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# Indivisibility, Fairness, Farsightedness and their Implications for Security

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# Abstract

This paper is concerned with the problems of achieving lasting peace. One dimension includes fairly sharing the post-war economic and political pie or the peace dividend. This requires post-war allocations that are envy free. Many peace agreements that end civil wars are notoriously unstable in that they are often not implemented, or break down after some time. Commitments to the peace treaty are simply not credible. One reason for that could be certain indivisibilities in perceived shares of power and income in the peace settlement, as well as the inability to correctly infer the value of path dependence when future reputation depends on present actions but the future is heavily discounted. The paper also discusses the role of another type of unfairness, namely a deep sense of humiliation, in determining acts of transnational terrorism, where force may not be the answer in attempting to deter deeply motivated persons.

Keywords: fair division, commitment, peace treaties, terrorist motivation JEL classification: C78, D71, D74, O10

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#### **1** Introduction

It is now two decades since the founding of UNU-WIDER, an institute that commenced its activities under the leadership of the late Lal Jayawardena. Although its remit is primarily development economics research, other issues not narrowly related to economics have also been studied at WIDER. A good example, is the work of the historian Eric Hobsbawm, whose masterly analysis of contemporary world history was penned while at WIDER. The central thesis of Hobsbawm's (1995) opus is the pervasively violent nature of the twentieth century with its two world wars; something which, on a global scale, is perhaps without historical parallel.<sup>1</sup> Related to this notion of violence are the uncertainties and insecurities which bedevil us in the new millennium. The danger of nuclear holocaust, after which 'the living would envy the dead',<sup>2</sup> seem long past. Yet many insecurities still loom large. The freedoms from want and fear are still far from being realized at the present time.<sup>3</sup> Without the achievement of these two freedoms, human security cannot prevail, even if lip service is paid to human rights. Poverty is widespread, and vast swathes of the developing world are being marginalized in our globalized era.<sup>4</sup>

To a great extent, inter-state wars have been largely replaced by intra-state conflict.<sup>5</sup> More importantly, these civil wars are closely related to poverty (the lack of the freedom from want).<sup>6</sup> For example, poverty makes soldiering less unattractive. Conflict also helps to perpetuate poverty.<sup>7</sup> This creates an interdependence between the freedoms from want and fear, as conflict (fear) and low-income (poverty) seem to go hand in hand.<sup>8</sup> The number of countries in civil war may be declining,<sup>9</sup> but their average duration during the 1990s was increasing.<sup>10</sup> This makes the analysis of why peace

<sup>&</sup>lt;sup>1</sup> Earlier wars may have also been just as, or more, devastating such as wars between Rome and other Italian entities in the fourth century BC, the three-year war leading to the annihilation of Carthage in 146 BC, the death and destruction wreaked by the armies of Changez Khan in the twelfth century, or even the English Wars of the Roses in the fifteenth century. But these wars were far more localized.

<sup>&</sup>lt;sup>2</sup> Commonly attributed to the erstwhile Soviet leader, Nikita Kruschev.

<sup>&</sup>lt;sup>3</sup> These are the last two of the four freedoms enunciated in President Franklin Delano Roosevelt's State of the Union address to Congress on 6 January 1941. See www.Fdrlibrary.marist.edu/od4frees.html, accessed on 29 June 2005.

<sup>&</sup>lt;sup>4</sup> See Murshed (2002b: 1-18).

<sup>&</sup>lt;sup>5</sup> See Murshed (2002a) for a brief description as to their causes.

<sup>&</sup>lt;sup>6</sup> See the model in Addison et al. (2002).

<sup>&</sup>lt;sup>7</sup> See Collier et al. (2003)

<sup>&</sup>lt;sup>8</sup> Not all poor or low-income countries descend into conflict, but most conflict ridden countries are poor or middle-income nations.

<sup>&</sup>lt;sup>9</sup> See Hegre (2004).

<sup>10</sup> See Fearon (2004).

cannot be achieved or sustained an absolute imperative, if the twin freedoms and human security are to be achieved.

