

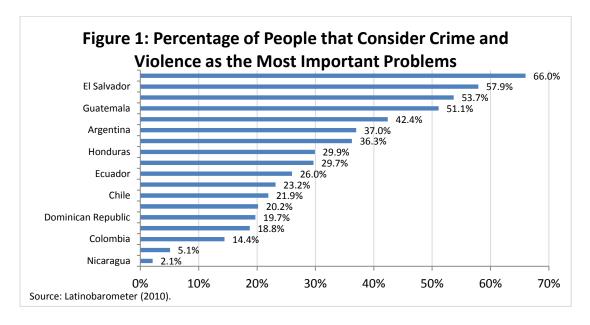
Research Department

Call for Research Proposals

The Cost of Crime and Violence in Latin America and the Caribbean (RG-K1109 and RG-K1198)

I. Justification and Background

Crime and violence are the top concerns of citizens in Latin America and the Caribbean (Figure 1) and absorb a substantial amount of government resources and efforts in the region. Evidence shows that these social evils are obstacles to economic growth and development, undermining physical, human, and social capital, and disproportionately affecting the most vulnerable groups (Heinemann and Verner, 2006: 7).



In this context, measuring the costs of crime and violence is a first step towards understanding and addressing the full consequences of the problems, highlighting their magnitude relative to other public policy challenges; helping governments in the region to set priorities in their agendas and public debates; providing empirical support for more resources for prevention; and importantly, equipping policymakers with the tools to assess the return on investment in prevention efforts. McCollister, French, and Fang (2010) and Roper and Thompson (2006) add that the results of cost studies also allow for the estimation of the value of social programs that address situations of crime and violence.

Against this background, this project aims to increase knowledge on the tangible and intangible costs of crime and violence in Latin America and the Caribbean and contribute to the development of standardized methodologies for a systematic, robust, and comprehensive analysis.



II. Conceptual Framework and Literature Review

1. Conceptual Framework

Although related in many ways, crime and violence are two different concepts. Violence can be defined as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation" (WHO, 2003). For the World Health Organization, interpersonal violence acts, which would trigger tangible and intangible costs, include abuse and violation of children's rights, intrafamily violence, maltreatment of old people, sexual violence, violence in the workplace, violence by and against youths, and other violent acts.

Crime is committed when criminal law is infringed. In this vein, Fletcher (1998) defines crime as any activity punishable through criminal prosecution. According to Grispigni (1928), crime is a disruptive human behavior that poses a serious risk to the coexistence and cooperation of individuals in a society. In turn, Ashworth (2000; 2003) pinpoints that the legal classification of a behavior as a crime entails social disapproval of such behavior, leading to the imposition of sanctions against the person responsible.

Crime can be violent, but not all crime *is* violent. For example, white-collar crimes are generally nonviolent. Moreover, not all violent acts are classified as crimes. The legal status of violence varies with context: for example, domestic violence or psychological violence—such as stalking—may be considered a crime in one country and not in another. For the purpose of this call for proposals, "violence" refers to activities and behaviors that intentionally cause or threaten to cause harm, regardless of whether they are sanctioned as crimes under the prevailing legal framework of the countries analyzed.

The "Global Report on Crime and Justice" (UN, 1999) provides a classification of crimes, including crimes against people, crimes against property, economic crimes, and crimes associated to trafficking in illegal goods and services.

Crimes against people encompass homicide, assault and battery, rape, and kidnapping, among others. Homicide is defined as an unlawful death purposefully inflicted on another person. Assault and battery refers to a physical attack on another person that results in personal injury. Rape is understood as a sexual encounter without valid consent. Kidnapping means depriving an individual of his or her freedom—without a court sentence—to demand a ransom or the like.

Crimes against property are traditionally confined to theft and robbery, although a broader view would also include those known as economic crimes. Theft is defined as the misappropriation of property without the owner's consent. Robbery is defined as the misappropriation of property without the owner's consent by means of force or fear. Economic crimes refer to swindles and frauds; usury, willful use of bank accounts; fraudulent procurement of loans; tax crimes or infringements; crimes against industrial property and intellectual copyright; and similar infringements (Olavarría, 2005: 63).

