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On the Cost of Violence and the Benefit of Peace

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Jurgen Brauer and John P. Dunne

Abstract

Among economists, there seems to exist an unfortunate lack of understanding of the complexities of war and violence and the effects on economy and society. The cost of the 2008/9 world economic and financial crisis, for example, amounted to a world GDP decline of much less than one percent in 2009—far smaller than the cost that violence imposes. This lack of understanding has created problems in the design of preconflict-, conflict-, and postconflict policies, leaving a sometimes unrecognized legacy of violence and loss. This essay deals with some of the economic issues involved.

KEYWORDS: violence, war, postconflict, peace

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Introduction

In the post-cold war world, the ILO Decent Work agenda had already started questioning the paths of development from conflict, asking what were the alternatives to the then-usual prescriptions of the World Bank Group and the International Monetary Fund (e.g., Dunne, 2003; Dunne and Mahone, 2003). In a comparison of Mozambique and Rwanda, Dunne (2006) argued that the complexities encountered meant it was important to consider more precisely what peace meant: Certainly the experiences of these countries, or of South Africa, El Salvador, Iraq, and many others, made it clear that the end of a state of war did not necessarily amount to peace.

Wars can be immensely damaging to economies, and they can leave long-lasting scars on society. What some consider to be postwar or postviolence situations can be preceded, infused, followed, and shadowed by ongoing nonwar political, domestic, and criminal violence. Thus war economies often do not end with the formal cessation of hostilities (Cooper, 2006; UNDP, 2008, p. 11). Successful recovery from collective violence is a difficult path fraught with dangers and riddled with economic, socio-cultural, and political problems and concerns. Surprisingly little substantive economics work on the subject is done – only in 2010 did the *Journal of Economic Literature* publish a survey piece on the economics of civil war (Blattman and Miguel, 2010) – particularly work that would deal with the possible paths countries can take from crises caused by violent conflict and work about institutions that would make for stable peace and minimize the risk of relapse into war or transition into forms of nonwar violence (e.g., Brauer, 2004; Wennmann, 2010).

Unarmed violence, e.g., spouse and intimate partner violence, parent-child violence, and elder abuse, also can have important effects, for instance on productivity in the workplace and costs imposed on the public health care sector that, via tax revenue and public expenditure mechanisms, filter through to the levels of fiscal policy and macroeconomics. Even forms of nonviolent conflict can carry substantial, measurable economic consequences, as for example in the case of the mostly nonviolent protests in Thailand that drastically affect tourist arrivals.

In general, there seems to exist an unfortunate lack of understanding among economists of the complexities of war and violence and its impact on economy and society. The cost of the 2008/9 world economic and financial crisis, for example, amounted to a world GDP decline of far less than one percent in 2009 (IMF, 2010) – far, far smaller than the cost that violence imposes (Brauer and Tepper-Marlin, 2009). This lack of understanding has created real problems in the design of preconflict-, conflict-, and postconflict policies, leaving a sometimes unrecognized legacy of violence and loss. This essay deals with some of the issues involved. (Although the present essay makes additional points, for an extensive, and extensively documented, version of the baseline argument, see Brauer and Dunne, 2011, in the *Handbook on the Economics of Conflict*.)

Violent collective conflict

The sort of features that can be identified as causing and amplifying conflict and war include colonial legacy, military governments and militaristic cultures, ethnic and religious identification, unequal development and poverty, bad leadership and/or polity frailties and inadequacies, external influences, and the complex of greed, opportunity, feasibility, and the availability of potentially lootable natural resources. Very few conflicts are simple; they seldom have single or even few causes and will often be a combination of features, moreover combinations that can shift as a conflict progresses through time and motivations and incentives for conflict participants change.

In developed and developing economies the nature of war has undergone changes: There are new technologies, changes in war-fighting methods, and the growth in asymmetric conflicts, where large forces taken on a challenger who refuses to play by traditional battle rules. Less formal armies have acquired increased importance, direct battlefield engagement is less pronounced, and the impact of war is more dispersed, and all this comes with an increased involvement of civilians as victims (Kaldor, 2001). This has meant that the effects of violent conflict can be pervasive and difficult to pin down.

