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PERSPECTIVE PAPER

*Benefits and Costs of the Conflict and Violence
Targets for the Post-2015 Development Agenda*

Rodrigo R. Soares

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Post-2015 Consensus

Rodrigo R. Soares
Sao Paulo School of Economics

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Introduction

It is very difficult to provide an encompassing review of the various costs of crime and social conflict. It is even more difficult to quantify the cost-effectiveness of the various potential interventions in these areas. So I sympathize with the major challenges faced by Fearon and Hoeffler in this undertaking and with their general approach of trying to highlight certain relevant dimension of costs, rather than always coming up with specific cost-benefit numbers. Contrary to some technologies of intervention in other areas – such as access to treated water or vaccination in public health – policies in the public security arena are very context specific and evidence is not so readily available. Therefore, despite the knowledge already accumulated, the generalization of impacts to contexts other than the ones initially considered is risky.

From this perspective, and going partly against the very mandate of this initiative, I think the discussion would benefit from a slightly different perspective. There seems to be too much in terms of broadness of scope simultaneously with a demand for specific cost- effectiveness numbers and recommendations, goals that are hard to reconcile in a single effort. Sacrificing more in terms of generality and focusing on specific dimensions would allow one to go deeper into the discussion of instruments available and potential targets. But, even like this, it would be little more than a leap of faith to really move into target setting. Maybe under ambitiously, it seems to me that the ideal would be to take a further step back and try to define specific issues that seem of paramount importance and promising interventions related to these issues, based on the evidence currently available.

The range of questions proposed under the Peaceful and Stable Societies item of the Post-2015 Consensus Prooject is truly wide - from civil wars to homicides, and to violence against children and women. Despite the authors' commendable efforts in trying to paint a broad picture of the major issues and challenges faced on these various fronts, any discussion trying to touch upon all of these at the same time will end up being somewhat fragmented and superficial. An alternative would be to have a more structured approach and, based on that, a more focused view.

Two questions could help in trying to achieve this objective. First, which of these issues could deliver potentially higher benefits? Second, which of them would be prone to more- or-less standardized interventions, which could then be seen as policy packages to be supported by international organizations and donors? I believe that the answer to both of these questions points to the desirability of an increased focus on common crime and the violence derived from it.

As Fearon and Hoeffler correctly stress in the introduction, deaths derived from common crime in societies subject to chronically high levels of violence far outweigh mortality from civil and military conflicts. From the perspective of the first question proposed in the previous paragraph, this would suggest that a focus on common crime and violence would be a good choice. It is maybe true that there are potentially

greater losses in infrastructure and state capacity in civil conflicts, but these are costs that are even more difficult to quantify, so it is hard to use them as a case for devoting attention instead to civil conflicts. In addition, it is important not to understate the threat to state capacity, the business environment, and social development that can be posed by chronically high levels of violence, organized crime, and the corruption that sometimes follows it.

One additional point overlooked in much of the discussion of the project and also in the assessment paper is the heterogeneous nature of civil conflicts and common crime, and the relevance that this heterogeneity has for the design of potential interventions and establishment of goals. This point is directly related to the second question raised before. Civil conflicts have a political origin. To varying degrees, they reflect the fact that relevant political agents in a given society have not come to an agreement on the institutional setting and rules that govern the distribution of political power and economic resources. They are conscious and direct challenges to the institutional rules that govern a country. In other words, there is not an obvious outcome that would be regarded as positive by virtually all of the affected population. In some sense, ex-ante, it is not consensual among the involved parties what a good outcome is. To think about standardized interventions and goal setting in these contexts seems, in my view, little more than wishful thinking.

Chronic violence derived from common crime, on the other hand, is a problem that affects vast populations in the developing world and that come, in one way or another, from the incapacity of governments to provide different types of public goods – from education and a good environment for employment to grow, to an effective justice system and efficient police forces. Virtually the entire population of affected countries would welcome effective interventions that indeed reduced crime and violence. From this perspective, it also seems much more natural and realistic to focus the discussion on crime and chronic violence, rather than on civil conflict.

Within the focus on common crime, there is one particular feature that distinguishes countries with chronically high levels of violence, shown in Figure 1 of the assessment paper: of all homicides, 72% of victims are male. What distinguishes societies subject to chronically high violence, in the end, is an astonishingly high fatality rate for young men. In these cases, mortality due to violence is the single most important cause of death for prime-aged males. It can represent losses in life expectancy at birth above 1 year for the overall population, and two times this number for men. These can indeed be seen as situations of endemic violence that could certainly benefit from focused interventions.

