



ECONOMIC CAUSES OF CIVIL CONFLICT AND THEIR IMPLICATIONS FOR POLICY

Paul Collier, Director, Development Research Group
World Bank

June 15, 2000

Of the 27 major armed conflicts that occurred in 1999, all but two took place within national boundaries. As an impediment to development, internal rebellion especially hurts the world's poorest countries. What motivates civil wars? Greed or grievance?

EMBARGOED: This item is not for news wire transmission, posting on websites, or any other media use until June 15, 2000 at 3 pm EDT (Washington time or 18:00 GMT).

Introduction

This paper presents an economic perspective on the causes of civil war, based on empirical patterns globally over the period 1965-99. During this period, the risk of civil war has been systematically related to a few economic conditions, such as dependence upon primary commodity exports and low national income. Conversely, and astonishingly, objective measures of social grievance, such as inequality, a lack of democracy, and ethnic and religious divisions, have had no systematic effect on risk. I argue that this is because civil wars occur where rebel organizations are financially viable. The Michigan Militia was unable to grow beyond a handful of part-time volunteers, whereas the FARC in Colombia has grown to employ around 12,000 people. The factors which account for this difference between failure and success are to be found not in the 'causes' which these two rebel organizations claim to espouse, but in their radically different opportunities to raise revenue. The FARC earns around \$700m per year from drugs and kidnapping, whereas the Michigan Militia is probably broke. The central importance of the financial viability of the rebel organization as the cause of civil war, is why civil wars are so unlike international wars. Governments can always finance an army out of taxation and so governments can always fight each other. The circumstances in which a rebel organization can finance an army are quite unusual. This is why my analysis is entirely confined to civil war: what I have to say has little or no bearing on inter-government war. Because the results are so counter-intuitive, I start by arguing why social scientists should be distrustful of the loud public discourse on conflict. I then turn to the evidence, describing each of the risk factors in civil war. I then try to explain the observed pattern, focusing on the circumstances in which rebel organizations are viable. Finally, I turn to the policy implications. I argue that because the economic dimensions of civil war have been largely neglected, both governments and the international community have missed substantial opportunities for promoting peace.

Greed or grievance? Why we can't trust the discourse.

There is a profound gap between popular perceptions of the causes of conflict and the results from recent economic analysis. Popular perceptions see rebellion as a protest motivated by genuine and extreme grievance. Rebels are public-spirited heroes fighting against injustice. Economic analysis sees rebellion as more like a form of organized crime. Either economists are being excessively cynical, or popular perceptions are badly misled. I first want to suggest why perceptions might indeed be wrong.

Popular perceptions are shaped by the discourse which conflicts themselves generate. The parties to a civil war do not stay silent: they are not white mice observed by scientists. They offer explanations for their actions. Indeed, both parties to a conflict will make a major effort to have good public relations. The larger rebel organizations will hire professional public relations firms to promote their explanation, and the governments which they are opposing will routinely hire rival public relations firms. Imagine, for a moment, that you are the leader of a rebel organization, needing to offer an explanation

of your goals. What are the likely elements? Most surely, they will be a litany of grievances against the government, for its oppression, unfairness, and perhaps victimization of some part of the population which your organization claims to represent. That is, your language will be the language of protest. You will style your rebellion as a protest movement, driven to the extremity of violence by the extremity of the conditions which 'your' people face. Almost certainly, the government will have responded to your insurgency with an incompetent counter-insurgency campaign. 'Almost certainly' because counter-insurgency is extremely difficult. The most obvious difficulty which a government faces in counter-insurgency is getting its army to fight. People prefer not to risk getting killed. Governments try various economic incentives to overcome this problem. For example, in one recent African conflict the government decided to pay its soldiers a premium if they were in a combat zone. Shortly after this incentive was introduced, the war appeared to spread alarmingly. In previously safe areas rebel groups set off explosions near barracks. It transpired that government soldiers were probably planting these explosions themselves. However, the more serious problems occur where the government succeeds in persuading its army to fight, but then lacks the means to control the behavior of soldiers on the ground. From Vietnam onwards, the result is atrocities. Rebel groups may even hope for government atrocities because the atrocities then fuel the grievances. This discourse of grievance is how most people understand the causes of conflict. A thorough analysis of the causes of a conflict then becomes a matter of tracing back the grievances and counter-grievances in the history of protest.

An economist views conflict rather differently. Economists who have studied rebellions tend to think of them not as the ultimate protest movements, but as the ultimate manifestation of organized crime. As Grossman (1999) states, 'in such insurrections the insurgents are indistinguishable from bandits or pirates' (p.269). Rebellion is large-scale predation of productive economic activities. I will shortly set out why economists see rebellion in this way, and the rather powerful evidence for it. However, the view is so at odds with the popular discourse on conflict that there is a temptation to dismiss it as fanciful. The techniques of economics don't help its arguments: compared with the compelling historical detail produced by histories of protest, the economist's approach seems arcane and technocratic. So, before I explain why economists see rebellion as they do, I want to show why the discourse on conflict cannot be taken at face value.

For a few moments suspend disbelief, and suppose that most rebel movements are pretty close to being large-scale variants of organized crime. *The discourse would be exactly the same as if they were protest movements.* Unlike organized crime, rebel movements need good international public relations and they need to motivate their recruits to kill. They need good international public relations because most of them are partially dependent upon international financial support. They need to motivate their recruits to kill, because, unlike a mafia, a predatory rebel organization is periodically going to have to fight for its survival against government forces. A rebel organization simply cannot afford to be regarded as criminal: it is not good publicity and it is not sufficiently motivating. Rebel organizations have to develop a discourse of grievance in order to function. Grievance is to a rebel organization what image is to a business. In each case the organization will devote advertising resources to promote it. In the economist's view of conflict, grievance

will turn out to be neither a cause of conflict, nor an accidental by-product of it. Rather, a sense grievance is deliberately generated by rebel organizations. The sense of grievance may be based upon some objective grounds for complaint, or it may be conjured up by massaging prejudices. However, while this distinction is morally interesting to observers – is the cause just? – it is of no practical importance. The organization simply

~~will see it as a cause of conflict, not as a by-product of it. Rather, a sense grievance is deliberately generated by rebel organizations. The sense of grievance may be based upon some objective grounds for complaint, or it may be conjured up by massaging prejudices. However, while this distinction is morally interesting to observers – is the cause just? – it is of no practical importance. The organization simply~~

will see it as a cause of conflict, not as a by-product of it.

which people give for their behavior, preferring to work by ‘revealed preference’: people gradually reveal their true motivation by the pattern of their behavior, even if they choose to disguise the painful truth from themselves. Rebel leaders may much of the time come to believe their own propaganda, but if their words are decried by their behavior, then their words have little explanatory power. There is less reason to doubt that those who support rebellion from afar are genuinely committed to the cause of grievance-redressal. However, such supporters may simply have been duped. Rebel leaders have always sought outside supporters - ‘useful idiots’ in Lenin’s telling phrase. Among the people who are most susceptible to the discourse of grievance are those who care most passionately about oppression, inequality, and injustice. In short, if rebellion presents itself as the ultimate protest movement, it will attract as non-combatant supporters, those who normally support protest movements. The economic theory of conflict argues that these people have been taken in by accepting the discourse at face-value. As a proposition in social science this theory of conflict is a case of modern economics meeting old Marxism. As in Marx, the underlying cause of conflict is economic: in this case, the rebel organization is predatory upon certain parts of the economy. As in Marx, the ‘superstructure’ is a set of beliefs which are false. The difference is simply that it is the *rebel* supporters who have the ‘false consciousness’: they are gulled into believing the discourse which self-interested rebel leaders promote.

