likely to rebel with or without discrimination. Fearon and Laitin did the same for intergroup hatreds and again found no relationship to the risk of civil war. Anke Hoeffler and I investigated the effect of income inequality, and to our surprise we could find no relationship. We also investigated the colonial history of each country. We could find no relationship between the subsequent risk of civil war and either the country that had been the colonial power or how long the country had been decolonized. I even came to doubt the apparently incontestable notion that today's conflicts are rooted in history. Of course, pretty well wherever you find a conflict today it's true that there was a conflict in the same area some time in the remote past; the current participants usually make a lot of it, and a rebel leader can often get trouble going by appealing to the past. This does not mean that the past conflict caused the present one, however, nor that we are locked into conflict by history. Most of the places that are at peace now have had civil wars some time in the past. Rather, some economic conditions lend themselves to being taken advantage of by gutter politicians who build their success on hatred.

I do not want to push this too far, and I certainly do not want to condone governments that perpetrate discrimination or repression. Genuine grievances should be redressed whether or not they provoke rebellion, yet all too often they are not redressed. But the sad reality seems to be that grievances are pretty common. Rebels usually have something to complain about, and if they don't they make it up. All too often the really disadvantaged are in no position to rebel; they just suffer quietly. Looking through history, about the worst case of ethnic discrimination I can think of occurred after the Norman invasion of England. The Normans, a small group of violent, French-speaking Vikings, killed the English elite, stole all the land, and subjected the native 98 percent of the population to two centuries of servitude. During this time there were many civil wars. None of them was a rebellion of English serfs against Norman masters. All the civil wars were one bunch of Norman barons against another, trying to grab yet more resources.

A flagrant grievance is to a rebel movement what an image is to a business. But occasionally we can disentangle a rebellion enough to get past the image. In Fiji, for example, Indian immigration changed the balance of the population, and eventually the better-educated and richer Indians became a small majority; in 1999 they elected an ethnic Indian prime minister, Mahendra Chaudhry. Fiji is the world's foremost exporter of mahogany, and shortly after the Chaudhry government came to power it decided to put out the state mahogany plantations to international management. Two of the international bidders were the Commonwealth Development Corporation, a British not-for-profit organization with huge experience working in developing countries, and a private U.S. company. As is normal, each of these rival bidders hired local businessmen to support their bids, and in an atmosphere of intense competition the government awarded the contract to the Commonwealth Development Corporation. One month later, a indigenous Fijian rebel leader named George Speight-who also happened to be the same businessman who had been serving as a consultant to the U.S. company—began an armed struggle against the new government. Speight's slogan, "Fiji for the Fijians," was a very emotive rallying cry, but was social justice really Speight's only motive? I suppose that as a rallying cry "Give the mahogany contract to the Americans" would have lacked some of the same frisson of an implied struggle on behalf of the oppressed.

How about Sierra Leone? Sierra Leone is a poor and miserable country at the bottom of the Human Development Index (a composite measure of life expectancy, literacy, and income), and its inhabitants most surely have plenty of reasons for grievance. The rebel leader Foday Sankoh came close to hitting the jackpot of gaining power—his forces were so strong relative to those of the government that he was offered amazingly generous settlement terms, including the post of vice president. Remarkably, Sankoh turned it down; having the number two position in the country was not what he wanted. Instead, he made it very clear that his goal was to be in charge of the part of the government that managed Sierra Leone's lucrative diamond concessions. And Sankoh's rebellion had not exactly been the stuff of heroic armed struggle. His preferred recruits were teenage drug addicts, easily controlled and not excessively inhibited by moral scruples. Their favored strategy was terror against the civilian population, including hacking off the hands and feet of villagers, even children.

Let's move on to another illusion: that all civil war is based in ethnic strife. This may seem self-evident if you go by newspaper accounts, but I have come to doubt it. Most societies that are at peace have more than one ethnic group. And one of the few low-income countries that is completely ethnically pure, Somalia, had a bloody civil war followed by complete and persistent governmental meltdown. Statistically, there is not much evidence of a relationship between ethnic diversity and proneness to civil war. We do find some effect: societies that have one group that is large enough to form a majority of the population, but where other groups are still significant—what we call "ethnic dominance"—are indeed more at risk. Examples are Rwanda and Burundi, which endured massively bloody conflict between Hutus and Tutsis, and also Iraq, where the country is divided among Sunnis, Shiites, and Kurds. Perhaps the majority group in such places throws its weight around, or perhaps the minority groups know that they cannot trust majority rule to protect them and so try to preempt domination by the majority with their own domination. But this effect is not huge, and most of the societies that make up the bottom billion are too diverse for any one group to be this dominant. People from different ethnic groups may not like each other, and there may be a noisy discourse of mutual accusation. But there is a big gap between interethnic dislike and civil war.