Section 2 of this chapter is concerned with the problems of *fairly* sharing the post-war economic pie or the peace dividend. Walter (2001) and Wood (2003) point out that peace agreements to end civil wars are notoriously unstable in that they are often not implemented, or break down after some time. Commitments to the peace treaty are simply not credible. One reason for that could be certain indivisibilities in perceived shares of power and income in the peace settlement, as well as the inability to correctly infer the value of path dependence (when, for example future reputation depends on present actions, but the future is heavily discounted). These matters are considered in section 3. Section 4 briefly discusses the role of another type of unfairness, namely a deep sense of humiliation, in determining acts of transnational terrorism. Finally, section 5 concludes.

# 2 Fairness and indivisibility

Fearon (2004) points out that of all types of civil wars, those with secessionist tendencies and 'sons of the soil' dynamics, are both the most protracted and difficult to resolve. This could be because of an attachment to the inviolability of land and territorial sovereignty by both parties to the conflict. Certainly, other causes such as the ready availability of easily lootable narcotic or gemstone revenues that help finance conflict, or misperceptions about the chances of outright military victory, are important in prolonging conflict. But the indivisibility of war aims, symbols or land can also make certain civil wars intractable.

Wood (2003) highlights *indivisibility* as a major impediment to peace deals. This arises when territory, symbols or revenue in a post-conflict situation cannot be divided up so as to achieve peace. The problem can be most acute when religious sites such as Har'm El Sharif or Temple Mount in Jerusalem are involved. Also, considerable difficulties arise when it is problematic to achieve compromise over a war aim such as land reform (Nepal and Colombia), or deep constitutional change (future of the monarchy in Nepal). There can also be seemingly irresolvable disputes over post-war power sharing, and the allocation of offices in a post-conflict government. This can lead to spoiler groups, usually but not exclusively amongst rebel groups, wrecking a peace agreement because it does not give them enough in terms of cabinet places or other lucrative positions in power. Secessionist wars where territorial sovereignty is contested can also be tricky to resolve. But in other cases, certain common territories can be dear to both sides, and the sharing rules proposed for them are not acceptable, as is the case with Har'm El Sharif or Temple Mount in Jerusalem. Compared to these, disagreements over sharing economic resources, such as oil revenues, may require less challenging solutions.<sup>11</sup> For

<sup>&</sup>lt;sup>11</sup> A counter-example may be in the Sudan. Although the north and south had reached agreement earlier, the discovery of oil meant that the civil war rekindled and was finally resolved via oil revenue sharing.

example, it can be argued that separatist tendencies in Indonesia have eased following the decentralization of the fiscal system, which allows regions to keep more of locally generated natural-resource revenues. While the federal government is keen to preserve the territorial integrity of Indonesia, there are no indivisible symbols akin to Jerusalem.

The theoretical literature on sharing and division offers us several insights. For example, Brams (2005) and Brams and Taylor (1996) point out several allocation rules for a single divisible good, many divisible goods and several indivisible goods. All of these have implications for durable peacemaking involving compromises over issues and post-war economic stakes. If a peace agreement, and the divisions and compromises it entails are perceived to be unfair then the deal itself will not be robust, as these arrangements will tend to break down. Sharing in this regard must be equitable in several senses, as well as being efficient. That is why envy-free allocative outcomes are so important. In an envy-free outcome each participant does not regard the allocation achieved by another player to be superior to what he/she has achieved. All the various allocative mechanisms considered by Brams (2005) and Brams and Taylor (1996) require design and implementation by an outside agency, a mediator and/or external power. This is all the more so in the case of allocations in a post-war situation.

In the case of a single divisible good the analogy with cake cutting is applicable. This may, for example, concern the division of the post-war peace dividend, which includes natural resource revenues and the imputed value of post-conflict overseas development assistance. Cake cutting, in a two player situation, implies one person doing the cutting and the other player having the right to call a halt to the slicing procedure. The application of the envy-free criterion, however, may entail several slices or divisions that may be inefficient and in excess of the number of parties to the conflict. This will be all the more true if what is being divided up is not homogenous. One can visualize situations to do with the division of the expenditure categories of post-war aid, and the dividing up of land that may require a great deal of parcelling.<sup>12</sup>

