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Violent Conflict and Human Development in Latin America: The Cases of Colombia, El Salvador and Guatemala

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**Violent conflict and human development in Latin America:
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I. Introduction

This paper is concerned with identifying the main costs that violent conflict has had for human development in Colombia, El Salvador and Guatemala. A first section refers to the difficulties involved in measuring these costs, taking into account different measurement methods, statistical problems and intangible costs. The second part of the paper briefly describes the basic characteristics of conflict in Colombia, El Salvador and Guatemala. The third part then identifies the impact of violent conflict on human development in these countries, with emphasis on economic and social development, while taking into account distributional questions. This is a first draft subject to revision.

II. Methodological issues

1. Counterfactual

What would have happened had there not been a violent conflict? This is normally a crucial question that needs to be dealt with when measuring the costs of violent conflict. Determining what would have happened if there had not been conflict is the counterfactual world (“*anti-mondo*”) to which what actually occurred needs to be compared. The difference between the (peaceful) counterfactual situation and the (violent) actual situation can then be attributed to conflict.

Two basic methods, with variants, can be used to compare both situations. The most common one is to characterize the violent period that is being analyzed and, on the basis of this characterization, determine the potential effects of violent conflict during this period. Once the basic traits of this period have been identified, their effects are assigned costs.¹ This is basically an accounting method, and the implicit counterfactual world is that everything would have continued being the same had it not been for violent conflict. The problem with this type of analysis is that the negative (or positive) effects of changes of other variables, like an external shock, are not taken into account, and by not doing so the effect of violent conflict can be magnified (or understated).

The second method consists in simulating, through an econometric model, a country’s economic growth. To the extent that a country departs from the path predicted by the model this can be accounted for by violent conflict or, alternatively, variables representing conflict can be built into the model and simulations can be made including

¹ The identification of costs made by the Guatemalan Truth Commission is of this type. See CEH (1999), chapter V.

or excluding the effect of these variables.² The problem with this approach is that models of this type typically refer only to economic growth and, furthermore, are subject to serious theoretical and empirical criticisms.³

A variant of the first method is to compare the evolution of the country or countries with violent conflict to other countries in similar situations without violent conflicts. In this case the counterfactual situation is in fact the situation of the other (non-violent) countries. In this case there is less danger of excluding the effects of other variables if the other countries are similar to the one that is being analyzed or if (through an econometric exercise) the effects of these variables are calculated and isolated so as to avoid being confused with the causes or effects of violence. An increasing number of studies have been made recently applying this methodology, basically comparing countries that have suffered civil wars with those that have not.⁴ A limitation of this approach is that even if the conclusions apply to a wide set of conflicts as a whole, there may be specific cases, like those being analyzed in this paper, in which they do not.

In practice, a combination of these methods is advisable, trying to carefully take into account “other effects” in the case of the first accounting method, recognizing that the second method of individual country modeling may only be a very broad and tentative approximation of the actual costs of violent conflict, and identifying specific traits of conflict in particular countries so as to be able to determine if general conclusions resulting from the comparison of countries with violent conflict to those which are peaceful are applicable to particular cases.

2. Intangible costs

Most costs are tangible, but a few are not. Social capital, trust, the capacity to cooperate, “agency” (the individual or collective capacity of persons to define their life style) or the weakness of the state are all crucial ingredients of development but are very difficult to measure. They therefore tend to be left out in measurement exercises. This also tends to happen with variables that econometric models have difficulty to include, like displaced persons or refugees, destroyed homes, impacts at a local level or the effects of conflict on mental health.

Furthermore, there are costs that are long lasting, that do not cease to exist with the end of violent conflict, including some of those mentioned above. This may be the case of processes that involve switching behavior based on expectations of honesty to behavior based on expectations of corruption and violence, a common effect of violent conflict that tends to outlast civil wars and become one of its legacies.⁵

² There are several studies of this type on the Colombian conflict. For a review see Riascos and Vargas (2004).