What else makes a country prone to civil war? Geography matters a bit. A huge country with the population dispersed around the edges, such as the Democratic Republic of Congo (formerly Zaire), or one with a lot of mountainous terrain, such as Nepal, is more at risk than flat, densely populated little places, probably because rebel armies find more places to form and to hide.

Why Do Civil Wars Last So Long?

So much for the causes of civil war. What happens once a civil war has started? The most important question seems to be what determines when the conflict stops, yet it is not always easy to figure this out; often such conflicts stop temporarily and then start up again later. Is such a case to be treated as if there was one continuous civil war or two wars with an aborted peace in between? There is no right answer; it is a matter of judgment, and these judgments will affect the results. Again, we used others' criteria, to avoid having our own biases influence the data.

Once more, low income featured. The lower a country's income at the onset of a conflict, the longer the conflict lasts. There was also some tendency for wars to last longer if important export products of the society became more valuable; perhaps in such cases war becomes easier to finance. The ultimate natural resource war was in Angola, with the rebel group, the National Union for the Total Independence of Angola (UNITA), financed by diamonds, and the government side, the Popular Movement for the Liberation of Angola (MPLA), financed by oil. The course of the war broadly followed the price of oil relative to diamonds. The UNITA leader, Jonas Savimbi, intensified the pressure when he had a high income from diamonds and oil prices were at record lows. His undoing began when the price of oil rocketed and when international action started to close off his access to the world diamond market. But that story of international action must wait for Part 4.

Civil wars are highly persistent. The average international war, which is nasty enough, lasts about six months. You can do a lot of damage in six months. But the average civil war lasts more than ten times as long, even longer if you start off poor. In part, such conflicts continue because they become normal. On both sides interests develop that only know how to do well during war. Given the massive costs of war, it should be possible to find a deal that benefits everyone, but often the rebels decide to continue the struggle rather than take the risk of being lured into a peace deal on which the government subsequently reneges.

Having looked at why civil wars started and how long they lasted, we then looked at what happened when they were over. As previously noted, the end of a war often is not the end of the conflict; once over, a conflict is alarmingly likely to restart. Furthermore, the experience of having been through a civil war roughly doubles the risk of another conflict. Only around half of the countries in which a conflict has ended manage to make it through a decade without relapsing into war. Low-income countries face disproportionately high risks of relapse.

Governments in postconflict societies are well aware that they are living dangerously. Typically, they react to this risk by maintaining their military spending at an abnormally high level. The military during the postconflict decade looks much more like a military at war than one at peace. To give you the orders of magnitude, a civil war typically comes close to doubling the military budget. Military spending during the postconflict decade is only around a tenth lower than during the war. You can hardly blame governments that face such a high risk of further conflict for setting spending at such a high level, but does it work? I will come back to that in Part 4, which addresses possible solutions, and in particular Chapter 9, which discusses military strategies for keeping the peace.

The Costs of War

Finally, we looked at what you might think of as the balance sheet of a civil war: the costs and the legacy. Civil war is development in reverse. It damages both the country itself and its neighbors. Let's start with the country itself. Civil war tends to reduce growth by around 2.3 percent per year, so the typical seven-year war leaves a country around 15 percent poorer than it would have been. Of course, war is much worse than just a prolonged economic depression: it kills people. Overwhelmingly, the people who die are not killed in active combat but succumb to disease. Wars create refugees, and mass movements of the population in the context of collapsing public health systems create epidemics. A young Spanish researcher, Marta Reynol-Querol, analyzed civil war, migration movements, and the incidence of malaria and came up with a startling result: the migration triggered by civil war sharply increases the incidence of disease among the population in the havens to which refugees run. The increase is too large simply to be accounted for by the refugees themselves; what seems to happen is that in their trek across country, refugees are exposed to disease vectors to which they have little resistance, and the diseases they pick up then move with them to their place of refuge, also infecting the people already living in that area.