A second situation considered by Brams (2005) and Brams and Taylor (1996) entails several items to be divided, each of which is in principle divisible. Peace negotiations usually involve several issues, including regional autonomy, sharing of resource rents (such as oil revenues in the Sudan), constitutional changes, power sharing in the federal government and so on. Typically these issues will involve a long period of extended bargaining. The procedure behind the settlement, if reached, is described as the 'adjusted winner mechanism'. The adjusted winner mechanism not only satisfies the standard efficiency and equity criteria, but additionally has a further equitability

<sup>&</sup>lt;sup>12</sup> If all players are risk-averse they will follow a maximin strategy, that is they will maximize the minimum allocation that they can achieve with certainty compared to uncertain prospects that yield higher returns but entail a positive probability for an outcome which is less than their maximin outcome. This is also like saying that those who dislike risk will do their best to achieve a minimum target or utility threshold.

condition, because it ensures that each player gets more than its share of the bargaining chips initially allotted to them. For example, in a two-person case, each player will get more than 50 per cent of the total value attached to all the issues and goods at stake.

Negotiations on the issues involve placing upper and lower bounds on the values of each issue, bearing in mind that assigning pecuniary values is more amenable in quantifiable matters such as resource rents rather than for non-monetary matters involving status such as who should be President. Each side will allocate weights on the different issues at hand, and given that each side has a similar number of bargaining chips, each party will win on some of the disputed issues. These will tend to be in areas most highly valued by the concerned protagonist. So if regional autonomy is more highly prized by a rebel group compared to resource rents, they will put a higher weight on it and secure that goal under the adjusted winner mechanism. In general, players will remain honest, and not risk losing on high valued issues by undervaluing their personal bid for them out of their total allocation of bargaining chips. But one side can end up with wins on many high valued issues, and the consequent allocation could be inequitable to the other side. So this mechanism requires an equitability adjustment. Basically, this means sharing on high valued issues where the two sides preferences are close, or the weights assigned to them out of their bargaining chip allocation are similar. So if the government and the rebels assign a close and high weight to resource rents, they must share these. In other words, if the government and the rebels both value resource rents highly, one side cannot equitably be allowed to be a sole winner. There has to be a revenue sharing mechanism on this issue. Other issues, where values diverge considerably, tend to be winner take all based on which side places the higher value. This adjusted winner mechanism gives both sides an allocation which is roughly equal and more than 50 per cent of the assigned weights from the bargaining chip pile. The problem with applying this equitability included adjusted winner mechanism is that many issues are not easily divisible, such as which side gets to first occupy a rotating post-war Presidency. A further difficulty can arise if the two sides do not have similar bargaining power, something that external actors need to engineer.

Third, and most importantly, Brams (2005) and Brams and Taylor (1996) consider allocating several indivisible issues. Once again external intervention or mediation is required. The allocation of indivisible goods requires the application of the envy-free principle for any allocation to endure. And, a unique envy-free allocation may not be Pareto-efficient. Pareto efficiency means that one side cannot be made better off without making another side worse off.<sup>13</sup> One can make an envy-free allocation Pareto efficient by improving the utility of one side without lowering the utility of the other. But such allocations may not remain envy-free as one side could have a lower allocation of relatively more highly prized items (yielding the same utility) that are being allocated,

<sup>13</sup> This is, however, consistent with one person having everything and another person nothing in a two-person world.

and consequently resent the other sides allocation. A similar argument can be made about a maximin allocation being envy-possible. Consider an application of the envyfree principle to the elections held in Iraq in January 2005. A criticism of the method adopted in that Iraqi election, for example, could be that the electoral mechanism (one person-one vote instead of representative bodies of each community) was not envy-free for the minority Sunni community, and had therefore not enlisted their full cooperation.<sup>14</sup> Furthermore, the power sharing mechanism devised does not have the properties of the equitability adjustments of the adjusted winner mechanism, which would give each side a larger share of the outcome than is strictly proportional to the bargaining chips it receives. One could even argue that the Sunnis received a smaller allocation of the total bargaining chips for negotiation than is warranted by their historical position. Despite the fact that the historical Sunni domination in Iraq was disproportionate to their (minority) population share, the present US-backed dispensation makes them feel vulnerable and disproportionately disadvantaged because of the lack of perceived constitutional safeguards for special groups. To them, there is a palpable lack of consensus and consultation.<sup>15</sup> The country is, consequently mired in a multi-faceted civil war.