According to CICAD and OAS (2004), crimes associated with trafficking in illegal goods and services comprise transactions involving "illegal products whose production and consumption is completely forbidden, or strictly regulated, and the exchange of which entails serious infringements punished with severe criminal penalties." These criminal activities include "trafficking in drugs and illegal substances, trafficking in stolen vehicles, trafficking in endangered animal species and endangered plant species and varieties, trafficking in human organs, trafficking in nuclear materials and radioactive substances, trafficking in firearms, ammunition, explosives and other related material, trafficking in cultural goods, including antiques and works of art, clandestine and illegal gambling and

betting, trafficking in human beings, illegal immigration, counterfeiting of products, and forgery of administrative documents and trafficking therein" (CICAD and OAS, 2004).

1.1 Tangible and Intangible Costs of Crime and Violence

The notion of "cost of crime" refers to the consequences stemming from crimes against property and people, and those related to trafficking in illegal goods and services, that affect the wellbeing of the victims and society. Such consequences are likely to be economically valued (Olavarría, 2005: 21). In turn, the "cost of violence" conveys the estimated economic value of the damages caused by the infliction of, or threat to intentionally inflict, force against oneself, another individual, a group, or the community.

Tangible costs refer to those costs that, when reduced or eliminated, make resources available for other purposes, which does not happen with intangible costs (Pérez, Wilson, and Valencia, 2003: 33–35). Tangible costs are investments, expenses, and/or material losses incurred by people, organizations, and communities to avoid being victims of criminal action and violence, as well as the costs of activities entailed to identify and punish the offenders concerned.

Intangible costs, on the other hand, range from distress, grief, suffering, and loss of quality of life experienced by the victims (CICAD and OAS, 2010; McCollister, French and Fang, 2010); to effects on the labor market, personal trauma, and changes in regular behavior (Soares, 2009); to fear of being victimized or attacked; to loss of interpersonal trust and deterioration of social capital or declining peace and freedom.

1.2 Cost Estimation Methods

Estimating the cost of crime and violence is a complex exercise that usually requires the use of sophisticated methodologies. These methodologies generally include contingent valuation, hedonic prices, and accounting of losses and expenses. Recently, a new method known as "life satisfaction" has emerged.¹

Cohen (2007) groups these methodologies under bottom-up and top-down. The top-down approach aims at estimating the total cost of crime and violence from a single source, while the bottom-up approach aims at identifying all the individual costs and adding them subsequently. These approaches make it possible to estimate both tangible and intangible costs. Accounting of losses and expenses is classified as a bottom-up method; whereas contingent valuation, hedonic prices, and life satisfaction, are methods that would be classified as top-down methods.

The contingent valuation method aims to identify a person's or community's willingness to pay to improve or prevent the deterioration of their wellbeing, or to compensate for damages or an unrealized improvement (Mora, 2002). In turn, under the hedonic prices method, the value of an asset would be the sum of the values given to its features, so that the price of a property, for instance, would be established by the features of the property, the neighborhood, and the social and environmental conditions, such as segregation and crime levels of the neighborhood (Heras and Maier, 2010). Thus, the cost of crime and violence could be measured with this method by estimating the differences in the price of properties (Glaesser, 1999). While the contingent valuation method is based on "stated preferences," determined by asking the interviewee directly about his or her willingness to pay for or to be paid for crime and/or violence reduction, the hedonic price method focuses on "revealed preferences," which are inferred from the effects of crime and violence, for instance, on the prices of property. Life satisfaction is an indirect estimation method, based on

¹ Graham and Chaparro (2010) explore the effects of victimization on happiness and health for a cross section of Latin American and Caribbean countries.



satisfaction surveys that infer the cost of crime and violence rather than by asking the interviewee to assign values directly (Cohen, 2007).