Both economic losses and disease are highly persistent: they do not stop once the fighting stops. Most of the costs of civil war, perhaps as much as half, accrue after the war is over. Of course, sometimes the rebellion is worth it, with rebel victory ushering in an age of social justice, but this does not happen often. Usually the political legacy is about as bad as the economic legacy—a deterioration in political rights. A rebellion is an extremely unreliable way of bringing about positive change. Rebel leaders who claim to have launched a civil war for the good of their country are usually deceiving themselves, others, or both. By the early 1990s, for example, Jonas Savimbi had amassed a fortune estimated at around \$4 billion from UNITA's control of Angolan diamonds. After losing the presidential election he spent it selflessly on relaunching the civil war rather than on a billionaire lifestyle.

Their followers, the foot soldiers of rebellion, often do not have much choice about joining the rebel movement. I have previously noted Foday Sankoh's preference for recruiting teenage drug addicts. In Uganda the Lord's Resistance Army, whose stated goal is to establish government according to the Ten Commandments, recruits members by surrounding a remote school with troops and setting fire to the school. The boys who manage to run out are given the choice of being shot or joining up. Those who join are then required to commit an atrocity in their home district, such as raping an old woman, which makes it harder for the boys to go back home. This style of recruitment is less exceptional than you might think. When the Maoist rebel group in Nepal moves into a district the young men run away rather than join up: apparently, they fear the same sort of forced recruitment. And, looking back, it now turns out that recruitment for the Long March of the Chinese revolution, the stuff of revolutionary legend for two generations of Western romantics, was at the point of a gun. The soldiers were not ideologically committed revolutionaries but scared farmers. And during the Russian Revolution the government rapidly collapsed, effectively leaving both the Red Army and the White Army as rebels living off the land; four million men deserted, despite harsh treatment of any who were caught in the attempt. Interestingly, the desertion rate varied: it was much higher in summer, despite the harsh Russian winter. Why? The recruits were peasant farmers, and in the summer, when they had crops to attend to, fighting was just too costly for them, whereas in the winter it didn't matter so much. Economic opportunities really do shape the ease with which a rebel army can maintain its forces.

Scholars are now starting to study the rebel recruitment process more rigorously, through fieldwork among rebels. Jeremy Weinstein, a young professor at Stanford, has been working on a former rebel group, the Mozambican National Resistance (RENAMO), and the Revolutionary United Front (RUF), a particularly violent group in Sierra Leone. One of Jeremy's results is both important and depressing: it concerns the gradual erosion of initial motivations among a rebel group. Imagine that you are a rebel leader who has decided to build a movement to fight for social justice. You have bought some guns, or been given them by a friendly foreign government that wants to cause trouble, and now you need recruits. Young men turn up at your bush headquarters and volunteer. Should you accept them? Some of these volunteers are like you, potential warriors for social justice, but others are, unfortunately, just attracted by the opportunity to strut around with a gun. Too, according to psychologists, on average about 3 percent of any population have psychopathic tendencies, so you can be sure that some of those in the recruitment line will be psychopaths. Others will be attracted by the prospect of power and riches, however unlikely; if the reality of daily existence is otherwise awful, the chances of success do not have to be very high to be alluring. Even a small chance of the good life as a successful rebel becomes worth taking, despite the high risk of death, because the prospect of death is not so much worse than the prospect of life in poverty. The key point of Weinstein's research is that in the presence of natural resource wealth—oil, diamonds, or perhaps drugs—there are credible prospects of riches, so that some of the young men in the queue to join will be motivated by these prospects rather than by the mission to deliver social justice. The idealistic rebel leader will find it very difficult to screen these people out. He can try rejecting those who fail to come up with the right slogans. But soon everyone will learn to parrot them. Gradually, the composition of the rebel group will shift from idealists to opportunists and sadists.

One important incipient rebellion is taking place in the delta region of Nigeria, where the country's oil comes from. Aderoju Oyefusi, a Nigerian doctoral student, has recently done a survey of 1,500 people from the region to find out who is taking part. The delta region is the stuff of rebel legend because it combines four toxic ingredients: oil companies (greed), degradation of the environment (sacrilege), government military intervention (oppression), and a dead hero, the activist Ken Saro-Wiwa, who was hanged by the Nigerian government in 1995 (sanctity). Aderoju wanted to determine whether local people who joined the violent groups were those who were most aware of grievances. He measured this by asking people whether they felt a sense of grievance and classifying them accordingly. Astonishingly, he found that people with a sense of grievance were no more likely to take part in violent protest than those who were not aggrieved. So what characteristics did make people more likely to engage in political violence? Well, the three big ones were being young, being uneducated, and being without dependents. Try as one might, it is difficult to reconcile these characteristics of recruitment with an image of a vanguard of fighters for social justice.