³ Specifically, determining the effect of trade liberalization or of institutions on growth is the object of tremendous controversy.

⁴ See, for instance, Collier, P. and A. Hoeffler, (2001); and Pottenbaum and Kanbur, (2004)

⁵ World Bank (2003), p.21

3. Statistical problems

Statistical problems abound. First, there is a general problem of data availability. The geographical concentration of most conflicts requires disaggregated data that is not available at a regional level, especially to establish a base line. This problem is related to the one traditional limitations of average or national figures. This may be a very serious limitation. Specifically, studies based on national indicators of inequality have not been able to conclude that conflict is related to inequality,⁶ whereas studies that have disaggregated data at a municipal or local level have found a relationship between both variables.⁷

Furthermore, violent conflict itself often results in deteriorating statistics, both at a national (lack of funds and weakening national statistical institutes) and regional (i.e. destruction of local administrative records) level. The logic of conflict and war may also result in outright falsification of statistics, especially of those associated with public expenditure, including expenditure on defense, or on statistics that become part of the propaganda strategies associated with wars.

All these problems may reinforce each other to the extent that a government in a situation of violent conflict may not wish to produce statistics –already in the process of being discontinued or destroyed- which may provide evidence of a deteriorating socio economic situation. This can be further complicated in cases in which certain concepts, like direct and indirect costs, are not used with any great precision.

A different problem arises from the difficulty of measuring violent conflict, since as a result of the variety of forms it may take (assassinations, kidnapping, destruction of infrastructure, violent demonstrations, etc.) no single indicator would appear to be appropriate. This is further complicated by the fact that many statistics of these forms of violence are either non-existent or very tentative. In Colombia a solution to the complexity problem was found by identifying the rate of homicides as an indicator of violent conflict, and the Human Development Index was adjusted by taking into account this indicator. But the availability of statistics still points out to the necessary caution with which sophisticated models may be used, since often basic statistical requirements cannot be met. And in many cases available data must be used imaginatively, though this obviously endangers the technical rigor of the analysis undertaken.

Another problem results from varying intensities, lengths and location of violent conflicts within countries. Conflicts such as those in Colombia and Guatemala have been long and had different intensities at different times and in different regions. According to Collier and Hoeffler a workable definition of a civil war is an internal conflict with at least 1,000 combat related deaths per year, where rebel organizations must suffer at least 5% of these casualties.⁸ Conflicts in Colombia (from 1984 to the present), El Salvador (from 1979 to 1992) and Guatemala (first from 1966 to 1972 and then from 1978 to 1984) fulfill this definition.

However, this does not take into account that the geographical (regional) locus of a conflict may change over time, as it did in Guatemala, first having concentrated in the

⁶ Collier and Hoeffler (2001)

⁷ Barron, Kai and Menno (2004) and Sarmiento (2001)

⁸ Collier and Hoeffler (2001).

eastern region and later in the north western regions, involving different intensities at different times. This is further complicated by the fact that many social indicators, especially at a national level, are not designed so as to take into account rapid and localized changes. This is the case of life expectancy, for instance.

4. The role of the State

Different assumptions regarding the role of the state may result in different estimates of costs. Destruction of different types of capital normally result from violent conflict, yet it may also be argued that a government's military expenditure may be needed precisely to reduce the destruction of capital stock produced by rebel forces. In this case there is a trade off between public expenditure required to defend a country's capital stock as opposed to public expenditure on health and education. But if the state itself has been the cause of massacres which have involved the destruction of human lives, household and social capital, as occurred in Guatemala during the early 1980s, it is not valid to argue that this trade-off exists. In this case the state is part of the problem and not part of the solutions.