The accounting of losses and expenses method, on the other hand, identifies the following as costs: investments made by individuals and organizations to avoid being victims of crime and violence; the value of stolen and robbed goods; the income not received by victims as a consequence of the crime; costs of victims' health care; and expenses incurred by the State to deter crime, identify the offenders, and prosecute and punish them as established by the courts of justice (Olavarría, 2010). This method also includes the identification intangible costs, such as uncollected taxes, losses derived from extortion practices, the weakening of the community's social capital, the social opportunity cost of somebody dedicated to crime instead of lawful activities, the opportunity cost of drug abuse, and the damage caused by drug production and trafficking (Olavarría, 2010).

2. Literature Review

Estimates of the cost of crime and violence date back to the early 20th century, including Smith (1900) and the study by the National Commission on Law Observance and Enforcement (1931) for the United States. In recent decades, there has been renewed interest in the economic consequences of crime and violence.² Even though studies have usually applied the accounting method and most of them have rendered tangible cost estimates, intangible costs have also been increasingly identified.

The efforts made in the 2000s to estimate the cost of crime based on stated preferences are mainly focused on the effect on property prices (see, for example, Bartley, 2000; Gibbons, 2004; and Ihlanfeldt and Mayock, 2009). More recently, the study by Bishop and Timmis (2011), based on the hedonic prices method, shows that the willingness to pay to avoid violent victimization increases by US\$0.10 for each additional incident. A study on the city of Bogota shows that higher-income segments of the population pay up to 7.2 percent of the value of their homes to prevent the homicide rate from rising by a standard deviation, and that the following socio-economic segment pays up to 2.4 percent of the price of their property for the same purpose (Gaviria et al., 2008).

The contingent valuation method has been used to estimate people's willingness to pay for a drug treatment program in the community to reduce crime (Zarkin, Cates, and Bala, 2000); for a firearm reduction program (Ludwig and Cook, 2001); for a robbery, assault, rape, and murder reduction program (Cohen et al., 2004); for initiatives to reduce common assault, actual bodily harm, and grievous bodily harm (Atkinson et al., 2005); and to estimate public support to proposals of rehabilitation or imprisonment of youths in conflict with the law (Nagin et al., 2006). In a study on Argentina, Ronconi (2009) concludes that the willingness to pay to avoid being victims of crime is considerably higher (more than twice as high) among actual victims of a crime than among nonvictims.

The accounting of losses and expenses method has been the one most widely used. Under this approach, Brand and Price (2000) classify costs that occur in advance of, as a consequence of, or in response to crime. The estimated total cost of crime in England and Wales, according to this study, amounted to GBP 60 billion³ (7 percent of GDP) in 1999 and 2000. Bowles and Pradiptyo (2005) show that 27 to 32 percent of this cost was attributable to young people 18 to 24 years old. The Brand and Price estimates were updated for 2003–04, showing a reduction of 9 percent in the cost crime between 1999–2000 and 2003–04. The cost of grievous bodily harm also came down, while actual bodily harm went up. Finally, the cost of health care and income not received due to sexual crimes increased as well (Home Office, 2005). For Australia, Rollings (2008) estimated the cost of crime at 4.1 percent of GDP in 2005, an increase from 3.8 percent of GDP estimated for 2001 by Mayhew (2003). In turn, Roper and Thompson (2006) estimated the cost of crime in New Zealand at 6.5 percent of GDP, 77 percent of which would correspond to private costs and 23 percent to public sector costs.

² For a review on the history of cost of crime estimates see Czabanski (2008).

³ In the Anglo-Saxon measurement system this amount is tantamount to 60 billion.



The categories analyzed include crimes against people, such as violent crimes, sexual crimes and robbery; crimes against private property, such as theft, home burglary, damage to property, and fraud; and other crimes with no direct victims, such as drug-related crimes, trafficking, and other similar ones.