And where are the violent groups most likely to form? One might think it would be in the districts that are most deprived of social amenities, for that is supposedly what it is all about—oil wealth being stolen by the oil companies and the federal government instead of being used for the benefit of local communities. But Aderoju found that among these 1,500 people there was no relationship between the social amenities that a district possessed and its propensity to political violence. Instead, the violence occurred in the districts with oil wells. The natural inference from this, given the prevailing discourse, is that this demonstrates that the oil companies are to blame because of all that environmental damage. But if this is indeed

the explanation, we hit a further puzzle, because although the risk of violence jumps sharply if there is at least one oil well, if there are two oil wells in the district it starts to go down again. And with twenty oil wells it is lower still. That is odd because the environmental damage is presumably roughly proportional to the number of oil wells. To my mind this looks more like a story of a protection racket than outrage provoked by environmental damage. In the absence of an oil well there is no scope for extortion, and so no violent protest. With an oil well, the protection racket is in business. But the more oil wells there are in the district the greater the incentive for the oil company to pay up and buy peace.

I do not want to overstate these results, for the disputes in the delta started out as justified environmental protests by people living in a region that was bearing the brunt of damage without seeing the benefits of oil revenues. But over time the situation has evolved. There is now a huge amount of money being directed by the Nigerian federal government to the delta region, and the oil companies are desperately spreading protection money—paying ransoms to free kidnapped workers is pretty well a daily occurrence. Within the region local politicians are fighting it out for control of all this money, and violent protest has become an orchestrated part of this political rent seeking. Grievance has evolved, over the course of a decade, into greed.

Let us get back to the costs of conflict. Many of the costs are borne by neighboring countries. Diseases don't respect frontiers, and the economic collapse also spreads. Since most countries are bordered by several others, the overall cost to neighbors can easily exceed the cost to the country itself. And the costs are not limited to the immediate geographic region. Ninety-five percent of global production of hard drugs, for example, is from conflict countries. There is a straightforward explanation: conflict generates territory outside the control of a recognized government, and this comes in handy if your activity is illegal. Osama bin Laden chose to locate in Afghanistan for the same reason. So countries in civil war have what might be called a comparative advantage in international crime and terrorism. AIDS probably spread through an African civil war: the combination of mass rape and mass migration produces ideal conditions for spreading sexually transmitted disease. Consequently, wars in the bottom billion are our problem as well.

All in all, the cost of a typical civil war to the country and its neighbors can be put at around \$64 billion. In recent decades about two new civil wars have started each year, so the global cost has been over \$100 billion a year, or around double the global aid budget. This is obviously only a ballpark figure, although in building it we have erred on the side of caution. Nevertheless, this sort of cost estimate can be useful. It is a critical step in valuing the benefits of interventions. As you will see in Part 4, there is a range of interventions that can cut the risk of civil war. In any one instance it is impossible to value the benefits. However, using variants of our model, it is possible to work out how much, on average, a particular type of intervention will reduce the risk, and so reduce the global incidence of civil war. By combining this reduction in the incidence of war with our estimate of the cost of war we deduce a benefit for the intervention. Once this benefit is combined with the cost of the intervention, we have arrived at the cost-benefit analysis.

Cost-benefit analysis is the basis of how governments make decisions on public spending. If we can get interventions to reduce the risk of civil war into this conventional framework of public decision making, we can escape the world of political make-believe-the posturing fantasies to which politicians resort when unrestrained by evidence. That is ultimately the agenda of Part 4.