Generally speaking, allocations involving indivisible items that are more qualitative are more difficult to achieve. The answers, in the more intractable cases, must lie in *sharing*, equal user rights and other 'federal' type arrangements that eschew winner-takes-all outcomes.<sup>16</sup>

Wood (2003) considers non co-operative strategies of actors in a conflict, and whether their strategies to fight or compromise are self-enforcing without third party mediation. This is at variance with allocative rules considered by Brams (2005) and Brams and Taylor (1996) involving mediation and refereeing, making the outcome resemble cooperative solutions. The decision to compromise is based on the pay-off in the peaceful state, as well as beliefs about the strategy which will be adopted by one's opponent. There also has to be bargaining over the share of the post-war pie that each side gets. The Nash equilibrium can involve either fighting or compromise; multiple equilibria are possible. If each side's expected post-war share is greater than what they can get from fighting, feasible compromise equilibria exist. But that depends upon beliefs about the other side's strategy. The feasible compromise equilibrium and the sharing it involves may not coincide with beliefs about the opponent's strategy. In general, there will be an optimal share of the post-war pie for each side which will maximize the robustness of a peaceful settlement (that is the agreement lasting or being self-enforcing) given beliefs

<sup>14</sup> In practice, the allocation of power in Iraq amongst the various communities includes several divisible and indivisible issues.

<sup>15</sup> Shurah in Arabic.

<sup>16</sup> As is the case in the Westminster (and American) style first past the poll electoral systems that often result in less compromise, consensus and power sharing.

of the two sides about each other. Within each group there may be factions or spoiler groups with more pessimistic views about their opponent's strategies. This will depress their value of any share of the post-war pie. Indivisibilities regarding the issues contested, and the post-war pie, also lower the expected worth of any share of the post-war settlement, making self-enforcing compromises difficult. In more extreme cases, as with virtually all contemporary civil wars, this may require external intervention in the form of aid to increase the total size of the potential peace dividend, so there is simply more to be shared. In the case of sites and symbols steps have to be taken to encourage sharing and envy-free access through confederal structures. This may require diplomacy, and in some cases coercive intervention by external powers.

#### 3 Indivisible periods and commitment problems

Another form of indivisibility arises when the future is heavily discounted, and when the future costs of current actions are similarly undervalued. We may describe this as the lack of recognition of path dependence. This may lead to problems of commitment to negotiated settlements even when Pareto optimal, that is when each side is better off in a state of peace. A commitment or credibility problem implies that the signal, or treaty, establishing peace is simply 'cheap talk', and by implication the arrangement is not self-enforcing. In most situations, war is irrational and inefficient (not Pareto optimal) as pointed out by Skaperdas (1992, 2002). Why is therefore the credibility of the commitment to peace treaties so fragile? There could also be misperceptions about the benefits of war, or an overestimation of the prospects of military victory.

To deal with misperceptions first, the most obvious candidate that prevents peace in this category of explanations for civil war persistence is an overestimate of the probability of military victory, see Collier et al. (2004) in this connection. The same authors also emphasize that the state of war may also be highly profitable for one or more of the belligerent groups. This is likely in the case of the presence of contraband substances such as illegal drugs, and lootable minerals such as alluvial diamonds.

The commitment problem to an agreed peace treaty is also a serious problem, and deserves further consideration. This difficulty arises when it is in the interest of one or either side to renege on the promise of peace, and the actions that peace involves. For example, in the model contained in Addison and Murshed (2002) one side to a peace treaty may wish to renege on its commitment to peace because it allows them then to loot valuable natural resource rents. The expropriation of these rents cannot take place without one side fooling the other, by feigning to make peace and later reneging on this undertaking. In that situation, when peace is not incentive compatible, commitments lack credibility and acquire the characteristics of cheap talk.

Sometimes agents or groups cannot commit credibly because there are no institutions or mechanisms upon which to anchor promises. In that situation they are not believed, even when they are honest. For governments, this is more likely in the context of weak state capacity, as it is difficult for a state to guarantee pledges when its own legitimacy and power base is fragile.