To measure the impact – the cost of conflict – one can use two approaches, the accounting approach, which tries to work out the total value of asset destruction (physical, human, social capital), and the counterfactual approach, which considers deviation from trends or uses counterfactuals based on model. Numerous case studies and cross country studies exist, but possibly the most useful depiction of the costs of conflict is a graphical representation published by the UNDP (Figure 1). Here, GDP per capita for a group of developing states that have experienced conflict all are rebased and arranged such that the end of their respective wars occurs in the same year (indicated by the vertical line in the Figure). The costs are very clear, with declining GDP per capita during war, and rising afterward. But even 15 years after the formal end of hostilities, in a number of cases states have not returned to prewar per capita GDP levels (e.g. Nicaragua).

Adapting a standard approach of empirical growth econometrics, Collier (1999) estimated the cost of civil war in terms of the reduction in the rate of economic growth, taking as the dependent variable the growth rate during a decade, and introducing the number of months during which the country was at civil war as an explanatory variable.

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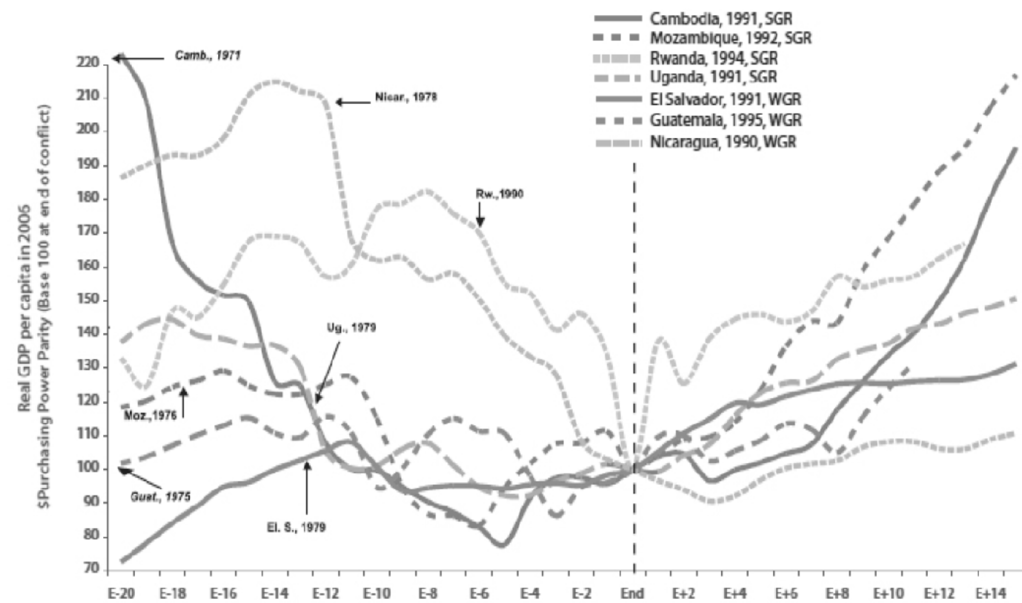
Figure 1 -- GDP per capita in selected civil war countries,
Source: UNDP, 2008, p.111.