So: ‘greed or grievance?’ – we can’t tell from the discourse. Occasionally the discourse is rather blatantly at variance with the behavior. Take the recently settled conflict in Sierra Leone. A rebel organization built itself into around 20,000 recruits and opposed the government. The rebel organization produced the usual litany of grievances, and its very scale suggested that it had widespread support. Sierra Leone is, however, a major exporter of diamonds and there was considerable evidence that the rebel organization was involved in this business on a large scale. During peace negotiations the rebel leader was offered and accepted the vice-presidency of the country. This, we might imagine, would be a good basis for rebel grievances to be addressed. However, this was not sufficient to persuade the rebel leader to accept the peace settlement. He had one further demand, which once conceded, produced (temporary) settlement. His demand was to be the Minister of Mining. Cases such as this are at least suggestive that something other than grievance may be going on beneath the surface of the discourse. It is to this hidden structure of rebellion that I now turn.

The Evidence

Modern economics has two powerful tools: statistics and theory. People who are not economists are seldom convinced simply by economic theory so I will begin with the statistical evidence. Together with Anke Hoeffler, I have analyzed the pattern of conflict using a large new data base on civil wars during the period 1965-99 (Collier and Hoeffler, 2000). A civil war is classified as an internal conflict with at least one thousand battle-related deaths. During this period globally there were 73 civil wars, and in principle we analyze the pattern as to why these wars occurred among the 161 countries in our sample. We divide the period up into eight five-year sub-periods, and attempt to predict the occurrence of war during a sub-period by the characteristics at its start. The

statistical techniques we use are logit and probit regressions. In practice, some civil wars occur in situations where there is virtually no other data about the country. We know that it had a war, but we do not know enough of its other characteristics to include it in our analysis. This reduces our sample to 47 civil wars. However, this is still sufficient to find some strong patterns. The 47 wars are listed in the Appendix.

In order to get some feel for how important different risk factors are, it is useful to think of a baseline country. I will take as a baseline, a country all of whose characteristics were at the mean of our sample. By construction then, this is an extraordinarily ordinary country. These characteristics give it a risk of civil conflict of around 14% in any particular five year period. Now, one-by-one, I will vary some of the more important risk factors.

The most powerful risk factor is that countries which have a substantial share of their income (GDP) coming from the export of primary commodities are radically more at risk of conflict. The most dangerous level of primary commodity dependence is 26% of GDP. At this level the otherwise ordinary country has a risk of conflict of 23%. By contrast, if it had no primary commodity exports (but was otherwise the same) its risk would fall to only one half of one percent. Thus, without primary commodity exports, ordinary countries are pretty safe from internal conflict, while when such exports are substantial the society is highly dangerous. Primary commodities are thus a major part of the conflict story. What else matters?

Both geography and history matter. Geography matters because if the population is highly geographically dispersed, then the country is harder for the government to control than if everyone lives in the same small area. The geography of the Democratic Republic of the Congo, (the former Zaire), makes it unusually hard for government forces to control because the population lives around the fringes of a huge area, with the three main cities in the extreme west, extreme south-east and extreme north. By comparison, Singapore would be a nightmare for a rebellion. In this city state there is nowhere to hide and government forces could be anywhere in the country within an hour. With Congo-like geographic dispersion our otherwise ordinary country has a risk of conflict of around 50% whereas with Singapore-like concentration its risk falls to around 3%.

History matters because if a country has recently had a civil war its risk of further war is much higher. Immediately after the end of hostilities there is a 40% chance of further conflict. This risk then falls at around one percentage point for each year of peace. However, how much history matters depends upon the size of the diaspora. For example, some countries have very large diasporas in the USA relative to their remaining resident population, whereas others do not. Suppose that our otherwise ordinary country has ended a civil war five years ago and now wants to know what are its chances of peace during the next five years. If the country has an unusually large American diaspora its chances of conflict are 36%. If it has an unusually small diaspora its chances of conflict are only 6%. So, diasporas appear to make life for those left behind much more dangerous in post-conflict situations.

Economic opportunities also matter. Conflict is concentrated in countries with little education. The average country in our sample had only 45% of its young males in secondary education. A country which has ten percentage points more of its youths in schools- say 55% instead of 45% - cuts its risk of conflict from 14% to around 10%. Conflict is more likely in countries with fast population growth: each percentage point on the rate of population growth raises the risk of conflict by around 2.5 percentage points. Conflict is also more likely in countries in economic decline. Each percentage point off the growth rate of per capita income raises the risk of conflict by around one percentage point.

The ethnic and religious composition of the country matters. If there is one dominant ethnic group which constitutes between 45% and 90% of the population, - enough to give it control, but not enough to make discrimination against a minority pointless – the risk of conflict doubles. For example, in Sri Lanka the Tamils are a minority of around 12% of the population, and in Rwanda the Tutsi are around 10-15% of the population. Of course, in Sri Lanka the Tamils are a weak minority whereas in Rwanda the Tutsis are a strong minority, controlling the government. However, clearly, in Rwanda, the Tutsi minority is too scared of being subject to ethnic dominance to hand over power. While ethnic dominance is a problem, ethnic and religious diversity does not make a society more dangerous – in fact, it makes it safer. A country which is ethnically and religiously homogenous is surprisingly dangerous – the risk is 23%. By comparison, a country with ethnic and religious diversity equal to the maximum we find in our sample has a risk of only around 3%. Other than in the fairly unusual case of dominance, diversity makes a society much safer.