An aspect of the commitment problem that has received scant attention is the very high discount rates, or the short time horizons of some of the parties involved (Addison and Murshed 2002). In situations of poverty and high uncertainty, agents may strongly prefer a dollar today to a dollar tomorrow. Although the absolute value of future peace may be much higher than that of continued warfare, the present value may be much lower when the discount rate is very high and there is an impatience to consume. The same argument can be applied to reputation, a factor that is central to the credibility of peacemaking. Breaking an agreement damages *future* reputation, but with a high enough discount rate it might pay to renege because the cost comes in the future. Each failure of the peace process raises the discount rates of the belligerents, thereby increasing the difficulty of making peace. Given the tarnished reputations of belligerents it is even harder to establish credible peace.

Solutions lie in directly increasing the cost of reneging on peace agreements and devising commitment technologies through institutional innovation, particularly at the international level. The latter is particularly important because, as noted above, many contemporary civil wars do not have self-enforcing negotiated settlements. Without external intervention, and the sanctions that entails in terms of peacekeeping, as well as the palliative effect associated with aid, peace is just not sustainable. Improving the quality of peacekeeping forces is an urgent need, as is increased commitment to bringing war criminals to trial. Peacekeeping also needs to be more legitimate and acceptable, and the current ventures involving co-operation between local peacekeepers (as in the case of African Union interventions) and major aid donors (the European Union) is a step in the right direction. More adequately mandated and efficient United Nations involvement can enhance the acceptability of peacekeeping operations.

With regard to commitment and commitment technologies there are four factors that deserve further consideration: the separation of economic life and politics, time horizons, institutional settings and the underproduction of external sanctions.

# **3.1 Economics and politics**

When we assess why some 'post-conflict' countries returned frequently to war (Angola) while others have managed to sustain peace (Mozambique), economic motivations may lie at the root of the problem—Mozambique has few valuable minerals over which to fight while Angola has several—and this may help explain several peace commitment failures in Angola. There may be situations when conflict and business entrepreneurs are one and the same, as in many cases in Africa. That is when rulers themselves are directly engaged in appropriating lootable mineral resource rents. This makes the commitment to peace less likely to hold, compared to societies with a relatively stricter

dichotomy between those who rule (politicians) and those who conduct economic affairs. This is because in the former case the political and economic interests are one, and clearly pro-war. Economic interests in this instance centre around war-contracts and the harnessing of resource or illicit drug rents. In the latter case there is some room for competition between different interests; business activities such as the exporting of manufactured goods from Sri Lanka or Nepal may be disrupted by the war. Even when there are links between the two groups, the greater the institutional separation through parliament and the political process, the better are the chances for lasting commitments to peace.

#### 3.2 Time horizons

This turns out to be a crucial feature in individual decisions. When a future is seen to feasibly exist, this results in more peaceful attitudes, even in situations where deepseated historical grievances are present. Generally speaking investment, which only bears fruit in the future, requires a long time horizon. More secure and affluent societies tend to have a longer time horizon and recognize the path dependence of current actions. By contrast severely war torn, insecure and poorer societies have shorter time horizons, with a very strong preference for a dollar today compared to an uncertain prospect of more than a dollar in the future. Short-term income may be readily obtainable in a war situation, even if war destroys future earning prospects. In the language of economics, this is referred to as a high discount rate applied to future income, as opposed to the high value put on present consumption. All of this means discounting the future cost of conflict, as well as undervaluing the tarnished future reputation which arises from an excessive zeal for short-term profit. Furthermore, societies with faulty and degenerating institutions of governance and democracy tend to have a high discount rate, as the future is uncertain. New and fledgling democracies are often characterized by these high discount rates, as the future is uncertain due to the fact that the political system may collapse. The state apparatus in this situation run the risk of descending into kleptocracy. The important point here is that many groups in these situations are also characterized by similar short-term mentalities, making them often prefer current profits in a war situation when compared to investing for a far greater income that peace might bring in the future. Also, investment in trying to bring about future peace can have substantial present-day costs in terms of foregone profit.