The Conflict Trap

Now we reach the aspect of civil war that is crucial for the thesis of this book: it is a trap. Suppose a country starts its independence with the three economic characteristics that globally make a country prone to civil war: low income, slow growth, and dependence upon primary commodity exports. It is playing Russian roulette. That is not just an idle metaphor: the risk that a country in the bottom billion falls into civil war in any five-year period is nearly one in six, the same risk facing a player of Russian roulette. The country may be lucky and grow its way out of the danger zone before it gets caught. Growth directly helps to reduce risk; cumulatively it raises the level of income, which also reduces risk, and that in turn helps to diversify the country's exports away from primary com- postconflict societies. Crime is one of the phenomena that are very badly modities, which further reduces risk. But it may not be so lucky. Suppose measured: countries differ massively in their definitions and in the degree

that for one reason or another growth stays slow. (I will be looking at why the countries of the bottom billion have failed to grow in the following chapters.) Then the peace might not last long enough to bring risks down before the chamber with the bullet in it comes around and the country slides into civil war. That is basically what has happened: the unlucky countries got war shortly after independence, as in the case of Nigeria, while others maintained peace for many years and then succumbed, as did Côte d'Ivoire, which was destabilized by a coup d'état, and Nepal, where Maoists were confronted by a fratricidal monarchy. All have been living dangerously. Sooner or later some combination of personalities and mistakes that in a more economically successful country would be brushed aside escalates into rebellion. Call the personalities and mistakes the "causes" if you must. I think that in such fragile societies it is generally even harder to avoid these triggers than it is to develop the economy. Persuading everyone to behave decently to each other because the society is so fragile is a worthy goal, but it may be more straightforward just to make the societies less fragile, which means developing their economies. How we can help these countries to do that is the agenda for Part 4.

Once a war has begun, the economic damage undoes the growth achieved during peace. Worse, even aside from this economic damage the risk of further war explodes upward. Civil war leaves a legacy of organized killing that is hard to live down. Violence and extortion have proved profitable for the perpetrators. Killing is the only way they know to earn a living. And what else to do with all those guns? Currently one of my graduate students, Phil Killicoat, is trying to collect data on the price of a Kalashnikov around the world year by year, the Kalashnikov being the weapon of choice for any self-respecting rebel. That is the sort of innovation in data that would make a real contribution to work on conflict. It is not an easy task, which is why until now nobody has done it, but he is resourceful. The emerging pattern seems to be that guns become cheap during conflict because so many get imported through official and semiofficial channels that a proportion of them leak onto the informal market. The legacy of conflict is cheap Kalashnikovs.

Anke Hoeffler and I looked to see what happens to the crime rate in

of underreporting. For that reason we settled on the homicide rate as the proxy for violent crime in general. Homicide is the best-defined violent crime and it is also likely to be the best-reported. We found that political peace does not usher in social peace. The end of the political fighting ushers in a boom in homicides. Presumably, this is part of a wider surge in violent crime. Add in mutual distrust and recriminations over atrocities, and it is not surprising that the typical postconflict country has little better than a fifty-fifty chance of making it through the first decade in peace. Indeed, about half of all civil wars are postconflict relapses.

A country such as the Democratic Republic of the Congo (formerly Zaire) will need around half a century of peace at its present rate of growth simply to get back to the income level it had in 1960. Its chances of getting fifty continuous years of peace with its low income, slow growth, dependence upon primary commodities, and history of conflict are, unfortunately, not high. This country is likely to be stuck in a conflict trap no matter how many times it rebrands itself unless we do something about it.

Poverty, economic stagnation, dependence on primary commoditiesdo these characteristics sound familiar? Yes, they are endemic to the bottom billion. This does not mean that all such countries are in the conflict trap, but they are all prone to it. We have, in fact, the building blocks for a system. The risk of conflict differs according to economic characteristics, and the economic characteristics are affected by conflict. It is possible to set up this interaction as a model that predicts in a stylized fashion how the incidence of conflict is likely to evolve. I joined forces with Harvard Hegre, a young Norwegian political scientist, and we built one. The world, as modeled, starts in 1960 with three different groups of countries: rich, bottom billion, and developing. We then see how many countries fall into conflict. The predictions rest upon the risks generated by the analysis I had already done with Anke, as well as assumptions about growth performance that extrapolate from the past forty years of experience. We project the incidence of conflict through until 2020 and even, somewhat fancifully, to 2050. Rich countries have such a low risk of civil war that even over such a long period none gets into trouble. A few of the developing countries stumble into civil war, and those that do get derailed for a while—examples of these are countries such as Colombia and Lebanon,

which are not part of the bottom billion but for one reason or another have been unlucky. The bulk of the countries that fall into civil war are from the bottom billion. Periodically they get back to peace, but often they fall back into conflict. The model is useless for telling us which countries will be in conflict, but its prediction as to how the global incidence of conflict evolves is depressing. By 2020 the world is much richer than today, and by 2050 it is fabulously richer: most countries are developed. But the incidence of civil war declines only modestly because most civil war is generated by the minority of countries in the bottom billion, and their growth is slow. Our model quantifies the grim implications of the failure of the growth process in the bottom billion, given the link between poverty, stagnation, and conflict.