Other types of violence – such as violence against women and children – are certainly extremely serious social issues, but are of a different nature and require different interventions. Societies with high levels of violence against women, for example, are oftentimes not societies with high overall levels of crime and violence. While common crime and violence seem to be closely connected to socioeconomic conditions and state policies in the area of public security, violence against women and children usually have

more of a cultural nature, and therefore would require other types of policies. For all these reasons, and given my own expertise, the remainder of this paper focuses on common crime and the violence derived from it.

A Proposed Framework for the Analysis

Given the more focused question proposed in the introduction to this note, it would be useful to have an informal theoretical framework guiding the discussion. One potentially useful framework – though certainly not the only one – would be that from the economic theory of crime. In that perspective, a natural starting point would include, on one side, the potential “supply of criminals” and, on the other side, the set of repressive policies adopted by the state. The so called potential supply of criminals would be determined by socioeconomic conditions, such as educational levels in the population, inequality, labor market opportunities, social norms, family structures, etc. These would jointly determine the predisposition of different groups of individuals within a population to engage in criminal activities. The repressive policies adopted by the state, in turn, would include the efficiency of police forces and the design and efficiency of the punitive and restorative justice systems, among others, and would jointly determine the probability and severity of punishment of potential criminals.

From an economic perspective, the interaction between these two sides would be summarized by the decision of a given individual – with certain socioeconomic characteristics and within a given economic environment, subject to a set of repressive policies implemented by the state – to engage or not in criminal activities. This interaction would then lead to an “equilibrium level” of crime and violence in a given society.

By providing a structured framework within which one can think about the crime phenomenon, this theory also points to the different dimensions where interventions can take place. The types of policies most commonly associated with public security are those related to the repressive side of this equation: the presence and efficiency of police forces (as affecting the probability of punishment) and the extent of punishment imposed by the justice system on those who are found guilty. But the other side of this equation should also be seen as a potential dimension over which policies can affect the incidence of crime and violence. This dimension would be related to the skills of individuals when entering the labor market, support for troubled youth (more likely to engaged in crime), and improved overall socioeconomic conditions. All of these factors have been found to be related to the involvement of individuals in criminal activities (Aizer, 2009).

A theory such as this one is developed in Soares (2014), who uses it to put in perspective the existing literature on the welfare costs of crime and violence. Within this framework, these costs can be classified as: (i) public and private security expenditures; (ii) losses from goods stolen or destroyed (if one ignores the welfare of criminals in the calculation); (iii) subjective utility loss from victimization (physical injury, potential death, and psychological trauma from victimization); and (iv) welfare

losses from changes in behavior to avoid crime (changes in consumption patterns or in just in behavior, such as avoiding certain areas of a city at certain hours). In reality, most of the estimates available on the welfare costs of crime and violence refer to the first three points on this list, while ignoring the fourth one, which may nevertheless be very sizeable.

Cost of Crime and Violence

The most common methodology used to calculate the welfare costs of crime and violence, which also is the one that receives most attention in the assessment paper, is accounting. This follows the basic logic from the economic model of crime and tries to add up all dimensions of expenditures and other types of costs that can be attributed to the existence of crime. So, to some extent, these would be estimates of the overall loss of welfare that can be attributed to the existence of crime itself, including possibly the value of property lost or destroyed, medical expenditures, subjective costs of pain and suffering, expenditures with police and the public justice system, etc. But, in fact, each particular study considers different dimensions of the set of all potential costs, and there is no single framework that is systematically applied in all the various calculations that have been performed in the literature (see, for example, Miller et al, 1993, Londoño and Guerrero, 1999, Brand and Price, 2000, and Mayhew, 2003). So it is not entirely clear to what extent the various numbers presented in the literature, and also those discussed by Fearon and Hoeffler, relate to the same dimensions of costs. It would be useful, therefore, to have a more standardized approach adopted as benchmark for all studies in the area. For the specific case of the assessment paper, it would be helpful to have spelled out explicitly in the text what dimensions are being considered in each case. The broader question with the different results from the accounting approach is whether we are really comparing oranges to oranges across the different sets of numbers available. And, if so, what specific oranges are being taken into account.

Disregarding the issue of implementation, the accounting methodology is useful as a strategy to give a broad overview of the extent of the problem of crime and violence in a society. Still, in reality, it has very little use in terms of public policy analysis or goal setting. There is a conceptual confusion that appears time and again in the discussion on welfare costs of violence within the accounting framework. From the perspective of alternative policies being considered, one should compare marginal benefits to marginal costs. How would an additional dollar spent on reducing violence through some specific policy affect the likelihood of a homicide? What is the social value of such a reduction in the likelihood of a homicide? These are really the relevant dimensions of the costs of violence and of the benefits of potential interventions that are useful from a public policy perspective. These are also the dimensions that should be considered when deciding whether a certain pre-established target for reduction in crime rates is feasible and, more important, socially desirable, given the costs of achieving such target.