# 3.3 Institutions of commitment

Even when all parties agree to and recognize the benefits of peace they need to credibly commit to peace, and the conditions stipulated therein. Generally, this requires institutions that help parties to credibly anchor their commitment to the peace treaty. The fear of reversal in the context of poor commitment technologies, leads to a peace treaty being imperfectly credible. And if it is not credible, the peace agreement will not last. Leaders of various groups and factions will then tend to behave like roving bandits with little concern for the country, like stationary bandits who have an encompassing interest in nurturing the tax base from which they obtain rent (Olson 1996). A poor environment for commitment often arises when the government or the rebel leadership's power base is weak and/or lacks legitimacy. Solutions here lie in devising better mechanisms to engender credible commitment via institutional improvement. This includes better constitutional safeguards, greater respect for the rule of law and superior regulatory capacities. This may be even a part of a society's democratic transition.<sup>17</sup> Existing domestic institutions often degenerate beyond redemption in many conflict ridden societies, making externally enforced commitment technologies imperative in the interim before domestic institutions can once again evolve.

#### **3.4 Underproduction of external sanctions**

Externally devised commitment technologies could be the key to ending conflicts where the peace treaty is otherwise not self-enforceable, as is usually the case in contemporary civil wars. Sanctions, aid trade restrictions and resource redistribution, if effective, might help to eliminate conflict. But external sanctions, themselves, must not be perceived by potential combatants as cheap talk. In other words, the external sanctions must *also* have credibility. If the cost of effective sanctions is too high, or it yields little security benefit to the sponsor as is likely to be the case for conflicts in distant lands, there is under-production of the sanction, making it more likely that it really is cheap talk. Perhaps, that is why we do not see the end of many civil wars in Africa, where large territories as in the Congo are policed by relatively small and weakly empowered peacekeeping forces. Civil wars in Europe, such as in the Balkans, by contrast are quickly concluded, with a huge relative (to population and geographical size) commitment in peace keeping forces and aid. The will and resources to end more distant wars by external powers may be more strictly limited. In the ultimate analysis, credible commitments to peace must be found in effective domestic constitutional restraints and delegation. These domestic commitment technologies require deep interventions in institution building, something that is notoriously difficult to achieve because of the persistence of vested interests in conflict.

# 4 Humiliation and terrorism

This section discusses transnational terrorism, which along side the other forms of violence and insecurity considered in this chapter are also a product of injustice and unfairness. What is more relevant here is individual, rather than group behaviour. A transnational terrorist act is one that impacts on the citizenry or interests of a country not directly part of the conflict in question. It can occur anywhere, both in the country where the conflict is occurring or elsewhere. Thus, for example, if the USA or the West is a target, then its citizens may be attacked in countries where the attackers are fighting the state, such as in Egypt. Attacks, kidnappings and bombings can also occur in third

<sup>17</sup> See Haggard and Kaufman (1995).

countries, such as Malaysia, Bali (Indonesia) and Saudi Arabia; attacks on US interests can take place in the USA (such as against the Twin Towers), or elsewhere as with the US embassy bombings in East Africa. More recently, there have been direct attacks in the UK and Spain. Transnational terrorism may reflect the internationalization of domestic disputes (Doran 2002). So, for example, the attacks on September 11, 2001 may reflect an act of war against an external sponsor (USA) of the real enemy (the venal and apostate government of Saudi Arabia). A similar argument can be made about acts of violence against Western tourists in Egypt, where the real enemy is the pro-Western government of Egypt.

From the viewpoint of the individual perpetrator of transnational terrorism, such as a suicide bomber, intrinsic motivation, which is often the outcome of the collective sense of humiliation (Lindner 2001), plays a greater role; therefore deterrence against terrorist groups may backfire if it hardens their resolve to resist, as is modelled by Addison and Murshed (2005). Deterrence can, however, influence the choice of targets by terrorists. Depending on relative difficulty, the target may shift from sponsor interests in other lands to sponsor countries, or even to where the real enemy is located. We do see shifting targets from the Twin Towers to Bali, to Saudi Arabia, to Madrid and London. Individual terrorist groups are often relatively small, and can be very creative in terms of organising finance for their localized cells, and evading sanctions, in order to carry out acts that are relatively much less costly and simpler than in the case of civil war.