Coups

Rebellion is not the only form of violent, illegitimate challenge to governments in the countries of the bottom billion. Many governments are more at threat from coups than from rebellions. You might have thought that coups had died out; your image of a coup is likely to involve a Latin American general from the 1960s. There is some justice to that image, as coups have largely gone out of fashion and outside the bottom billion they are now very rare. But among the bottom billion they are still depressingly common. As of December 2006 the latest successful one had occurred just two weeks earlier, in Fiji. Coups are not as disastrous as civil wars; to adapt the famous newspaper headline about an earthquake, this event might have been reported as "small coup in Fiji, not many dead." But they are not a very good way of changing a government. The political instability that they manifest is known to be detrimental to economic development. So what causes coups?

We drew upon the data of an American political scientist who had assiduously trawled through thousands of pages of newspaper reports to produce a comprehensive list of all the reported coup plots, failed coup attempts, and successful coups in Africa, and we also found data on all the successful coups in other parts of the world. We followed broadly the same approach that we had taken in understanding civil wars. I should add a caveat: whereas our civil war work is published and so has been subject to academic scrutiny, our work on coups is new and so far has been presented only at a few conferences. However, I am sufficiently confident in these results to describe them, and what we found certainly surprised us.

It turns out that countries are prone to coups for reasons pretty similar to those that make them prone to civil war. The two big risk factors are low income and low growth—exactly the same as civil war. In Africa, societies with one big ethnic group—what we have called "ethnic dominance"—are also more at risk, just as with civil war. And, again crucially for the thesis of this book, there is a coup trap, just as there is a civil war trap. Once a country has had a coup it is much more likely to have further coups. The big difference between coups and rebellions is that natural resources do not seem to matter. This may be because to mount a rebellion you need to find a sustainable source of funds for guns and troops, so profiting from natural resources helps to make rebellion financially feasible, whereas to mount a coup you don't need any financing whatsoever—the government has already paid for the army that you are going to use against it.

Because Africa is the epicenter of low income and slow growth, it has become the epicenter of coups. But, controlling for these risk factors, there is no "Africa effect." Africa does not have more coups because it is Africa; it has more coups because it is poor. That's also true of civil war: Africa became increasingly prone to civil war as its economic performance deteriorated, not because it was Africa. Some years ago I found that my neighbor at a conference was a former vice president of Ghana. He explained that he was delighted to have been invited to the conference: the invitation had actually prompted his release from prison. He had been imprisoned following a coup d'état, and so we talked about that. He told me how unprepared the government had been for the coup; it was totally unexpected. Surely not, I said; coups are pretty common. He explained why the government considered itself safe: "By the time we came to power there was nothing left to steal."

At the high levels of coup risk prevalent in Africa, governments are, unsurprisingly, scared of their own armies. In principle the army is there to defend the government. In practice it is often the biggest threat to the government. I will return to this in Chapter 9, on the military.

Why It Matters for G8 Policy

Wars and coups keep low-income countries from growing and hence keep them dependent upon exports of primary commodities. Because they stay poor, stagnant, and dependent upon primary commodities they are prone to wars and coups. Wars and coups feed on themselves in other ways that make history repeat itself.

The costs that these conditions generate are predominantly borne not by those who perpetrate them. The costs of war even spread beyond the war's temporal and geographic boundaries. As a result, they not only trap the countries that experience them, but make development more difficult in entire regions.

If wars and coups could readily be avoided by good domestic political design—democratic rights—then the responsibility for peace would be predominantly internal. That is, we might reasonably think that peace should be a struggle waged by citizens of the country itself, rather than something for us to become actively concerned about. But the evidence is against such internal solutions. Democratic rights, hard as they are for a people to establish, do not reduce the risk of civil war, and they do not reduce the risk of coups. When the growth process fails in a low-income society, it is exposed to risks that are hard to contain. I do not want to claim that only the economy matters, but without growth peace is considerably more difficult. And in the societies of the bottom billion the economy is stuck. So breaking the conflict trap and the coup trap are not tasks that these societies can readily accomplish by themselves.