Finally, some good news. Since 1990 the world has been significantly safer from civil conflict. If we add a dummy variable for the period since the end of the Cold War it is statistically significant with quite a large effect. Holding the above causes of conflict constant at the average, the risk of conflict was only half as great during the 1990s as during the Cold War. Of course, some of the other causes of conflict also changed during the 1990s – on average per capita incomes rose faster than during the 1980s, so that this also reduced the risk of conflict. However, some countries became more dependent upon primary commodity exports, or their economies collapsed, and these countries became more prone to conflict. As of 1995, the country with the highest risk of civil conflict according to our analysis was Zaire, with a three-in-four chance of conflict within the ensuing five years. Sadly, our model predicted this all too accurately.

This is the statistical pattern of civil conflict since 1960. It is interesting both for what is important and for what is not. Clearly, there are some powerful dangers coming from primary commodities and diasporas, and there used to be risks from the Cold War. However, equally striking is what does *not* appear to affect conflict risk. Inequality, whether of incomes or of assets, has no discernible effect. Unequal societies are not more prone to conflict. A lack of democratic rights appears to have no significant effect. Ethnic and religious diversity, as noted, far from increasing the risk of conflict, actually reduces it. These are all obvious proxies for objective grievances. Unequal, ethnically divided societies, with few political rights might sound exactly the sort of places which would be

most prone to rebellion. They are surely the sort of places most in need of protest. And yet, such places, as far as we can tell, have no higher risk of violent conflict than anywhere else – indeed, thanks to their ethnic diversity, they are somewhat safer. The only protest-type variable which matters is if the society is characterized by ethnic dominance. This may be because we are not measuring objective grievances well enough. However, we have made an honest effort to utilize all the available comparable indices of objective grievance, of which there are now a number. At least as a working hypothesis, civil war is much more strongly related to the above economic and geographic variables than it is to objective grievances.

There are thus two surprises to be explained: why is rebellion so unrelated to the objective need for protest, and why is it so strongly related to primary commodities and diasporas?

Why is rebellion not like protest?

Economists have studied the dynamics of protest (Kuran, 1989). The first problem with getting a protest going is that it is a ‘public good’. That is, even if the protest succeeds in securing justice, everyone will benefit whether or not they bother to take part in the protest. Always, public goods face collective action problems: it makes more individual sense to free-ride on the efforts of others, and if everyone free-rides, nothing happens. This is a problem in a protest because the government might punish people who take part, unless there are so many people that there is safety in numbers. Further, in order to protest, most people will lose a day of income. This is one reason why such a high proportion of protesters are often students. The temptation to free-ride on a justice-seeking *rebellion* is very much stronger than the temptation to free-ride on a justice-seeking *protest*. A protest costs little, risks little, and offers a sense of citizenship. In effect, protestors are forcing an open election on an issue. Rebellion is a full-time commitment, and it is dangerous. Economists would predict that the collective action problem for a justice-seeking rebellion would usually be insuperable.

Kuran’s insight in analyzing the dynamics of protest was to see that a successful protest would be one which escalated, and that this depended upon a cascade of participation, drawing in increasingly luke-warm supporters. Suppose the potential supporters of a protest are ranked in order of their willingness to take personal risk. The most ardent supporters join the protest first, at the stage when because it is small, it is easy for the government to victimize participants. Each time an additional supporter joins the protest the risks of punishment for participation go down. The cascade depends upon the reduction in this risk inducing enough people to change their minds and join the protest that the risk falls further, inducing another group of people to change their minds. If the cascade works, then when a few committed people create an initial spark it turns into a prairie fire. Could the rebellions we observe be failed protest movements, cases where brave few hundred created the spark, but the rest of the society failed to ignite, leaving the brave core to turn into guerrilla fighters against the government? Are rebels just heroes who have been let down by the mass of cowards and so driven into more violent

actions to protect themselves? Well if they were, we would observe a clear pattern in rebellion.

Kuran suggests that the cascade is more likely to work in fairly homogenous societies. In such societies there will be a dense continuum of opinion. Many people will be on the margin of changing their minds and so will be swung into action as the risks of government punishment start to fall. By contrast, if the society is split up into many different groups who see the concerns of other groups as irrelevant to their own, instead of a continuum of opinion there are clusters broken by gaps. As soon as the cascade reaches the first gap it stops. One implication of this insight is that the societies in which protest will get stuck are those which are diverse. That is, if rebellions are the stuff of heroes let down by cowards, we should expect to find more of them in diverse societies. Recall that in fact we find precisely the opposite. Diverse societies have a much lower risk of rebellion than homogenous societies. Of course, if we scour history sufficiently thoroughly we will find examples of protest movements which aborted into rebellion. If we scour history we can find anything. However, the image of the rebel band as that part of the population which is the most dedicated and self-sacrificing is difficult to reconcile with the facts. Rebellion is not generally linked to the objective grievances – inequality, political repression, diversity – which is repeatedly used in rebel discourse. Nor is its incidence high in societies where we would expect protest movements to face the most difficulties. The sole exception to this is that in situations of ethnic dominance – with or without democracy – minorities (or majorities) may take to the gun. Other than this, the modern rebel appears truly to have been a ‘rebel without a cause’.

What conditions make predatory rebellions profitable?

Empirically, the risk of rebellion is strongly linked to three economic conditions: dependence upon primary commodity exports, low average income of the country, and slow growth. I now suggest why this is the case.

Primary commodity exports are the most lootable of all economic activities. An economy which is dependent upon them thus offers plenty of opportunities for predatory rebellion.¹ One indication that primary commodity exports are highly lootable is that they are also the most heavily taxed activity – the same characteristics which make it easy for governments to tax them, make it easy for rebels to loot them. Indeed, rebel predation is just illegal taxation. Conversely, in some countries government has been described as legalized predation in which primary commodities are heavily taxed in order to finance the government elite. In the worst cases, those who are the victims of such predation may not discriminate much between the behavior of the rebel organization and that of the government. This does not, however, mean that the rebels are ‘no worse’ than the government. The presence of a rebel organization plunges the society from peace to civil war, and the costs of war are likely to outweigh the costs of government predation.

Primary commodity exports are especially vulnerable to looting and taxation because their production relies heavily on assets which are long-lasting and immobile. Once a

¹ Collier (2000) sets out a formal model of loot-seeking rebellion.

mine shaft has been sunk, it is worth exploiting it even if much of the anticipated profits are lost to rebels. Once coffee trees have been planted, it is worth harvesting them even if much of the coffee has to be surrendered. Thus, rebel predation does not kill the activity off or shift it elsewhere as would happen were manufacturing the target. Further, because the produce is exported, it has to be transported to the port. Along the way there are many geographic 'choke points' which if rebels can control, even if only spasmodically, they can extract a tribute. The government can be presumed to control the best choke point of all – the port itself. This behavior makes a rebel group somewhat like organized crime. However, it is organized crime with a difference. The government will try to defend the choke points from rebel attacks – it is, after all, defending its own revenue. Hence, unlike a mafia, the rebel group must expect sometimes to confront substantial government forces, and so will need to protect itself. Rebel groups therefore need to be much larger than mafias. Typically, rebel organizations have in the range 500-5,000 fighters, whereas mafias are generally in the range 20-500. It is because rebel organizations need to be large and to confront government forces in order to function as predators that conflicts can produce cumulative mortality in excess of 1,000 and so qualify empirically as civil wars.