III. Violent conflict and war in Colombia, El Salvador and Guatemala: context and specific characteristics

1. Colombia

Colombia has gone through at least two periods of extreme violence during the past decades. During "la Violencia" (1948-53), more than 145 thousand people were killed mostly as a result of rivalry between Liberal and Conservative forces. A military coup put an end to this violence in 1953 and in 1957 a caretaker military junta turned power over to a coalition formed by liberals and conservatives who then reached an agreement to share power by alternating governments for the next 16 years.

Liberals and conservatives mostly abandoned resorting to violence but during the 1960s new insurgent movements developed and started to grow gradually, mostly in areas where demands for agrarian reform were frustrated. A decade or two later so called paramilitary forces, at first supported or accepted by governments, began to grow as organizations defending rural areas from attacks by insurgents.

Conflict was initially a low intensity one confined to rural areas but gradually grew and extended its presence in urban centers, as did the links between coca producers and traffickers and insurgent and paramilitary groups. In this process there would appear to have been an initial motivation of rebel forces based on grievances linked to land reform (sixties and seventies), but then their growth seems to have depended primarily on economic opportunities that initially (eighties) were linked to the availability of natural resources (including oil and mining) and later, in the nineties, to drug trafficking.⁹ Regions with higher potential rents have then become the most likely regions subject to violence and to the continued presence of armed groups.

⁹ PNUD (2003), p. 72

2. Guatemala and El Salvador

Guatemala shared with El Salvador a dynamic process of economic growth, spurred by new export crops that included cotton, sugar cane and beef, and by a small but dynamic industrial sector during the sixties and seventies. At the same time military regimes faced strong popular mobilizations during the second half of the sixties and early seventies, as well as the creation of broad opposition fronts that participated in elections that were rigged. This resulted in a rather classic example of grievances, mostly articulated by urban middle classes, in which civic resistance was severely repressed.

Within this context discontented army officers displaced by the extremely conservative anti-communist movement that had overthrown, with United States support, a democratically elected government in 1954, founded the first rebel movement in 1962 in Guatemala. However, rebel forces were not able to greatly expand and control significant areas nor able to take over cities, with the exception of a one day occupation of a small provincial capital (Sololá) in 1980. They never were able to grow beyond a typical guerrilla movement concentrated mostly on a tactical harassment of government forces, first in the Eastern parts of Guatemala (1966-72) and later (1978-84) mostly in the Western highlands.

At the end of the seventies the repressive reaction of the state was massive, no doubt influenced by the Sandinista victory in Nicaragua and by the significant threat that the insurgent forces represented in El Salvador. In Guatemala reaction by the state included a campaign of selective assassination of leaders of social and political movements in urban areas, the forced recruitment of almost one million peasants through the creation of civil self defense patrols under the control of the Army, and a series of massacres in rural areas as part of the government's terror campaign. Rebel forces were basically defeated in 1982, though minor groups continued to be active both nationally and internationally until 1996, when the Peace Agreements were signed, as they attempted to avoid that military defeat might become a decisive political defeat.

Rebel movements were founded in the early seventies in El Salvador, within a context of strong confrontations between peasant and organized labor groups on the one hand, and the government on the other. The government increasingly responded with repressive policies, including electoral frauds in 1972 and 1977. Political violence increased as army and paramilitary squads killed leaders of social and political movements, including the assassination of the archbishop of El Salvador, Oscar Romero, in 1980. This contributed to a growing rebel movement in the late seventies.

Rebel movements united in 1980 and launched a so-called final offensive in 1981. Although this offensive failed to spark a national rebellion it demonstrated the strength of rebel forces and turned them into the main political opposition force. From thereon they carried out a low-intensity war with strong areas of influence in the north and east of El Salvador. After years of what was basically a de facto stalemate, negotiations began in the late eighties and concluded with a Peace Agreement signed in 1992.