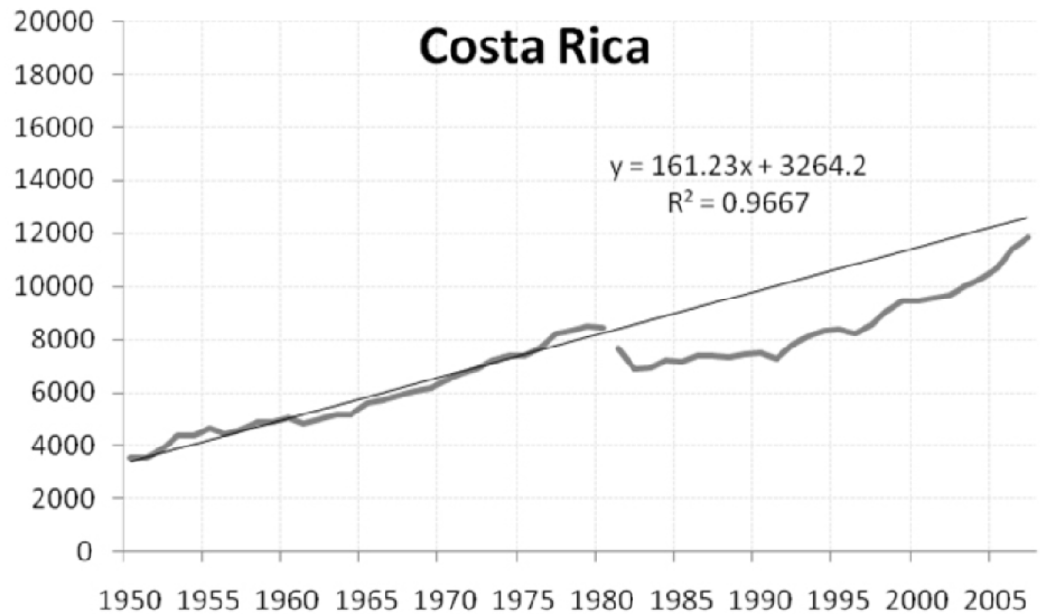


Each year of civil war reduces the growth rate by around 2.2%, with the sample based mostly on years prior to the end of the cold war. The average civil war lasts for around seven years, according to the data set used, so that by the end of war the economy is approximately 15% below its counterfactual level. (Other estimates have been made from aggregations of case studies, and these tend to propose rather higher growth costs of war, but case studies were not selected randomly and there may have been a tendency to select particularly costly wars; see de Groot, *et al*., 2009.)

If one assumes that an average, normal state's economy grows by about two percent per person per year, then one interpretation of Collier's finding is that countries in violent conflict are stagnant – all their "natural" growth is negated by violence – or that their "above normal," "catch-up" growth is dampened (for example, overtly violent India grows at a somewhat lower rate than does not-so-violent China). There are various other measures in the literature, both higher and lower. Maybe one should not overstate the impact, but in the case of civil rather than interstate wars the impacts do run deep (Blattman and Miguel, 2010). In addition, while economies may bounce back they will still have had reduced growth, and when this loss of GDP is discounted it implies very high costs (de Groot, *et al*., 2009).

Violent conflict in a particular country or region can also have a wider, a spill-over, impact. This is obvious for large destructive wars, such as the world wars, but there is also the surprising example of Costa Rica, a peaceful country, that has suffered economically from war among its neighbors. If one takes the linear trend line, based on real per capita GDP from 1950 to 1980 as indicative of how the economy of Costa Rica should be progressed, Figure 2 shows that its economy suffered a drastic decline with the onset of the 1980s decade of civil wars in El Salvador, Guatemala, Honduras, and Nicaragua, a decline from which Costa Rica has not recovered in the 20 years since the formal cessation of these wars.

Figure 2 - Costa Rica, real per capita GDP (I$), 1950-2007; base year=2005, Source: computed from Penn World Table 6.3



Studies have looked at these spillovers, through contagion (Murdoch and Sandler, 2002) and more specifically through refugee effects (Saleyhan and Gleditsch, 2006). Other studies aim to analyze how war affects a particular attribute of economic wellbeing, such as human capital effects – through health (casualties, civil and military, and aftermath) and education (evidence of decline in education in conflict) – through effects on inequality, or through the environmental consequences of war (Brauer, 2009). One does have to be careful to avoid double counting when aggregating, and link these approaches to other approaches. The legacy of these wars cannot be measured purely in direct

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economic costs, but they do give a starting point. Attempts are being made to consider the cost of conflict generally and to deal with the issue of double counting (Bozzoli, *et al*., 2008; de Groot, *et al*., 2009). These costs must reflect the full legacy, particularly of civil wars, and include the cost of postconflict violence and reconstruction.