U.S. studies during the 2000s based on the accounting method have usually addressed conceptual and methodological issues and present estimates on specific components, rather than the total cost of crime and violence. Lindgreen and Gifford (2000) estimate expenses in crime and violence in the United States at US\$120 billion; Cooter and Ulen (2000) calculate private prevention costs at US\$65 billion; and Witte and Witt (2001) value protection services and legal advice at US\$46.2 billion. Cohen (2005) discusses the cost components of crime and the state of the art techniques to estimate them. Cohen (2007) estimates the cost of rape for victims in terms of health care, income not received, legal costs, and prison costs for the offender. McCollister, French, and Fang (2010) calculate the costs for income not received by the victim and the aggressor, short-term medical expenses, and damages to property and material loss. Similarly, Cohen and Piquero (2007) estimate that a typical youth with high social risk factors for involvement in crime generates a cost that ranges between US\$4.2 to US\$7.2 million throughout his or her lifetime, 65 percent of which would correspond to costs associated to his or her criminal career-including the cost of committed crimes, the cost of the criminal justice system and imprisonment, and the opportunity cost of the aggressor—and the remaining 35 percent would be related to the cost of lost productivity due to school dropout and drug abuse. Mejía and Restrepo (2011) sustain that crime leads people to carry or wear less visible objects, not only for the fear of being robbed, but also to avoid revealing their wealth, which could turn them into the target of a criminal act.

A study on 10 countries in Europe, North America, and Oceania on the State's cost to face crime and violence, per thousand (°/oo) of GDP, concludes that Australia's expenditure was 10.53, Austria's 12.60, Canada's 11.25, Denmark's 7.64, England and Wales' 15.07, France's 8.26, Germany's 10.43, Holland's 11.57, Sweden's 10.34 and United States' 15.64 (Van Dijk and Waard, 2000).

Studies about the cost of violence have produced a wide range of findings. Those gathered by the World Health Organization (WHO, 2004) show that the estimates of homicide cost range between US\$15 thousand in South Africa, to US\$602 thousand in Australia, to US\$829 thousand in Austria, to more than US\$2 million in the United States. The same source indicates that in the United States, the cost of child abuse represents 1 percent of GDP, the cost of intrafamily violence has reached 0.1 percent of GDP, and the aggregate cost of violence is an estimated 3.3 percent of GDP. In turn, Pfizer (2001) estimates that the aggregate cost of crime and violence is tantamount to 5 percent of industrialized countries' GDP or 14 percent of low-income countries' GDP.

In Latin America, Londoño, Gaviria, and Guerrero (2000) estimate the cost of violence on goods and people at 14.2 percent of the Latin American GDP, the loss of human capital at 1.9 percent of GDP, the loss of capital resources around 4.8 percent of GDP, and the transfers of victims to aggressors around 2.1 percent of GDP. Along these lines, the study by Acevedo (2008a) estimates the cost of crime and violence in Central America at 7.7 percent, including costs for citizens, actions by the control system, and health care.

National case studies have produced a wide array of estimates and categories of costs. A World Bank report (World Bank, 2007) shows that the cost of crime in Trinidad and Tobago would have been 1.6 percent of GDP in 2003, including costs of lost productivity, funerals, and security for companies. On the other hand, this study indicates that the cost associated to crime in Jamaica for health care, lost productivity, and public expenditure in security reached 3.7 percent of GDP in 2001; and if Haiti, the Dominican Republic, Guyana, and Jamaica could reduce the homicide rate to the level reported by Costa Rica, they would experience an increase of economic growth rates of 5.4 percent, 1.8 percent, 1.7 percent, and 5.4 percent respectively. In turn, studies on crime and violence in Central America

5 | Page

⁴ An exception to this trend is the study conducted by Anderson (1999), who estimated that in 1997 the aggregate cost of crime in the United States was US\$1.7 trillion.



affirm that in 2006 the aggregate costs—proportional to GDP—incurred in health care, public security and justice administration, home and companies security, and material lost amounted to 7.7 percent in Guatemala, 10.8 percent in El Salvador, 9.6 percent in Honduras, 10 percent in Nicaragua, and 3.6 percent in Costa Rica (Acevedo, 2008a). A study by the UN (2007), on the other hand, estimates the cost of crime in Guatemala and El Salvador at 7.3 percent and 11.5 percent respectively.