Why is the risk of conflict much higher in countries where incomes are low? The explanation which jumps to mind is that when people are poor they have little to lose from joining a rebel group, so that rebel organizations find recruitment cheap. There may be something in this, but if young men can be recruited cheaply for the rebel organization, they can also be recruited cheaply by the government. Hence, low income does not automatically give rebellion an advantage. However, indirectly, low income does advantage the rebels. Around the world, the share of income which accrues to the government as tax revenue rises with income. For example, most OECD governments get around 40% of national income as tax revenue. In the really poor economies, like Ghana and Uganda in the early 1980s, the government was only raising around 6% of national income as taxation. This reduces the capacity of the government to spend on defense, and so makes rebel predation easier. Indeed, in low-income economies, governments will typically derive about half of their revenue from taxes on primary commodity exports (directly or indirectly) so that their revenue base is quite similar to that of the rebels. At higher income levels the government supplements these revenues with revenues from taxes on other economic activities. Thus, poor countries have a high incidence of conflict because governments cannot defend. Of course, there might be other reasons why poverty makes it easier for rebels. Poverty might make people desperate or angry. However, if this was an important effect we would expect to find that inequality made conflict more likely: for a given level of average income, the more unequal is income distribution the more severe the poverty of the poorest. In fact, inequality does not seem to effect the risk of conflict. Rebellion seems not to be the rage of the poor.

Indeed, if anything, rebellion seems to be the rage of the rich. One way in which rebel groups can lock in to predation of primary commodity exports is if they can secede with the land on which the primary commodities are produced. Such attempted secessions by rich regions are quite common. The Katangan secession movement in Zaire was the copper mining region; the Biafran secession movement in Nigeria was the oil producing

region; the Aceh secession movement in Indonesia is an oil-producing region with per capita GDP three times the national average; the successful Eritrean secession was a region with double the per capita income of the rest of Ethiopia. To the extent that the rebel group is not just benefiting itself through predation, but is fighting a political cause, that cause is the grievance of a rich minority at paying taxes to the poor majority. Such rebellions may have more in common with the politics of Staten Island than of Robin Hood.

Slow economic growth and rapid population growth both make rebellion more likely. Presumably, both of these assist rebel recruitment. The rebel organization needs to build itself up fairly fast in order to survive against the army. Hence, for a given level of income, if there are few job opportunities, few schooling opportunities, and many young people needing work, the rebel organization has an easier task.

So, the observed pattern of rebellion is quite intelligible. High primary commodity exports, low income and slow growth are a cocktail which makes predatory rebellions more financially viable. In such circumstances rebels can do well out of war.

Why does ethnic diversity make a society safer not more dangerous?

One of the most striking empirical regularities is that societies which are diverse in terms of ethnicity and religion are significantly safer than societies which are homogenous. If ethnic and religious hatreds an important cause of conflict the pattern would be the reverse, since in homogenous societies there would be nobody to hate. Evidently, conflict is not being generated by such hatreds. However, it is less evident why diversity makes a society considerably safer, instead of simply having no effect.

I think that diversity makes a society safer because it makes rebellion more difficult. This is because, first and foremost, a rebel organization is neither a mafia nor a protest movement, but an army. Armies face huge problems of organizational cohesion and motivation. To fight effectively, soldiers must overcome their individual instincts to avoid danger, and must take risks to help other members of their team. Military history abounds in stories of small groups defeating larger groups because they were better fighting units. The government army also faces these problems but it has the advantage of already having had a long time to deal with them. By contrast, the rebel organization cannot usually afford to take years to build up its morale before it starts operations: it must recruit from scratch and rapidly start fighting. One simple principle is to keep the recruits as alike each other as possible. The more social ties there are within the organization, - the same kin group, or at least same ethnic group, language group, and religion, - the easier will it be to build a fighting force. This may be especially true of the officer core. The easiest way for a government to defeat a rebellion may be to buy off some of the officers. The more 'social capital' there is within the group the more cohesive it is likely to be. This principle implies that in ethnically diverse societies rebellions will tend to be ethnically particular. This has two important corollaries. First, the more that the society is divided into a patchwork of different ethnic and religious groups, the more difficult will it be to recruit a force of a sufficient scale to be viable. For

example, in Africa the average ethno-linguistic group has only around 250,000 people, of whom around 25,000 will be young males. Thus, even before we allow for any further divisions of religion, an organization of 5,000 fighters would need to recruit 20% of the age group. Diversity in the society thus makes the rebel task more difficult and so makes rebellion less likely.

The second corollary is that where conflict does take place in ethnically diverse societies it will take the form of some particular ethnic group rebelling against the government. As in any army, recruits will be motivated to kill the enemy by basic indoctrination in why the enemy deserves to be killed. Indeed, the simple Leninist theory of the rebel organization, which many rebel movements adopt even if they do not adopt Marxist ideology, is that people are initially so oppressed that they do not realize they are oppressed. *It is a key task of the rebel organization to make people realize that they are the victims of injustice.* The economic theory of rebellion accepts this proposition and makes one simple but reasonable extension: the rebel organization can inculcate a subjective sense of injustice whether or not this is objectively justified. The rebel organization needs to inculcate a sense of injustice and will work to create it. From this follows a hatred of the enemy and a willingness to fight. The inculcation of grievance is not a frivolous activity, it is vital for an effective fighting force. Take for example, the Eritrean People's Liberation Front, which is probably the most effective rebellion in recent history. Its recruitment base was barely two million people and it had little foreign government support, yet it defeated an Ethiopian army of over 400,000 men which was supported by Russia. Its success obviously depended upon having its much smaller army well-motivated. The EPLF deliberately built this motivation by routinely withdrawing its recruits from the front for six months to send them on indoctrination courses. If the society in which the rebellion occurs is ethnically diverse, the rebel organization will nevertheless be ethnically homogenous to assist cohesion. Since the rebels will therefore be ethnically different from most of the rest of society, the obvious discourse for the rebel leadership to adopt with its recruits is that of ethnic grievance. Hence, ethnic grievance is actively manufactured by the rebel organization as a necessary way of motivating its forces. As a result, where conflicts occur in ethnically diverse societies, they will look and sound as though they were caused by ethnic hatreds.