There are two methodologies that, despite other limitations, come closer to providing the numbers that one should look for when setting targets and deciding on optimal policies: marginal willingness to pay and contingent valuation. The first of these strategies tries to assign values to marginal reductions in crime or violence based on individuals' market behaviors that partly reveal the value they attach to safety, or based on economic models that simulate individuals' preferences (for example, Thaler, 1978, Lynch and Rasmussen, 2001, and Soares, 2006). The second strategy – contingent valuation – tries to unveil individuals' subjective valuations for marginal changes in crime and violence based on hypothetical questions about different crime scenarios and corresponding policy costs associated with them (see, for example, Ludwig and Cook, 2001, Cohen et al. 2004, and Atkinson et al. 2005).

These methodologies have somewhat standardized approaches that, in principle, could be applied in different settings and allow a similar framework to be used in the evaluation of the costs of crime in different regions of the world. Still, some of the most harmful dimensions of the costs of crime and violence tend to escape even these approaches. These dimensions are related to impacts on individual behavior and the economic environment, which can have lasting consequences in terms of productivity and long term development, and are difficult to measure or to quantify in monetary units.

For example, evidence suggests that violence and crime reduce the amount and quality of investments in education. Grogger (1997), Aizer (2009), Chamarbagwala and Morán (2011), and Monteiro and Rocha (2012) explore data from different settings indicating that children exposed to a violent environment have worse performance at school and, after growing up, accumulate fewer years of schooling. The impact of crime and violence on the business environment seems to be similarly important. Gaviria and Velez (2002) show that crime tends to reduce investment and employment in Colombia, while 52% of managers in Brazil state that crime is a major business constraint (data from the World Bank's Investment Climate Survey 2003). Krkoska and Robeck (2006) present evidence of the negative effects of crime on entrepreneurship for 34 transition and non-transition countries in Europe and Southeast Asia, based on a survey of 13,500 firms. Analogous results are also available for Jamaica (World Bank, 2003).

The papers cited above explore only some of the most important impacts of crime on economic behavior, which are pervasive and have been documented also in decisions related to time of work, opening hours of businesses, and choice of city of residence (see, for example, Hammermesh, 1999, Cullen and Levitt, 1999, World Bank, 2003). Still, most of these dimensions are difficult to quantify in a standardized fashion across different contexts, mainly because their assessment depends on the availability of very specific type of data and it is not easy to translate them into monetary units.

The problem of data availability is a serious one even when considering more aggregate numbers and standard dimensions of the costs of crime, such as those typically incorporated in the accounting methodology. Fearon and Hoeffler themselves, in order

to be able compare aggregate costs of crime across regions of the world, adopt implicit hypotheses that allow them to scale numbers calculated for the US to other contexts, based on proportionality assumptions. Similar assumptions are made in some widely cited studies, such as Londoño and Guerrero (1999). These assumptions are difficult to justify on theoretical or empirical bases, since they wash away all the heterogeneity that is likely to be present in diverse socioeconomic settings. In some sense, it is not clear what is added by calculations based on these assumptions, in comparison to simply listing the actual crime numbers that are available for developing countries. The demand for comparison sometimes forces authors to contrast numbers that are not really comparable. In the assessment paper, for example, the use of disciplinary practices to estimate maltreatment and the later comparison of this number to maltreatment in the US is questionable. These are data coming from different surveys, trying to get at different concepts, so the conclusion that “prevalence for low and middle income countries is about 60 percent higher than for the US” (p.18) seems far from granted. The problem of availability of information is not a trivial one and should not be disregarded when discussing what to monitor and what targets to set.

Target Setting

Target setting in a context that lacks so much in terms of comparable data, useful cost estimates, and well conducted impact evaluation studies seems to be, in my view, a very hazardous business. Fearon and Hoeffler suggest a 20% reduction in various dimensions of violence as an achievable target, but this number seems rather arbitrary. It is difficult to find any justification for such target, other than that 20% is as good a number as any other. Here again, I would advocate a more focused and conservative approach.