Postwar reconstruction and violence

Violent conflict can have huge economic and social costs which, when combined with the variety of causes and forms of conflict, all make moves toward peace rather difficult. Recovery and reconstruction is difficult and fraught with the danger of a return to fighting. This has led to arguments that the first step of conflict resolution needs to be a detailed understanding of the background and dynamics of the conflict (Dunne, 2003). This also raises the question of how peace is defined, and different groups are likely to disagree on this. The nature of peace will depend on how the war ended, by victory of one side, by international imposition, or by exhaustion, and whether it does in fact end completely-wars seldom end tidily and fighting may continue in pockets. It is also possible that a non-peaceful legacy may be left at the “end” of the war, with different forms of endemic violence.

Economic reconstruction is vital and may start before the complete end of the violent conflict or crisis, as an improving economy would make it easier for all stages of reconstruction to be moved through. Whenever it does start, the first actors involved are likely to be the aid agencies and the World Bank Group and the International Monetary Fund. It is also likely that, in constructing a peace deal, promises were made to deal with certain grievances which may not always be consistent with WBG/IMF policies (although both institutions have become more accommodating). To ignore promises made and to impose generic policies for economic growth may lead to a reigniting of hostilities as protagonists may see themselves as being better off fighting (Harris, 1999; del Castillo, 2008).

In principle, the end of a violent conflict should lead to a peace dividend, but continued military action may be required, even if only to defend the peace. What problems are encountered will depend upon the level of development of the country and the damage caused by the conflict. In developing countries, demobilizing soldiers is problematic and can take time. If it is done too quickly, the country could end up with disaffected and armed ex-soldiers. A war economy faced with a sudden change in the form and level of demand will find it difficult to adjust.

After a civil war the first stage may be to disarm and reintegrate all combatants but this costs money, even as fiscal possibilities are likely to be limited. Violent conflict is likely to reduce the capacity of economies to absorb labor and may mean increased unemployment. Foreign aid and loans can help, but these can cause their own problems such as displacement, dependency, and difficulty to serve external debt.

In addition, it is possible that the postwar environment will see political instability. This is likely to discourage investment, especially foreign direct investment. Governments may find it difficult to raise taxes or borrow and may be tempted to print money, possibly resulting in inflation. It is important for governments to encourage private investors to make investments that are irreversible and this requires the rebuilding of civil society and the reestablishment of transport infrastructure in particular. Aside form direct destruction, agriculture will be affected by destruction of support infrastructure, especially transport and communications networks. It is likely that an exodus to urban areas will be taking place and it is important to stop this. The break-up of social groups and communities could cause violent conflict with the return of ex-combatants who will not be reintegrated.

In dealing with agriculture it is important to consider both subsistence and commercial farming. Subsistence can allow much of the population to become self-sustaining fairly rapidly, while commercial agriculture may be the major earner of foreign exchange, so both are important in different ways. It is, however, important to recognize the impact violent conflict can have on rural household behavior and how this might affect their responses to attempts at reconstruction (Brück, 2000).

In a word, the end of war implies neither economic nor personal security as there may be problems of continued micro-insecurity. There could be an environment in which armed inhabitants, desensitized to violence, resort to violent crime (e.g., Guatemala). Such insecure environments can discourage acquisition of visible assets and so translate into macro-insecurity as economic problems get worse. In such situations, there is considerable risk that war will be resumed.

Macroeconomics and violence

Ordinarily, economic performance is measured by GDP. But in violent societies especially, GDP is an inappropriate measure as it both includes and excludes responses to expected and realized insecurity. In South Africa, for instance, there are some 300,000 private guards whose services are counted in GDP but have no directly productive function.

At the same time, GDP excludes the informal markets, the shadow economy, driven underground in response to security failures. It cannot be assumed that GDP inclusion and exclusion cancel each other out and, in any case, the distributional consequences are different for each. Thus, in societies wracked

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by violent conflict GDP probably mismeasures the size and structure of an economy even more than usual.