A more remarkable example is the conflict in Somalia. Somalia is one of the most ethnically homogenous societies in the world although, as in all traditional societies, within the single ethnic group are many lineage or kin-groups. In the initial post-independence period, political power had been shared reasonably comfortably among these clan groups. However, in the instability following a dictatorship, a political opportunist, Ayeed, induced the group living around the national arsenal to seize its considerable contents. The group then proceeded to build an army around these armaments. Building an army fast, Ayeed based recruitment on his clan and its proximate lineage groups – in the absence of ethnic distinctions, clan membership was the only basis for creating cohesion in a fighting force. The excluded clans naturally felt threatened by this bid for power and so armed themselves in response. The resulting violent conflict in effect turned what had been a patchwork of closely related clusters of people, into large rival groupings which hated each other. The conflict created the

equivalent of inter-ethnic hatred in an ethnically unified society. A surprisingly similar example is the recent conflict in the Democratic Republic of the Congo (DRC). The DRC is at the opposite end of the spectrum to Somalia, a society which is highly ethnically diverse. When President Kabila fell out with his Tutsi military support, he needed to build an army to oppose them. Because the DRC was so ethnically divided, this was difficult. Kabila needed to recruit across ethnic boundaries in order to build a sufficient fighting force. He therefore manufactured an encompassing ethnic grouping, of which all groups other than the Tutsis were members, namely the Bantu. Just as in Somalia Ayeed had forged several clans into a common fighting group distinct from the excluded clans, so Kabila hoped to forge several ethnic groups into a common fighting group. In both cases, the conflict created a need to manufacture inter-group hatred, but the basic conditions for it – a society divided into two large groups, did not exist. In both cases military necessity led to the invention not just of the grievances but of the groupings themselves. Conflict is not caused by divisions, rather it actively needs to create them.

When such conflicts are viewed during or after the event, the observer sees ethnic hatred. The parties to the conflict have used the discourse of group hatred in order to build fighting organizations. It is natural for observers to interpret such conflicts as being caused by ethnic hatred. Instead, the conflicts have caused the inter-group hatred and may even, as in Somalia, have created the groups.

If the rebel organization succeeds in generating group grievance, perhaps by manufacturing both the grievance and the group, the resulting civil war becomes defined in terms of political conflict. However, it is the military needs of the rebel organization which have created this political conflict rather than objective grievances. Analysts often reason back from the political discourse during conflict and deduce that the war is the consequence of particularly intense political conflict, based in turn upon particularly strong reasons for grievance. Yet the intensity of objective grievance does not predict civil war. Many societies sustain intense political conflict for many years without this developing into war. Political conflict is universal, whereas civil war is rare. My argument is that where rebellions happen to be financially viable, wars will occur. As part of the process of war, the rebel organization must generate group grievance for military effectiveness. The generation of group grievance politicizes the war. Thus, the war produces the intense political conflict, not the intense political conflict the war.

If diversity increases safety why is ethnic dominance so dangerous?

The one exception to the rule that homogenous societies are more dangerous than societies with more than one ethnic group, is when there is ethnic dominance. By ethnic dominance I mean a society in which the largest single ethnic group has somewhere between 45% and 90% of the population. It is not difficult to see why such societies are dangerous. Having 45% or more of the population is sufficient in a democracy to give the group permanent control: what political scientists call a stable winning coalition. Having less than 90% of the population suggests that it might be worth exploiting this power by transferring resources from the minority. If the minority is much smaller than 10% of the

population, there is normally so little to be gained by exploiting it, that the gain may be more than swallowed up in the costs of the transfer system.

Thus, in societies characterized by ethnic dominance, the majority probably has both the power and the interest to exploit the minority. The minority may become sufficiently fearful of permanent exploitation that it decides to fight. This is the exception to the absence of objective grievance effects, and a reason for it may be that democracy can offer no prospect of redress. In diverse societies not characterized by ethnic dominance, small groups which are excluded from power can hope at some stage to bid themselves in to a winning coalition. Even dictators do not last forever. Thus, for example, in Kenya, where no tribe has close to a majority, the fifteen years of President Kenyatta's rule strongly favored his own large tribe, the Kikuyu. However, Kenyatta had chosen as his Vice-President someone from a very minor tribe. On the death of Kenyatta, the Vice-President, Moi, succeeded to the Presidency and has managed since 1978 to hold together a winning coalition of small tribes, excluding both the Kikuyu and the Luo, the two largest tribal groups. The small tribes in Kenyatta's Kenya were thus right to hope for eventual redressal through the political, rather than the military process. By contrast, in societies characterized by ethnic dominance, the minority has little to hope for through the political process. Thus, it is possible that rebellion in societies with ethnic dominance is the behavior of despair. Note that it makes little difference whether it is the majority of the minority which is in power. Even if the minority is in power, it dare not trust democracy because it does not trust the majority. This is perhaps the case with the Tutsi-dominated governments of Rwanda and Burundi, and perhaps even of the minority Tigrean-dominated government of Ethiopia.

Why are diasporas so dangerous?

Recall that empirically if a country which has recently ended a conflict has a large diaspora living in the USA, its risk that the conflict will resume is sharply increased.

There is little mystery about this effect. Diasporas sometimes harbor rather romanticized attachments to their group of origin and may nurse grievances as a form of asserting continued belonging. They are much richer than the people in their country of origin and so can afford to finance vengeance. Above all, they do not have to suffer any of the awful consequences of renewed conflict because they are not living in the country. Hence, they are a ready market for rebel groups touting vengeance and so are a source of finance for renewed conflict. They are also a source of pressure for secession. For example, the (peaceful) secession of Slovakia from the then Czechoslovakia was initiated not in Czechoslovakia itself, but in the Czechoslovak diaspora organizations in North America. City-by-city, the diaspora organization divorced.² The *reductio ad absurdum* of such a trend would be for immigrant populations of the USA and the European Union to split their countries of origin into tiny 'ethnic theme parks', while themselves enjoying the advantages of living in nations with scale and diversity.

² I would like to thank Professor Frederick Prior of Swarthmore College for this information.

Another source of foreign finance is governments which are enemies of the incumbent government. During the Cold War each of the superpowers offered inducements for third world governments to align with them. Once a government had done this, it became the potential target of destabilization efforts from the other superpower. One means of destabilization was to fund rebel groups. Once the Cold War ended, the need for such destabilization ended, and so the external finance for rebel organizations declined, which perhaps explains why the risk of civil conflict was lower during the 1990s.

So what can be done?

I have spent a long time on the diagnosis of the problem because different diagnoses lead to radically different policy solutions.

If you accept the conventional grievance account of conflict, then the appropriate policy interventions are to address the possible objective causes of grievance. On this account, countries should reduce inequality and increase political rights. These noble objectives are desirable on many grounds, but if the objective is civil peace, then on my analysis they will be ineffective.