In a comparative study, Londoño and Guerrero (2000) analyze the cost of health, material loss, lost productivity, investment, labor and consumption, and transfers, concluding that the cost of crime and violence represents 24.9 percent of GDP in El Salvador, 24.7 percent in Colombia, 11.8 percent in Venezuela, 10.5 percent in Brazil, 5.1 percent in Peru, and 12.3 percent in Mexico.

In country specific studies, the work by Acevedo (2008b), based on health, institutional, security, and material loss costs, estimates the cost for El Salvador in 2007 at 10.9 percent, one-tenth above its own estimates for 2006 and considerably below Londoño and Guerrero estimates for the late 1990s. The study carried out by Olavarría (2005) indicates the cost of crime in Chile in 2002 was 2.06 percent of GDP, based on the analysis of costs to avoid victimization, the value of the goods robbed and stolen and frauds, the cost of intrafamily violence, and the State's expenditure. Based on victimization surveys, Ronconi (2009), in turn, estimates the cost of crime in Argentina at 14.2 percent of GDP, including lost production, preventive measures, feeling of insecurity, value of stolen property, and damage to physical and mental health. In addition, Olavarría (2009) calculates the cost of drugs in Chile in 2006 at 1.03 percent of GDP—including costs for supply and demand reduction and lost productivity, and hospital, prison, and funeral costs—and the size of the drug market in said country at US\$134 million. On the other hand, a study on Brazil concludes that had there been a 10-point reduction in the homicide rate for every 100,000 inhabitants, an additional GDP increase between 0.7 percent and 2.9 percent would have been recorded (World Bank, 2006).

Studies on crime and violence tend to focus on the identification of tangible costs, given the difficulty, lack of data, and assumptions—not always real—in estimating intangible costs. On this matter, Dolan et al. (2005) argue that estimates of intangible costs, such as distress, grief, and suffering experienced by victims, are not very robust. Using a method based on the estimate of "Years of Healthy Life Lost" (YHLL)—considered more tenable—they conclude that rape is the crime generating the most extensive loss throughout life, followed by bodily harm, such as common assault, grievous bodily harm, murder, robbery, and other sexual crimes. The study on England and Wales (Home Office, 2005) distinguishes between YHLL and violent crimes included in the "British Crime Survey" (BCS). These estimates suggest that physical and psychological damages resulting from violent crimes accounted for 50 percent of the total cost of crimes and violence against people and households in 2003–04, implying a reduction from the previous calculation made by Brand and Price (2000). The study by Roper and Thompson (2006), using the same method followed by the Home Office study (2005), calculates intangible costs of violent crimes (robbery, sexual crimes, and the like), concluding that intangible costs amounted to 43.8 percent of the total cost of crime and violence in New Zealand in 2003–04.

McCollister, French, and Fang (2010) take a different approach to estimate the intangible cost of crime and violence. These estimates are focused on rape and sexual crimes, robbery and aggravated assault, and homicide. The estimate of the cost of distress and suffering derived from these crimes was based on legal redress to the victims. The authors add an adjustment for the risk of homicide. The results from the calculations show that homicide is the crime generating the highest intangible costs, followed, by far (in descending order), by sexual crimes, aggravated assault, robbery, arson, burglary, carjacking, and other robbery and theft.