Violence exerts fiscal effects, both via tax revenue and natural-resource rent losses and via higher public expenditure on security forces or the public health sector. It also destroys asset, namely losses in productive capital, financial capital flight, and human capital destruction through killings and injuring and delays in human capital accumulation. Violence increases transaction costs, generating increased contract risk, shorter time-horizons, and the deferral of maintenance of public and private infrastructure. A consequent rise of the informal economy and possibly of a "criminal peace economy" (UNDP, 2008, p. 78) results, and possibly a reallocation of development assistance away from violent areas (one of the highest murder rates in the world – 60/100,000 – affects humanitarian aid workers), a discouragement of investment on account of fear, and investment in security installations (defensive, avoidance, and preventive investment) instead of in productivity-enhancing installations. All this can mean a huge security economy, but this is neither peace nor, by itself, productive.

Brauer and Tepper-Marlin (2009) provide a summary review of the literature and, based on simulations, suggest that at least 4.4% of 2007 world GDP is misallocated toward security-related measures and that the equivalent of an additional 8.7% of 2007 world GDP is simply forgone. This translates into about 6.1 trillion purchasing power parity dollars in lost business opportunities. The economic benefits of utopian nonviolence (peace) would be large indeed.

One can identify three objectives for postwar macroeconomic policy. First, to rebuild capital, that is, to have income generated from a sound and increasing asset base; second, to rebuild the economic, social, and legal framework such that peace is stable and reversal to war unlikely (irreversibility); third, to break the prewar conditions inasmuch as they have contributed to war and hence to avoid criminalization of the economy. Even the IMF now recognizes that economic growth "at all costs" is not the correct prescription: growth that sacrifices peace is a mirage.

As regards monetary policy, inflation control will likely require a rebuilding of the central bank as a credible institution, the reestablishment of its regulatory or supervisory functions, and the resetting of the domestic and international payments system. A foreign exchange policy will need to be developed and implemented and whatever forex-regime is adopted, it will need to be reasoned, credible, and flexible as the country's situation changes. It is also vital that credit provision is restarted, especially to small and medium-sized enterprises.

In a postwar environment, policy coordination is particularly important. In peaceful states, fiscal and monetary policy usually are kept apart and can work against each other, but in postwar countries, they require close coordination and cooperation (del Castillo, 2008). The consensus view is this: "macroeconomic policies must give priority to minimizing conflict risk, even as they promote growth. This may mean tolerating moderate inflation and budget deficits" (UNDP, 2008, p. xxiii). Issues of fiscal federalism (revenue sharing across provinces) are also important, for example of natural-resource rents in Indonesia or Nigeria.

Repatriation of financial, human, and physical capital that may have fled the country or been looted during the war and the proper contracting for natural resource exploitation, management of the resources, and income flows – particularly given that such resources may have been important in maintaining the protagonists – are additional important macroeconomic issues. International trade and foreign-aid policy also are problematic: "free" trade is frequently not free at all but biased toward the interests of developed states, and "aid" reflects third-party interests yet needs to be nonpolitical, predictable, and long-lasting, on the order of ten years from the end of conflict.

Clearly, the development of macroeconomic policy in postwar environments is complex and requires informed, flexible, and sympathetic policymakers – qualities which are not always apparent.

Economics of violence

Considerable problems hinder any given state moving from the end of war to the development of its economy. Many mistakes can and have been made. Often, moving to a postwar process has simply been seen as one of regularizing the economy. Unfortunately, this fails to recognize the nature of war economies and their inherent logic and that they can be very different from peace economies, depending upon the starting point, the nature of the underlying conflict, the process of the war, and the final outcome (Stewart, 1993).