III. The impact of violent conflict in Colombia (1992-2002), El Salvador (1979-91) and Guatemala (1980-1990)

Human development, defined as a process of growing options or freedom, involves growing capabilities that depend on social development, economic growth and the possibility that human beings may individually and collectively define and choose the way of life they prefer. Violent conflict is the opposite of human development, to the extent that it reduces freedoms and capabilities through its negative impacts on economic and social development while at the same time severely restricting or excluding political freedom. These issues are analyzed in the following sections on the basis of available data in the cases of Colombia, El Salvador and Guatemala.

1. Economic costs

There is a considerable amount of research on countries that have experienced civil wars and internal conflict, and it suggests that a typical civil war results in a rate of growth around 2.2 percentage points less than during peace, that this type of war lasts seven years, and that the cumulative loss of income during the war would be equal to around 60% of a year's GDP.¹⁰ Most studies on the effects of internal conflict in the case of Colombia, El Salvador and Guatemala suggest that annual GDP growth rates may have been lower than in other regions, though conflicts have been significantly longer, thereby resulting in cumulative losses that have been higher.

One set of estimates (based both on accounting methods and simulations) of the yearly reduction of GDP as a result of conflict concludes that losses have been the equivalent of around 2 percentage points in Colombia,¹¹ within the range of 0.4 and 1.4 percentage points in Guatemala between 1980 and 1990,¹² and between 0.3 and 1.5 points in El Salvador.¹³

The extended length of the periods analyzed and the fact that the intensity of internal conflicts in these countries -and especially in Guatemala and Colombia- varied in different periods, makes it difficult to be very precise. But on the whole, these conflicts have been equivalent to not producing at least for a whole year, that is, with accumulated losses that have been above 100% of GDP. Comparing these countries to other ones in similar situations but without violent conflicts provides similar estimates.¹⁴ An alternative calculation made for El Salvador and Guatemala estimated even larger costs, equivalent to more than four times its GDP in Guatemala and more than 10 times in El Salvador.¹⁵

¹⁰ World Bank (2003) chapter 1, p. 17.

¹¹ PNUD (2003), p. 110. There is also a large number of studies on the effect of crime and violent conflict on growth in Colombia which are not part of the mainstream research going on in this area. See Riascos and Vargas, (2004)

¹² Stewart and Humphreys (1997) and CEH (1999) Memoria del Silencio, Tomo IV, Consecuencias y efectos de la violencia, UNOPS, Guatemala, p. 225, table 15.

¹³ Stewart and Humphreys (1997) and Stewart, Huang and Wang (2000)

¹⁴ For instance, ranking Guatemala's position in Latin America on the basis of the growth rates of its different sectors in the 1970s and comparing it with its ranking in the 1980s results in Guatemala moving down 4 positions in commerce and the industrial sector, 10 in agriculture and 16 in construction. See CEH, p 224.

¹⁵ López (2003) These estimates appear exaggerated. The fact that El Salvador's counterfactual (with peace) GDP per capita (PPA dollars 2000, US\$ 8,400) would have reached Costa Rica's level that same

It is useful to disaggregate costs in order to have a more precise idea of their nature and magnitude. Those resulting from direct damage tend to be the highest ones. The damage to infrastructure in Colombia, El Salvador and Guatemala was considerable, as part of insurgent forces' strategy to destroy their enemy's communication and support lines, including telecommunications, bridges and roads, together with infrastructure linked to the generation of energy and electricity. Just repairing a destroyed oil pipeline in Colombia between 1992 and 1996 was estimated to have cost approximately US\$ 4 billion, and the destruction of electricity installations amounted to US\$ 1.5 billion during this period.¹⁶ Damage to infrastructure in El Salvador was estimated to be approximately US\$ 1.6 billion.¹⁷

In these cases the destruction of infrastructure not only reduced incomes as a result of infrastructure's importance as a public good and as a determinant of growth, but also led foreign firms to abandon their plans to increase their investments in favor of actual disinvestment processes. Clearly, favorable expectations to invest in legal and productive activities disappeared.