Latin American studies for the 2000s mainly gather tangible costs of crime and violence, although some of them also identify intangible costs. Among them, the study by Londoño and Guerrero (2000)—based on surveying the willingness of people to pay for living in a violence-free context—estimate that the deterioration of the investment and productivity environment represents 1.8 percent of GDP in Latin America, whilst in the case of consumption and labor, it implies a further 5.3 percent of GDP. In turn, the study conducted by Acevedo (2008a) estimates—based on

compensations that would have been received by victims if the values used by the UK Department of the Environment, Transport and the Regions (DETR) had been applied—that the emotional damage resulting from crime and violence in Central America in 2006 would have been equivalent to 2.2 percent of the subregion's GDP. ⁵ Using the same method, Acevedo (2008b) estimates the emotional damage for 2007 in El Salvador at 2.5 percent of GDP. In the case of Argentina, in the aforementioned study by Ronconi (2009), the estimate about the willingness to pay among those who have been victims of crime and those who have not could be presumably capturing the (intangible) cost generated by the suffering or grief from experiencing such a situation.

On the other hand, a World Bank report about the Caribbean (World Bank, 2007), though with no monetary value allocation, identifies other intangible costs of violence, such as the effects on social capital, on everyday behaviors, and especially on recreational activities outside the home. In Jamaica, residents of neighborhoods with higher criminal rates suffer the effects of stigma, which is translated into further difficulties to find a job. In the Dominican Republic, the main intangible costs of crime are expressed in a number of activities citizens avoid for fear of being victims of crime, such as leaving the home unattended, participating in recreational activities, going out at night, or visiting friends and relatives. In the case of Haiti, people avoid going to Port-au-Prince or closer big cities, shopping at the local market, visiting friends or relatives in their home towns, going to the bank, visiting neighbors, going to work, or going to recreational places.

The relationship between crime and violence, as well as its translation into cost, is complex. On the one hand, crime and high levels of violence may inhibit social relationship practices and the strengthening of bonds of trust, but organized criminal groups and/or gangs are, though disruptive, also a form of social capital. The study by Demoscopia (2007) shows that the *Maras* in Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua are involved in drug and arms trafficking, kidnapping, contract killings, robbery, assault, extortion, "tax collection" from neighbors and shopkeepers, threats, and organized crime. On the other hand, the study conducted by Olavarría and Allende (2012) shows that in the neighborhoods of Santiago, Chile in which trust among neighbors is stronger, crime and violence rates are lower.

This summary shows that studies based on hedonic prices and contingent valuation methods have tended to focus on relatively limited dimensions of costs from crime and violence. It also shows that the accounting method tends to identify the total cost of violence in a specific country or region, and that the use of the accounting method could include the analysis of the willingness to provide comprehensive estimates of the tangible and/or intangible costs of crime.

III. Project Objectives and Requirements

The objective of this project is to increase the knowledge on the tangible and intangible costs of crime and violence in Latin America and the Caribbean, and contribute to the development of standardized methodologies for a systematic, robust, and comprehensive analysis.

The IDB will finance studies that estimate the tangible and/or intangible costs of crime and violence in one or more countries in the Latin American and Caribbean region. Particular interest will be placed on studies that offer a comprehensive approach to estimating costs by type of crime or violent act. Proposals that develop a full methodological framework will be given consideration, even if the framework can only be partially applied from an empirical perspective due to data limitations in a given country.

7 | Page

⁵ The cost of emotional damage by country, proportionate to GDP, would be as follows: Guatemala 2.3 percent, El Salvador 3.4 percent, Honduras 2.4 percent, Nicaragua 3.1 percent, and Costa Rica 0.9 percent (Acevedo 2008a: 14).

Proposals should include the following sections:

- a) Purpose and theoretical framework: This section should introduce the research question and include a brief discussion of the problem, the theoretical framework to be used, and the relevant literature.
- b) Methodology: This section should identify the methods and techniques to be employed, explain how the data will be obtained, and, if applicable, describe the type and size of the sample to be used.
- c) Schedule of activities: This section should include the activities to be conducted within a timeframe that meets the terms stated in the project schedule below.
- d) Researchers: The proposal should identify the senior researcher and coresearchers, and describe their individual functions in connection with the schedule of activities proposed.