In war situations, the informal economy can often come to the fore. Paradoxically, with the end of war, the acquired strength of this sector can then act as a restraint on the reassertion of the formal economy and can introduce criminal elements. War can lead to a transfer of assets to middlemen, which can be extremely destructive and embed inequality, especially if it results in a mere circulation of goods with little new production of assets. And yet, the informal sector may be the only viable possibility of a livelihood for many people so that the impact of destroying informal economic links through reconstruction policies may not be compensated for by the growth of the formal sector (Duffield, 2001).

When a war ends with the involvement of outside pressure, it is likely that agreements are made with protagonists, not with civil society. This can legitimate the leadership of the militias who may have been fighting to overthrow legitimate government. If leadership changes take place through war, it is not necessarily for

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the better, though it may be. New governments that come to power by violence may not be the best-placed to move to a peaceful society: Few liberation forces have made good post-liberation governments (e.g., Lamb, 2006).

With or without outside involvement, wars seldom end tidily and residual violence may remain, and even when the primary conflict ends fully, there may be a legacy of violence that is simply less formal. Certainly many countries considered to be "at peace" are in fact suffering from various forms of ongoing violence and crime. What the international community calls peace, when it accepts a government as legitimate and then withdraws or turns its attention away, may not be peace at all.

Yet without peace – the true cessation of violence – there will be no development or only malformed development where an economy may be criminalized and corrupt. In such a situation all but a minority of people are likely to lose. Ultimately, it will be depriving business and its suppliers of markets and profits, employees of jobs, customers of goods and services, and the public sector of tax revenue while high spending by government on security will put a burden on the economy. It may well create an economy where violence is embedded in economic processes and a move away from this could require costly and economically disruptive action, which the ruling class has no particular incentive to undertake.

Economists have to realize that the quality of political and institutional arrangements in peace agreements matter greatly. First, there is a need to recreate social relations or, as Murshed (2009) argues, to recreate a working social contract. This is especially important when "war after peace" results in a criminalized peace economy. Second, to ensure competent and non-corrupt service delivery, both competent macro-planning and micro-delivery are necessary. Third, one needs to deal with potentially damaging transboundary effects such as adverse effects on neighbors (e.g., refugees, closure of trade routes). This has important implications for aid policy as it might mean helping the neighbors as well.

Conclusions

War exacts a large economic penalty, often on states that can least afford it, and clearly the true legacy of war is not fully appreciated or measured. Although used as a fall-back device, GDP is actually a bad measure of the cost of violence; we need to do better. Growth of GDP is needed to rebuild assets; peace needs to be made irreversible; criminalization is to be avoided. In addition, one needs to consider the possible paths of development, of which some may be more palatable than others. Fiscal and monetary policy needs to be practical, not dogmatic.

Traditional state-on-state wars have (mostly) ceased to exist, replaced by civil war and (organized) crime. We witness not so much the abolition of violence as a shift in the form violence takes. Violence can be devastating for the societies involved, as well as for their neighbors, and can lead to huge economic costs. The cost estimates for individual countries are much larger as a share of GDP than the world financial and economic crisis of 2008/9 (IMF, 2010). Of course, the economic crisis would have been worse if not for massive, coordinated government intervention but the question is, why do we not have a similar massive intervention against violence?

Postwar reconstruction is complex and difficult to achieve and it does not necessarily lead to peace. The end of war may leave a governance structure in place that is internationally recognized, but it may only be a partial end to the ongoing conflict and/or leave a legacy that maintains violence in various forms. The cost of conflict can lead to serious misallocation of resources in current GDP, serious opportunity costs of nonrealized GDP, and lost business opportunities whose annual value is on the order of several trillion dollars, exceeding the 2008 purchasing-power parity measured GDP of all of Sub-Sharan Africa and South Asia combined or of all of Latin America and the Caribbean combined (WDI, 2010, p. 34).

Neither the absence of war nor the presence of security amount to peace. Not only more but different research is needed, recognizing the wider issues. Here is an important role for economists, but for ones that understand the specificities of dealing with war and postwar economies: The social returns to nonviolence and peace loom larger than just about anything else economists ordinarily concern themselves with.

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