In many civil wars both insurgents and government forces loot and destroy housing, schools and health facilities. In the case of Guatemala approximately 170 families were the victims of looting and persecution. In the Northern and Western highlands, and as part of a military strategy to terrorize the civilian population,¹⁸ houses of peasant families were destroyed together with all their household capital (furniture, clothes, working instruments, house appliances, animals, food reserves).¹⁹ This was often part of a wider pattern involving not only the destruction of homes but also of churches, market places, schools and health centers, as well as the destruction of larger productive investment, including that of rural enterprises such as cooperatives or haciendas.

In the case of Colombia both the costs of armed conflict and of widespread crime, linked to drug trafficking, must be taken into account. Crimes against private property tend to have a greater relative importance in this context, including theft and hold ups. The total cost of physical capital, either of communities, enterprises or households amounted to approximately 40% of total costs reported in Colombia (table 1).

An often forgotten part of the cost of violent conflict, resulting from the forced recruitment of persons, gives rise to a similar proportion of total costs in this country. This loss, which takes into account the contribution that these resources made to economic growth in the past, should be added to increased military spending and forced recruitment. Neither item involves destruction in itself, though both have a high opportunity cost.

Specifically, in the case of Guatemala forced recruitment covered more than 10% of total population by involving young men in the countryside in self defense patrols

year (US\$ 8,650) is most unlikely if account is taken of the fact that Costa Rica's GDP per capita and its social indicators were already significantly superior before El Salvador's internal conflict began.

¹⁶ Riascos and Vargas (2004)

¹⁷ López, (2003).

¹⁸ This appears to be a common characteristic of civil wars, where "Civilians are targeted mainly because the displacement of large fractions of the civilian population reduces the fighting efficiency of the enemy, as they cannot hide and obtain support as easily." World Bank (2003), p. 18.

¹⁹ CEH, p. 208.

controlled by the army. Apart from devoting a considerable amount of their time to patrolling the countryside, thereby having to abandon their regular productive activities, organizing them in patrols was also a means of controlling rural population and avoiding their becoming part of rebel forces. This opportunity cost, in addition to the additional military expenditure, represented more than half of total calculated costs of violent conflict in Guatemala. Excess of military expenditure accounted for 25% of total costs in Colombia.

Table 1
Composition of reported costs of violent conflict
in Colombia and Guatemala
(percentage of total)

	Colombia	Guatemala
Persons killed or disappeared	2.1	7.3
Displaced persons and refugees	32.8	30.3
Forced recruitment	n.a.	47.4
Kidnapping, robbery, household destruction	26.0	6.0
Infrastructure	14.1	n.a.
Excess military expenditure	25.0	9.0
Total	100.0	100.0

Source: PNUD, INDH 2003, table 4.4, an CEH, p. 226, table 16.

Another significant cost has resulted from internally displaced persons and refugees. In Colombia approximately 2 million persons were refugees or displaced persons in 2002, of which approximately 40% were children.²⁰ In the case of Guatemala refugees and displaced persons were mostly part of the approximately 170 thousand families whose homes were destroyed in the early eighties, and who represented close to 850 thousand persons. Of these close to 100 thousand were killed or disappeared, 600 thousand were internally displaced persons and approximately 150 thousand were refugees who fled mostly to neighboring Mexico.²¹ Apart from the human suffering involved, the economic effect of this displacement, together with the effect of the forced recruitment of about a million young men at the time, had a tremendous effect in reducing production and incomes, especially in the Northern and Western regions, and mostly in the department of Quiché, one of Guatemala's poorest departments (provinces).

2. The social development costs

a) Military expenditure versus social expenditure

Switching public expenditure so as to increase military expenditure is another symptom common to all internal conflicts or civil wars.²² The most common conclusion is that this expenditure crowds out both public social expenditure and private investment.

²⁰ PNUD, (2003), p. 1001, Box 4.2.

²¹ CEH (1999), p. 205.

²² World Bank, (2003), p. 14.