In addition, the following information should be sent in separate files:

- A budget table specifying the terms and necessary resources for the study. The table should break down the items financed by the IDB and, if applicable, those financed by the research institution or team of researchers. The budget should indicate amounts allocated to professional fees, overhead, and other important research expense categories.
- Name and curricula vitae of senior researcher and coresearchers (three pages maximum per researcher). The research team should demonstrate capacity to meet the project objectives, including relevant experience. In proposals submitted by institutions, please remember that subsequent replacement of researchers originally registered will need to be approved by project coordinators, but the senior researcher should lead the project until its completion.

The research proposals and different drafts of the research papers can be submitted in English, Portuguese, or Spanish.

IV. Selection Criteria and Proposal Submission

Both private researchers and research-related institutions may submit proposals. ⁶ The final number of selected proposals will depend on both overall quality of the proposals and the funding required. The selection process will promote representation of geographical subregions of Latin America and the Caribbean.

The IDB will contribute up to US\$35,000 to each selected study. Projects that seek cofinancing from other institutions are strongly encouraged.

If selected, institutions should provide the name and contact information of their legal representative, duly empowered to sign contracts with the IDB.

Proposals should be submitted no later than June 15, 2012 (6:00 pm Eastern Standard Time) to the following e-mail address: CostosCrimenViolencia@iadb.org.

⁶ Multilateral organizations, and IDB staff (and individuals otherwise contractually linked to the Bank) and their relatives cannot submit proposals.

V. Coordination and Schedule

The project will be coordinated by Gustavo Beliz (gustavob@iadb.org), Modernization of State – Lead Specialist in the Institutional Capacity of the State Division.

An Advisory Committee will oversee the project. The members are:

- Daniel Mejía Londoño
- Rodrigo Soares
- Ana Corbacho
- Carlos Scartascini

The tentative schedule of activities is as follows:

- May 8, 2012: Dissemination of the call for proposals.
- June 15, 2012: Deadline for submission of research proposals.
- July 2nd, 2012: Announcement of preselected research proposals.
- July, 2012: Inception Workshop in Washington D.C. to discuss proposed methodologies and data requirements for the selected proposals. The participation of the project's senior researcher will be financed by the IDB. After this workshop, and due agreement between the IDB and the researchers, the formal contract will be signed. It is expected that the inception workshop will take place during the second week of July.
- September 17th, 2012: Deadline to submit Progress Report.
- December 10th, 2012: Deadline to submit the final version of the research paper.
- January, 2013: International Seminar to present findings. Publication of studies on IDB citizen security website. It is expected that the seminar will take place during the second half of January.

VI. Financial Contribution

The IDB will contribute with up to US\$35,000 per study, according to the scope of the work proposal.

The payment schedule is as follows:

- 30 percent within 15 days of the formalization of the agreement between the IDB and the corresponding research team or institution.
- 30 percent within 15 days following the approval of the Progress Report.
- 40 percent within 15 days following the approval of the Final Report.