A further policy, if you accept the grievance account, might be to re-draw borders, split countries, and even move populations so as to achieve greater ethnic homogeneity. By contrast, if you accept that diversity makes countries safer, then this is the road to increased civil conflict, and presumably also to increased international conflict. Perhaps a recent example of such an eventuality is the break-up of Yugoslavia. In the old Yugoslavia there was a sufficiently high degree of diversity that no one group constituted a majority – the society was not characterized by ethnic dominance. First, Slovenia, the richest region of Yugoslavia, seceded in what could be interpreted as an instance of the ‘rage of the rich’, although there were most surely other motivations. Then Croatia, the next richest region also seceded. Due to these two secessions, the residual Yugoslavia *was* characterized by ethnic dominance. Civil and international war followed.

Hence, the policies that follow from the grievance diagnosis are variously ineffective and counter-productive if you accept the predation diagnosis. What policies would work if this alternative interpretation of conflict is in fact correct? First, we need to distinguish between conflict prevention and post-conflict situations. Prior to conflict, the approach implied by the predation analysis is to work through the major risk factors, identifying how to reduce them. Note that this approach is radically different from the more traditional approach which attempts to identify grievances and redress them. The new approach is basically one of making it harder for rebel organizations to get established, and addressing objective grievances is not usually an effective way of achieving this objective. Post-conflict, the problem is rather different. Rebel organizations have forced themselves onto the political landscape and have generated group grievance. Although both the grievances and the groups may be manufactured, they now exist and post-conflict policy must address them. Hence, whereas conflict prevention should not be built around the reduction of objective grievances, the construction of sustainable peace in post-conflict societies will have to address the subjective grievances of the parties to the

conflict. I therefore consider the problems of conflict prevention and post-conflict peace-building separately.

Policies for Conflict Prevention

Each society is different. The overall risk of conflict in a society is built up from a series of risk factors, and the balance of risk factors will differ from one country to another. Hence, the first step in conflict prevention is to decompose the overall risk into its constituent components and then put most effort into reducing those risks which are the most important and the most amenable to policy. I take the potential risk factors in turn.

Economies with around a quarter of GDP coming from natural resource exports are acutely at risk of civil conflict. There are four strategies that might reduce this risk. First, the government can facilitate diversification of the economy away from dependence upon primary commodities. Better economic policy promotes diversification. In a really poor policy environment, the only export activities which survive are those with high location-specific rents. The World Bank's annual measure of policy (the 'Country Policy and Institutional Assessment') is significant in explaining the extent of primary commodity dependence. Policy improvement, sustained over a five year period, reduces dependence in the next five year period. Secondly, a government can try to make loot-seeking rebels unpopular by transparently using the revenue from primary commodity exports to fund effective basic service delivery. If the money is seen to be funding primary education and rural health centers then the population is going to be more hostile to rebels than if they believe that the money is sent off to Swiss banks. There are, however, limits to the effectiveness of this policy. For example, many of the youths who fought for the rebel movement in Sierra Leone are so unpopular that they dare not return to their communities, but this unpopularity did not stop them joining a rebellion. The rebels deliberately targeted drug addicts and children for recruitment and so had an unusually dependent laborforce. Third, the international community can make it more difficult for rebel groups to sell the commodities which they loot. Most of the international markets in commodities are, at some point along the marketing chain, fairly narrow, in the sense that there are not many market participants. Although primary commodities are more difficult to identify than branded manufactured goods, they differ in quality, and so markets can usually identify the origin of the commodity in the process of determining its quality. For example, at the stage at which diamonds are cut, their provenance can be established with reasonable accuracy, and diamond cutting is a highly skilled activity which can potentially be subject to a degree of international regulation. Of course, it will never be possible to drive illegal supplies out of the market, but, it should be possible to drive them to the fringes of the market, where the goods can only be sold at a deep discount. Rebel predation would then become less lucrative.

Low income and economic decline are further risk factors. There is no quick fix to low income. However, within a single generation it is now possible for most poverty-stricken societies to lift themselves out of poverty. In a single generation South Korea managed to grow from a per capita income of \$300 a year to \$10,000 a year. Most very poor countries have poor economic policies. Changing these policies is often politically

difficult because in the short term vested interests lose, but many societies have faced down these interests and transformed themselves. In such situations international aid has been shown to be effective in accelerating growth. For example, during the 1990s Uganda has transformed its economic policies, and with the help of the international donor community, has sustained a 7% annual growth rate. It is on track to realize the government objective of overcoming poverty within a generation. Within Uganda, a rebel group called the AFL recruits by offering the unemployed sh200,000 per month (around \$150). Rapid growth will gradually make recruitment harder.

A further risk factor is ethnic dominance. If a society has a single ethnic group which is large enough to dominate democratic institutions, then democracy itself is not sufficient to reassure minorities. Ethnic dominance is a difficult problem. The most realistic approach is to entrench minority rights into the constitution. This can be done either by explicitly legislating group rights, or through strong individual rights. If all individuals are secure from discrimination, then individuals in minority groups are secure. The scope for this approach depends upon the credibility of the checks and balances which the state can erect upon government power. Usually, state institutions are not strong enough for this degree of trust, and so they can usefully be reinforced by international or regional commitments. For example, the European Union is requiring that the many Eastern European countries hoping to join it, must treat their minorities equally. Latvia moderated its policies towards its Russian minority in response to this requirement.

If governments and the international community can defuse the risk from its primary commodity exports, generate rapid growth, and provide credible guarantees to minorities, then the risk of conflict can be radically reduced. Conflict prevention can be achieved through large effort on a few risk factors.

Policies for Post-Conflict Peace-Building

All the policies which are appropriate for conflict prevention are also appropriate for post-conflict peace-building. However, they are unlikely to be sufficient. In the first decade of post-conflict peace, societies face roughly double the risk of conflict that the pre-conflict risk factors would predict. Post-conflict societies are thus at substantial additional risk because of what has happened to them during conflict.

Several factors may account for this increase in risk. A rebel organization has built an effective military capability, in part by the manufacture of group grievance, and in part by the accumulation of armaments, money and military skills. People have got used to violence, so that the norms which inhibit political violence in most societies will have been eroded. People's political allegiance may have polarized, so that, as in Somalia, ethnic dominance has been created by the conflict even if the society was initially either diverse or homogenous.

Many societies have severe objective group grievances which sustain intense political conflict, without getting close to civil war. Group grievance and intense political conflict are not in themselves dangerous: they are indeed the normal stuff of democratic politics.