Evidence of the former effect is clear in the case of Guatemala during the early 1980s, when its internal conflict intensified, giving rise to several years (1983-86) during which military expenditure was greater than public expenditure on education, a phenomenon observed 50 years earlier, before a 16 year old dictatorship was substituted by a democratic government.²³

Regarding the Colombian case it has been argued that military expenditure may contribute to reduce the destruction of capital stock resulting from internal conflict. As noted earlier, this effect will depend on the nature of the state involved, since this expenditure can be a source of destruction and not solely of protection, as was the case in Guatemala during the early 1980s. In the case of Colombia a simulation exercise found that during the 1990s a slight increase of military expenditure could contribute to higher levels of output, consumption and investment after a transition period during which consumption would be lower.²⁴ This would suggest a trade-off between the positive effect of public expenditure on health and education on human development, as opposed to an alternative and positive effect of military expenditure that reduces the destruction of capital. Whatever the case, internal conflict still would be giving rise to a situation in which public expenditure on health and education would be lower.

b) The effect of lower economic growth (resulting from violent conflict) on human development

Apart from the effect that violent conflict will have on reducing public expenditure on health and education, it will also have similar effects via the reduction of household income, which will tend to result in adjustments of private expenditure on health and education. Specifically, a study on the economic and social costs of armed conflict in El Salvador makes use of elasticities linking changes in social indicators to income variations.²⁵ The social indicators included are infant and child mortality and malnutrition, enrolment (primary, secondary and tertiary), illiteracy and telephones.

On the basis of these elasticities it is possible to make estimates of the effect of GDP reductions resulting from internal conflict on these social indicators. Indeed, taking into account that two of the three components of the Human Development Index are included in these estimations (GDP and education), an additional estimate of the effects of income variations on life expectancy changes provides a first idea of the effect of violent conflict on the HDI via its effect on the reduction of income.²⁶

²³ A graph illustrating this point is found in CEH (1999), p.213. The historical analysis of public expenditure and on the relative importance of public expenditure on education, health and defense can be found in Sistema de Naciones Unidas, Guatemala: el financiamiento del desarrollo humano, ONDH 2001, Guatemala 2001, p. 14-15. Internal conflict in the 1980s returned Guatemala's public expenditure situation to one similar to the one existing 50 years earlier, in the 1930s.

²⁴ This approach is explained in the review undertaken by Riascos and Vargas (2004)

²⁵ López (2003)

²⁶ The idea that life expectancy reductions have been mostly the result of preventive medicine associated to the germ theory of disease suggests that life expectancy reductions depend only in a relatively minor way on growing income (greater income would explain between 15 and 20% of the reduction of life expectancy in the United States during the first half of the XXth Century). See Preston, Samuel H. "American Longevity: Past Present, and Future". Distinguished Lecturer in Aging Series, No. 7/1996, Syracuse Policy Brief.

Through these direct and indirect effects the approximate impact of a reduction in income of 1% would then be to reduce the value of the IDH by 0.018, as opposed to the case when these elasticity effects are not considered, in which the IDH falls by only 0.006.²⁷ Furthermore, given the evidence that the destruction of public goods as a result of internal conflicts tends to be of greater relative importance in middle income countries – like Colombia, El Salvador and Guatemala- thereby affecting to a greater degree their social development,²⁸ would mean that their lost human development would be relatively greater –given the magnitude of the conflict- than in the case of lower income countries affected by internal conflicts.

c) The direct impact on education

It is especially difficult to have precise estimates of the effect of internal conflict on education. Nevertheless, there is evidence that the more direct effect of violent conflict on education has been felt on children that have had to abandon school, either because of the forced displacement of families or as a result of education facilities that were destroyed or closed down. In Colombia the rate at which children have abandoned school is higher in municipalities in which both insurgents and paramilitary forces are present than in other municipalities.²⁹ Violence is not the only explanation of this outcome, but the fact that municipalities in which violence has been increasing are also those with greater inequality³⁰ suggest a vicious circle involving inequality, violence and fewer opportunities for education.