One dimension of crime and violence that is measured with roughly similar definition and reasonable accuracy across countries with a well-functioning health system is homicide. Despite not summarizing all relevant dimensions of crime and violence, homicide does represent a particularly negative outcome associated with these events, and one that represents a large part of the fear of victimization in countries with chronically high levels of violence. The World Health Organization considers that a homicide rate of 10 per 100,000 inhabitants constitutes the cut-off level defining a violence epidemic. Though this number also lacks deeper theoretical foundations, it has some grounding on the epidemiological profile of populations and on what seems to be relatively normal conditions in reasonably well functioning societies. So it might be useful as a benchmark in the discussion on target setting in the crime and violence area. A natural starting point would be to focus on countries that are currently above this threshold and try to provide guidance on policies that seem to work in these contexts.

Policies

Contrary to commonly held beliefs, some local governments in developing countries have been able to reduce substantially the levels of fatal violence through concerted policy efforts. In most of the successful examples available, violence levels remained high, but there was unmistakable improvement in citizen security and reduction in

homicide rates. These experiences should be better understood – and improved upon – so that a package of effective policies could be developed to be offered to countries seeking advice in the area. Two noteworthy examples are Bogotá, Colombia, and São Paulo, Brazil (for a more detailed discussion, see Soares and Naritomi, 2010).

Bogotá implemented a strategy inspired by the Development Security and Peace Program (DESPA), initially designed for the city of Cali. The program trusted on preventive and repressive policies, and adopted a public health approach to crime and violence. The public health approach was based on the close monitoring of the most serious types of crime, so it depended initially on the development of a reliable information and data management system. Following, several policies were adopted, including limited hours for alcohol sales, disarmament, improved police equipment and organization, and conflict management interventions. The Colombian program combined integrated initiatives, including public health, reclaiming of public space, and criminal justice improvements. As a result, there were major reductions in crime: homicide rates dropped from 80 per 100,000 in 1993 to 21 in 2004. Bogotá moved from having the highest homicide rate among capital cities in Latin America in 1994 to a position in the mid-2000s below Caracas, Rio de Janeiro, and Washington DC, and similar to that of Lima.

The experience of São Paulo followed in the footsteps of the success of Bogotá. In this case, policies implemented also included a combination of dry-laws, disarmament, and social interventions, as well as increases in incarceration rates and changes in police organization and operation. Against the Brazilian trend of increasing homicide rates, São Paulo recorded consistent declines in homicides starting in 1999. Similar combinations of policies were adopted in other cities in the metropolitan area of São Paulo as well. Diadema, for example, achieved success by coordinating various political and social actors and focusing on community cooperation: the number of homicides was reduced by roughly 70% between 1999 and 2005. In the city of São Paulo itself, the number of intentional homicides was reduced by 79% over a 10 year period.

The particular roles played by the different components of the interventions in these experiences remain somewhat unclear. But there is evidence from carefully conducted statistical studies in Latin America that can be helpful in shedding light on their importance. Examples include Biderman et al (2009), who analyze the role of dry-laws in the reductions of homicides in São Paulo, Di Tella and Schargrodky (2004), Soares and Viveiros (2010), and Garcia et al (2013), who look at the effect of the presence and organization of police forces in reducing crime, and Di Tella and Schargrodky (2013), who evaluate the role of alternatives to incarceration in reducing criminal recidivism. Still, overall, there is little evidence from developing countries on the effectiveness of alternative policies aimed at reducing crime rates. Sherman (2012) provides an overview of evidence on strategies to fight crime and violence from other settings, and also proposes guidelines for evidence-based crime policies that can be useful for the discussion.

Equally important in a strategy to reduce crime and violence is, as mentioned before, the understanding of their socioeconomic determinants and of the potential role of preventive interventions (acting on the socioeconomic and psychological dimensions). On this front, despite some promising developments in behavioral therapy in the US (see Heller et al, 2013), even less is known. In the case of developing countries, apart from a general understanding on the relationship between demographic composition, inequality, and crime (see discussion in Mello and Schneider, 2010 and Soares and Naritomi, 2010), there is very little micro evidence on the specific factors conditioning illegal behaviors among individuals at risk (exceptions include Rubio, 2007, and Carvalho and Soares, 2014).

Concluding Remarks

My take on the issue of crime and violence within the context of the Post-2015 Consensus discussion is probably much less ambitious than the Copenhagen Consensus initiative would want. At the current stage, it seems to me that we do not have enough established knowledge to move into target setting in this area, apart from maybe using the conservative WHO number of 10 homicides per 100,000 inhabitants as an initial benchmark. The priority, right now, should be the production of high quality comparable data and the creation of knowledge related to program effectiveness in the area of public security in developing countries.

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This paper was written by Rodrigo R. Soares, Professor of Economics at the Sao Paulo School of Economics. The project brings together more than 50 top economists, NGOs, international agencies and businesses to identify the goals with the greatest benefit-to-cost ratio for the next set of UN development goals.

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