However, in post-conflict societies, civil war has first built intense political conflict and then conducted that conflict through violence. Whereas most of the societies which have group grievances have no tradition of conducting their political conflict by means of violence, post-conflict societies may have no tradition of conducting their political conflict non-violently.

The rebel organization usually maintains its effectiveness during the post-conflict period. Compared with a pre-conflict society with the same risk factors, the post-conflict society is therefore much better prepared for war. The rebel organization has already recruited, motivated, armed and saved. For example, Savimbi the head of the Angolan rebel organization UNITA, was reputed to have accumulated over \$4bn in financial assets during the first war, some of which he then used to finance the start of the second.

Peace requires either that the intense political conflict continue but that the military option of conducting it should be made infeasible, or that the political conflict should itself be resolved. Each of these is difficult. To remove the military option requires demilitarizing the rebel organization, turning it into a conventional political party. This can happen. For example, Renamo, once a rebel military organization in Mozambique is now a successful political party. Renamo was willing to demobilize whereas UNITA was not. Mozambique was a post-conflict success whereas Angola was a failure, partly because Angola had diamonds whereas Mozambique did not. Aid donors were able to come up with a moderate financial package for Renamo which made peaceful political contest an attractive option. Diamonds had made UNITA so rich that nothing that donors could offer would matter, while renewed predation offered massive rewards. In the first two years of renewed war UNITA is believed to have earned around \$2bn from diamond mining. The massive importance of aid donors to the Mozambique economy may also have made the maintenance of a democratic system in which Renamo would have a fair chance more credible. In Angola the government did not need the donors, and so had no means of reassuring UNITA that democratic rights of political contest would be maintained. Even when the rebel group demobilizes, the precedent of violent conflict is fresh in people's minds. This is perhaps why time itself improves the prospects of peace: the habits of peaceful conflict replace those of violent conflict.

The alternative to continuing the political contest but making the military option infeasible is to resolve the political contest itself. This requires at a minimum that grievances be addressed, even if though on average they are not objectively any more serious than those in peaceful societies. If, indeed, group grievance has been manufactured by rebel indoctrination, it can potentially be deflated by political gestures. While grievances may need to be addressed objectively, the main purpose of addressing them is probably for their value in changing perceptions.

The task of dealing with conflict which lacks proper boundaries between the political and the violent is difficult whether the approach is to restore boundaries or resolve the political conflict. However, the attitudes of the domestic population appear not to be the main reason why post-conflict societies have a risk of further conflict which is no much greater than implied by their inherited risk factors. Recall that the main risk comes from

diaspora living in rich countries. What can be done to reduce this risk? One approach is to build the diaspora into the peace process. For example, in the conflict in Northern Ireland it is evident that the Irish American diaspora has played a major part both in financing violence. Both the protestant and catholic rebel military organizations have actively raised funds in North America, and a number of the guns used in shootings turn out to have come, (hopefully indirectly), from the Boston police department. When the peace faction within the IRA initiated the peace process, its leader went to Boston, and the British and Irish governments chose an American Senator to head the peace negotiations. An extension of this approach is to target campaigns at the diaspora which emphasize that the domestic population wants to maintain peace because the costs of violence are so high. Diasporas bear none of these costs, and so they need to be reminded that others do. Governments can go much further. Diasporas are potentially major assets for the development process, with skills and business connections. The diaspora organizations can be given explicit tasks in promoting economic recovery, facing them with a choice between a constructive and a destructive role. A complementary policy is for the governments of the countries in which these diasporas are resident to put clear limits on the activities of the diaspora organizations. Political support for violent rebel organizations is legitimate, but supplying material aid is not. For example, American efforts to prevent countries such as Libya, Sudan and Afghanistan from harboring terrorists who have killed US citizens would have greater prospects of success were they to be set in the context of an international policy to set limits on the conduct of diasporas.

Dependence upon primary commodity exports turns out to be even more important as a risk factor in post-conflict societies than in pre-conflict societies: the same level of dependence generates a significantly higher risk. In mitigating the risks from primary commodities, one policy is open to post-conflict governments which is not available pre-conflict: the government might decide to share the revenues peacefully and legally with the rebel organization. The rebels then do not need to fight in order to get what they want. This is, perhaps, what the government of Sierra Leone decided to do by bringing the rebel leader into government as Minister of Mining. It attempts to give them a greater interest in peace. There are, however, limits to this policy. If it is profitable for one rebel group to be predatory on primary commodity exports, once it has been bought off, it will probably be profitable for another group to replace it.

While a post-conflict government has more options of dealing with primary commodity dependence, it has fewer options of dealing with ethnic dominance. The provision of constitutional guarantees for ethnic minorities is unlikely to cut much ice in the low-trust environment which follows years of mutual hatred and killing. In such situations one option is for the international community to provide reassurance through an extended phase of military presence and its own guarantees. This is the solution currently being attempted in Bosnia and Kosovo. A further possibility is to determine that the country as constituted is unviable. However, rather than ethnic cleansing, a better solution may be federation with a neighboring country in which no ethnic group is dominant.

As in conflict prevention, rapid growth will assist peace. However, the task of achieving rapid growth requires somewhat different policies in post-conflict societies. After a long

war, economies tend to bounce back: they are so far below their productive potential. For example, in the first five years of peace after a 15 war economies on average grow at 6% a year (Collier, 1999). Mozambique suffered an even longer war than this and recovered even more rapidly. One of the casualties of civil war is trust. Because life is so uncertain, people shorten their time horizons and are less concerned to build a reputation for honesty. Some people find it more profitable to behave opportunistically. As this behavior becomes more commonplace, the society switches into a low-level equilibrium of mutual suspicion and widespread opportunism. This raises the cost of all sorts of business transactions. For example, in Kampala, Uganda, a manufacturer of mattresses sold them wholesale on credit to agents who went up country to sell them retail. One of the agents claimed that his entire consignment had been stolen by northern rebels. The manufacturer had to accept this alibi and forfeit the money. On the grapevine, he heard that the agent had invented the story, but he could not be sure what to believe. Once a society has suffered a collapse into low trust, it takes concerted action to change expectations, and meanwhile, many functions which other governments could rely upon simply don't work. The tax collection system, the courts, accountants, and doctors may all have been corrupted by opportunistic behavior. Of course, it is not only societies which have suffered civil war which can experience a breakdown of trust. However, in post-conflict situations it is the norm. The government can respond to this problem by creating coordinated changes in expectations, institution-by-institution. For example, one quite common approach has been to close the old revenue collecting part of the civil service, and establish a new, independent institution to which people are freshly recruited. In return for better pay they are subjected to more rigorous checks for honest conduct. Being a new institution it is to some extent able to shed the burden of bad expectations which the old institutions carry.