The extreme intensification of violent conflict in Guatemala in 1982, when most massacres occurred in the countryside, resulted in an absolute reduction of enrolment of almost 37 thousand students in primary school, mostly in public schools in rural areas.³¹ Furthermore, since teachers had an important role as community leaders, it is not surprising that hundreds were assassinated, thereby weakening further the state's capacity to provide adequate education services.

In the case of El Salvador estimates based on the simulated effect of lower GDP on social variables point to a relatively limited impact on education, concentrated mainly on secondary and tertiary education.³² The methodology used in this case clearly has its limits, since it is based on an assumed impact of economic considerations on dropping out of school that does not take into account specific characteristics of violent conflict, especially in rural areas, as the case of Guatemala illustrates.

3. The direct impact on health

²⁷ The elasticities are the following ones: 0.02 for net primary enrolment, 0.32 for net secondary enrolment, 0.23 for gross tertiary enrolment and -0.05 for the illiteracy rate. See Lopez (2003) Our own estimated elasticity of life expectancy, calculated on the basis of the HDR (excluding 10 outliers) is of 0.1660, close to Preston's estimates for the US during the first half of the XXth century. The relationship between income and the HDI and income is affected by its logarithmic nature. Gustavo Arriola, of Guatemala's NHDR team, calculated these figures and the overall effect on the HDI.

²⁸ Pottenbaum and Kanbur (2004)

²⁹ PNUD (2004), p. 106

³⁰ Sarmiento (2001)

³¹ Whereas 884.8 thousand registered in 1981, only 8481 registered a year later, in spite of a continuously growing trend in earlier (and later) years. See CEH, p.219, table 11.

³² López (2003).

It is even more difficult to determine the effect of violent conflict on health. A first indicator is the number of persons that died as a result of violent conflict, as well as the number of refugees and –especially- internally displaced persons for whom health conditions deteriorated considerably. In the case of Guatemala it is estimated that between 1980 and 1990 approximately 100 thousand persons were killed or disappeared, while there were 750 thousand displaced persons, including 150 thousand refugees that migrated to Mexico.³³ El Salvador's civil war cost some 75 thousand lives and displaced about 1 million people.³⁴

In Colombia most studies attempt to distinguish between the effects of criminal violence and armed conflict. From 1998 to 2001 the number of homicides reached approximately 100 thousand persons, with a rising number of homicides per year, reaching almost 28 thousand in 2001, of which 27.4% were considered of a political nature.³⁵ Adjusting life expectancy in Colombia to take into account its high homicide rate has led to estimate that life expectancy during the nineties was reduced by between one and a half and two years.³⁶

Another indicator results from comparing men and women's life expectancies. Since a normal difference between men and women would be approximately 4 years, in the case of countries subject to violent conflict a greater difference can be attributed to higher death rates of men resulting from violence. Thus, in 2002 the corresponding difference in Colombia was of 6.2 years, whereas in both Guatemala and El Salvador, ten years earlier (1992) this difference amounted to 4.9; significantly it increased to 5.9 and 6, respectively, ten years later, suggesting that violent crime, a legacy of past internal conflict, is on the rise.³⁷

The simulation of the possible effect of GDP's reduction as a consequence of war in El Salvador also led to estimate quite significant increases in infant mortality (from 23 to 29 per thousand born alive), under-5 mortality (from 27 to 35) and child malnutrition (from 6 to 12%) as a result of conflict in that country.³⁸ This suggests similar patterns of either deteriorating or very slow progress in health in Colombia at present and during the eighties in Guatemala.