Individual perpetrators of terrorist acts are usually not uneducated and poor (Krueger and Maleckova 2002), unlike in the case of civil wars where the soldiery is often drawn from the ranks of the impoverished whose alternative gainful employment prospects are scant. In fact, education can act as an indicator of reliability in acts such as suicide bombing. Terrorism requires individuals to express solidarity with an intrinsic cause or value, where the notion of pecuniary gain associated with greed in the case of civil wars is totally irrelevant. Individual utility functions associated with terrorism are altruistic. There is not only identification with a cause, something that can also be present in passively interested individuals, but an imperative to participate in furthering the cause. This urge to act may result in violent action including self-destruction. From the viewpoint of individual choice, suicide bombing may be a rational act as explained by Wintrobe (2002). This is because the individual has made an all or nothing choice between solidarity with a cause and individual autonomy. An all or nothing choice involves a 'corner solution' to a utility maximization problem. In this situation, changing relative prices (increasing deterrence) has little impact on individual choice, which is another way of saying that deterring terrorism will not succeed in preventing people from committing to their cause, even if the success rate of individual acts of terrorism diminishes. Alternatively, deterrence has to be very large to prevent individuals from carrying out violent deeds in this context of deep humiliation. In many cases this implies the physical annihilation or mass deportation of 'terrorists'. Such acts of deterrence are, however, not feasible in democracies with the exception of a state like Israel. Many societies and groups are willing to go to great lengths and to sacrifice themselves out of a sense of deep humiliation.<sup>18</sup> Economists, in particular, are guilty of ignoring these types of preferences, which are less amenable to 'relative price' changes. Addressing the issues that cause humiliation, including those that disaffect second or third generation migrants in Europe are important to finding permanent solutions to terrorism.

# 5 Conclusions

Human security in the form of the freedoms from want and fear are inter-related. One of the great insecurities of the present age is the fact that there are civil wars in many lowincome nations where poverty is also endemic. Indeed as Collier et al. (2003) and other authors have emphasized, the most significant and robust factor in determining the risk of civil war is a low-per capita income, implying that poverty and underdevelopment can result in outright violent conflict between different groups in society. In short poverty breeds conflict, and conflict helps to perpetuate poverty. Tackling one issue without paying attention to the other is futile.

One cannot overemphasize the differing natures of the motivations behind civil war and transnational terrorism. The former is intimately linked to poverty; the latter not necessarily so, being much more connected to acts of solidarity with collective humiliation and other causes. That is why we see many of these acts of terrorism being perpetrated by relative educated and affluent individuals, including citizens (drawn from different ethnicities) of developed countries. Where mass deportation and physical extermination is not an option, as is the case in most democracies, addressing issues connected with humiliation is of utmost importance. Here, dialogue with disaffected groups may act as a palliative, just as indiscriminate criticisms of large groups (for example Muslims, who are about a fifth of humanity) have an inflammatory effect.

The message to policymakers is clear. Most conflict ridden countries have weakened state capacity, so that the state can no longer be regarded as an impartial actor in all of its traditional conflict prevention functions. So some external intervention is required to restore peace and security, including rebuilding state capacity. Tackling inter-group or horizontal inequalities can also be central to preventing and ending conflict. This means poverty reduction, growth, greater political participation and improved governance. As far as peace settlements are concerned, they are generally not self-enforcing without external help and commitment; peacekeeping is something that is inadequately supplied in many parts of the world. Ultimately, however, peace in any corner of the world is a public good, because of the potential costs of humanitarian intervention and managing refugee flows if there is war. Making peace settlements durable implies that sometimes the indivisible has to be made divisible through intervention in the form of diplomacy

<sup>18</sup> See Lindner (2001) on this.

and coercion which encourage sharing, as well as greater economic aid to make the peace dividend more palpable. It also means devising institutions that help anchor commitment. Furthermore, post-war allocations need to be envy-free in order for them to endure. In the final analysis, lasting security cannot be achieved by coercion alone; without economic development and broad-based poverty reduction the disincentive to resort violence is always small.

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