The combination of primary commodity predation and opportunism implies that some people do well out of war (Collier, 2000a). Although most people lose, others have an interest in war restarting. Hence, when wars do restart, it is not necessarily simply an outpouring of irrational hatred or deep fears. Indeed, both hatreds and fears can be played upon by those who expect to gain materially. One way in which a post-conflict government can defend the peace against such manipulation is to publicize self-interest for what it is. Society at large needs to recognize that some groups have an interest in a return to conflict.

A corollary of this analysis is that rebel organizations, existing or prospective, can be viewed as rational economic agents. This has both a hopeful and a cautionary implication. The hopeful implication is that rebel organizations are likely to respond to incentives. For example, were the UN Security Council to introduce sanctions which made the economic and military circumstances of rebellion more difficult, the incidence of rebellion would decline. The cautionary implication is that it may be of little avail to buy rebel groups off. In countries where the objective conditions make rebellion financially feasible, if one group is bought off, others are likely to occupy the 'market' opportunity for the generation of grievance.

Conclusion

Popular perceptions of the causes of civil conflict take at face value the discourse of the rebel organization. Civil war appears as an intense political contest, fueled by grievances which are so severe as to have burst the banks of normal political channels. Rebellions are thus interpreted as the ultimate protest movements, their cadres being self-sacrificing heroes struggling against oppression. In fact, most rebellions cannot be like this. When the main grievances - inequality, political repression, and ethnic and religious divisions - are measured objectively, they provide no explanatory power in predicting rebellion. These objective grievances and hatreds simply cannot usually be the cause of violent conflict. They may well generate intense *political* conflict, but such conflict does not usually escalate to violent conflict.

By contrast, economic characteristics – dependence on primary commodity exports, low average incomes, slow growth, and large diasporas – are all significant and powerful predictors of civil war. Rebellions either have the objective of natural resource predation, or are critically dependent upon natural resource predation in order to pursue other objectives. These, rather than objective grievances, are the risk factors which conflict prevention must reduce if it is to be successful. Since to date conflict prevention has paid scant attention to these causes of conflict, there is probably considerable scope for policy, both domestic and international, to prevent civil conflict more effectively.

While objective grievances do not generate violent conflict, violent conflict generates subjective grievances. This is not just a by-product of conflict, but an essential activity of a rebel organization. Rebel military success depends upon motivating its soldiers to kill the enemy, and this – as in the classic Leninist theory of rebel organizations – requires indoctrination. Hence, by the end of a civil war, there is intense inter-group hatred based upon perceived grievances. A conflict has been generated which has no boundaries between political and violent actions. The task in post-conflict societies is partly, as in pre-conflict societies, to reduce the objective risk factors. However, post-conflict societies are much more at risk than implied by the inherited risk factors, because of this legacy of induced polarizing grievance. Either boundaries must be re-established between the political contest and violence, or the political contest must be resolved. Neither of these is easy, which is why, once a civil war has occurred, the chances of further conflict are so high.

Table 1: Outbreaks of War

country	year	war	prev.	country	year	war	prev.
		started war				started war	
Afghanistan	1975-79	1	0	Mozambique	1960-64	1	0
Afghanistan	1990-94	1	1	Mozambique	1975-79	1	1
Algeria	1960-64	1	1	Myanmar/Burma	1965-69	1	1
Algeria	1990-94	1	1	Myanmar/Burma	1980-84	1	1
Angola	1960-64	1	1	Nicaragua	1975-79	1	0
Angola	1975-79	1	1	Nicaragua	1980-84	1	1
Azerbaijan	1990-94	1	0	Nigeria	1965-69	1	0
Bosnia	1990-94	1	0	Nigeria	1980-84	1	1
Burundi	1970-74	1	0	Pakistan	1970-74	1	0
Burundi	1984-89	1	1	Peru	1980-84	1	0
Burundi	1990-94	1	1	Philippines	1970-74	1	1
Cambodia	1970-74	1	1	Romania	1984-89	1	0
Chad	1980-84	1	0	Russia	1990-94	1	0
China	1965-69	1	1	Russia	1995-99	1	1
Colombia	1980-84	1	1	Rwanda	1960-64	1	1
Dominican Republic	1965-69	1	0	Rwanda	1990-94	1	1
El Salvador	1975-79	1	0	Somalia	1980-84	1	0
Ethiopia	1970-74	1	1	Somalia	1984-89	1	1
Georgia	1990-94	1	0	Sri Lanka	1970-74	1	0
Guatemala	1965-69	1	1	Sri Lanka	1980-84	1	1
Guatemala	1970-74	1	1	Sudan	1960-64	1	0
Guatemala	1975-79	1	1	Sudan	1980-84	1	1
Guinea-Bissau	1960-64	1	0	Tajikistan	1990-94	1	0
India	1980-84	1	1	Turkey	1990-94	1	0
Indonesia	1975-79	1	1	Uganda	1965-69	1	1
Iran	1970-74	1	1	Uganda	1980-84	1	1
Iran	1975-79	1	1	Vietnam	1960-64	1	1
Iran	1980-84	1	1	Yemen	1990-94	1	0
Iraq	1970-74	1	1	Yemen AR	1960-64	1	1
Iraq	1984-89	1	1	Yemen PR	1984-89	1	0
Iraq	1990-94	1	1	Yugoslavia	1990-94	1	0
Jordan	1970-74	1	0	Yugoslavia	1995-99	1	1
Laos	1960-64	1	1	Zaire	1960-64	1	1
Lebanon	1975-79	1	1	Zaire	1990-94	1	1
Liberia	1984-89	1	0	Zaire	1995-99	1	1
Liberia	1990-94	1	1	Zimbabwe	1970-74	1	0
Morocco	1975-79	1	1				

References

Collier, Paul (1999) 'On the Economic Consequences of Civil War', *Oxford Economic Papers*, 51, pp. 168-83.

Collier, Paul (2000) 'Rebellion as a Quasi-Criminal Activity', *Journal of Conflict Resolution*, (forthcoming).

Collier, Paul (2000a) 'Doing Well Out of War' in *Greed and Grievance: Economic Agendas in Civil Wars*, Mats Berdal and David Malone (eds.), Boulder, CO: Lynne Rienner.

Collier, Paul and Anke Hoeffler, (1998) 'On the Economic Causes of Civil War', *Oxford Economic Papers*, 50, 563-73.

Collier, Paul and Anke Hoeffler (2000), *Greed and Grievance in Civil War*, World Bank, Policy Research Working Paper 2355.

Grossman, H.I. (1999) 'Kleptocracy and Revolutions', *Oxford Economic Papers*, 51, 267-83.

Kuran T., (1989) 'Sparks and Prairie Fires: a Theory of "Unanticipated Political Revolution"', *Public Choice*, 61, pp. 41-74.