4. From grievance to greed: the costs and legacy of a culture of violence

Collier and Hoeffler provide evidence suggesting that “greed”, or economic opportunity (access to finance provided by extortion of natural resources, or donations from abroad), is a better explanation of civil war than “grievances” such as high inequality, lack of political rights and ethnic or religious divisions in society.³⁹ However, violent conflict in Colombia, El Salvador and Guatemala suggests that it may be useful to distinguish between what originates violent conflict and what sustains it. In these countries it would appear that grievance-fed violent conflict gave rise to a culture of violence and

³³ CEH, p. 205

³⁴ López (2003), *The Economic and Social Costs...*

³⁵ PNUD, INDH (2003), p. 105, table 4.2

³⁶ PNUD, INDH (2003), p. 105.

³⁷ UNDP Human Development reports of 1995 (table 3.1, p. 85) and of 2004 (table 24, p. 219).

³⁸ López (2003)

³⁹ Collier and Hoeffler (2001)

lack of respect for the rule of law that facilitated the extension of violence to other spheres, opening up spaces for violence based on greed.

This is most obvious in the case of Colombia, where one of the intangible costs of the violent conflict originally fed by political motives has been to combine and amplify it through its increased link with drug trafficking and crime in general. It is also part of the legacies of internal conflict in both El Salvador and Guatemala, where criminal violence, involving actors that in the past participated in these countries' internal conflict, grew rapidly –indeed, exploded- after the signing of their respective Peace Agreements.⁴⁰ This is part of the destruction of social capital, partly the result of the widespread repression of different types of organizations through the assassination of their leaders and by means of other terrorist actions, but also through the erosion of values that recognize the importance of honesty, cooperation and hard work as opposed to corruption and crime in general.

5. Distributional consequences

Analysis of the geographical distribution of violent conflict provides some insights regarding the relationship between conflict and inequality. As mentioned above, a study on Colombia found a close relationship between the rate of homicides and a concentration index of a quality of life indicator in different municipalities, distinguishing between municipalities in which violence had increased and those in which it had not, and covering two periods: 1985-86 and 1990-96.⁴¹ No relationship was found between violence (measured by the homicide rate) and poverty whereas a positive relationship between violence, higher income and inequality was found.

This is in accordance with Barrington-Moore's theory that grievances arising in situations in which there is evidence that it is possible to materially cover the needs of those who are poorest can be a cause of revolt. These situations tend to correspond to those existing in Central America during the 1960s, when high economic growth rates (with GDP growing between 5 and 7% per year) were accompanied by high degrees of inequality. This unequal process of economic modernization, coupled with closed political systems and slow social development, is the main explanation of wars in El Salvador, Guatemala and Nicaragua in the seventies and eighties. The fact that the same study in Colombia found that municipalities with greater levels of education and higher levels of voter participation were also among those with lower levels of violence, confirms the importance of education and of open democratic systems as deterrents of violence.

Available evidence on Guatemala's conflict during the 1980s⁴² points to it having concentrated in a few departments (provinces) and especially in the department of Quiché, followed by Huehuetenango and Chimaltenango, all of them with a majority of

⁴⁰ In this context the Peace Agreements are especially important as means to reduce the probability of shifting from a violent conflict based mainly on grievances to one based mainly on greed.

⁴¹ Sarmiento (2001)

⁴² There was a first wave of violence and insurgency that concentrated mostly in the Eastern, non-indigenous, part of Guatemala during the sixties and early seventies.

indigenous population.⁴³ These departments also belonged to the regions with the lowest IDHs and the highest levels of poverty in 1989.⁴⁴

Although Guatemala's indigenous population accounts for approximately half of total population, the indigenous groups were those most affected by violent conflict, including massacres, forced recruitment or displacement and destruction of their homes. The extreme nature of repression against indigenous peoples in Guatemala provides evidence of an extreme form of racism, with accusations that this involved genocide.

⁴³ CEH (1999), p. 216-219

⁴⁴ They were not, however, the departments with the greatest concentration of land ownership. Curiously, they are among the departments with the greatest **reductions** in the land Gini coefficient between 1979 and 2002.

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