REFERENCES

- Acevedo, Carlos. 2008a. "Los costos económicos de la violencia en Centroamérica." El Salvador: Presidency of the Republic, National Council of Public Security.
- ———. "Los costos económicos de la violencia en El Salvador." América Latina Hoy, 50: 71–88.
- Anderson, David. 1999. "The Aggregate Burden of Crime." *Journal of Law and Economics*, Vol. XLII: 611–42.
- Ashworth, Andrew. 2000. "Is the Criminal Law a Lost Cause?" Law Quarterly Review, 116: 225–56.
- ———. 2003. *Principles of Criminal Law.* Oxford, UK: Oxford University Press.
- Atkinson, Giles; Healey, Andrew; Mourato, Susana. 2005. "Valuing the Cost of Violent Crime: A Stated Preference Approach." Oxford Economic Papers, 57: 559–85.
- Bartley, William. 2000. "Valuation of Specific Crime Rates: Final Report." National Criminal Justice Reference Service. Rockville, MD: NCJRS.
- Bishop, Kelly and Timmins, Christopher. 2011. "Hedonic Prices and Implicit Markets: Estimating Marginal Willingness to Pay for Differentiated Products Without Instrumental Variables." NBER Working Paper 17611. Cambridge, MA: NBER.
- Bowles, Roger and Pradiptyo, Rimawan. 2005. "Young Adults in Criminal Justice System: Cost and Benefits Considerations." Centre for Criminal Justice, Economics and Psychology, University of York. Study commissioned by Barrow Cadbury Foundation.
- Brand, Sam and Price, Richard. 2000. "The Economic and Social Cost of Crime" in Home Office research study 217. London: UK Home Office.
- CICAD (Inter-American Drug Abuse Control Commission) and OAS (Organization of American States). 2004. "Programa de Entrenamiento de Formadores en materia de Normas y Técnicas de Lucha contra el Lavado de Activos y Financiamiento del Terrorismo. Manual del Instructor." CD ROM. Washington D.C.: CICAD/CICTE/OAS.
- ———. 2010. "Guía Metodológica para Estudios de Estimación de los Costos del Abuso de Sustancias Psicoactivas (Legales e Ilegales)." Preliminary Version.
- Cohen, Mark. 2005. The Cost of Crime and Justice. New York: Routledge.
- ———. "Valuing Crime Control Benefits Using Stated Preferences Approaches." Law and Economics Working Paper 08-09. Vanderbilt University Law School.
- Cohen, Mark and Piquero, Alex. 2007. "New Evidence on the Monetary Value of Saving a High Risk Youth." Law and Economics Working Paper 08-07. Vanderbilt University Law School.
- Cohen, Mark; Rust, Roland; Steen, Sara; and Tidd, Simon. 2004. "Willingness-to-pay for Crime Control Programs." *Criminology*, 42: 86–106.
- Cooter, Robert and Ulen, Thomas. 2000. *Law and Economics*. 3rd Ed. Cambridge, MA: Addison Wesley.



- Czabanski, Jacek. 2008. Estimates of Cost of Crime: History, Methodologies, and Implications. Berlin: Springer.
- Demoscopía. 2007. "Maras y pandillas, comunidad y policía en Centroamérica." Working Document. San José, Costa Rica: Demoscopía S.A.
- Dolan, Paul; Loomes, Graham, Peasgood, Tessa; and Tsuchiya, Aki. 2005. "Estimating the Intangible Victim Cost of Violent Crime." *British Journal of Criminology*, 45, Issue 6: 958–76.
- Fletcher, George. 1998. Basic Concepts of Criminal Law. Oxford, UK: Oxford University Press.
- Gaviria, Alejandro; Medina, Carlos; Morales, Leonardo and Nuñez, Jairo. 2008. "The Cost of Avoiding Crime: The Case of Bogotá." Borradores de Economía № 508. Cali, Colombia: Banco de la República.
- Gibbons, Steve. 2004. "The Cost of Urban Property Crime." Economic Journal, 114(499): F441-F463.
- Graham, Carol and Chaparro, Juan Camilo. 2010. "Los vínculos entre la inseguridad, la salud y el bienestar en América Latina y el Caribe: una exploración inicial basada en encuestas sobre felicidad." Draft pending publication.
- Glaesser, Edward L. 1999. "An Overview of Crime and Punishment." Working Paper, Preliminary Draft. Washington D.C.: The World Bank.
- Grispigni, Filippo. 1928. *Introduzione alla sociologia criminale*. Turin: Unione Tipografico-Editrice Torinese.
- Heinemann, Alessandra and Verner, Dorte. 2006. "Crime and Violence in Development: A Literature Review of Latin America and the Caribbean." World Bank Policy Research Working Paper 4041, October. Washington D.C.: The World Bank.
- Heras, Shanaka and Maier, Gunther. 2010. "El método de precios hedónicos en el sector inmobiliario y estudios de mercado de la vivienda. Una revisión de la literatura." SRE Documento de Estudio 2010/03. Viena Institut für regional-und Umweltwirtschaft, WU Viena Universidad de Economía y Empresa.
- Home Office. 2005. "The Economic and Social Costs of Crime Against Individuals and Households 2003/04. Home Office Online Report 30/05.
- Ihlanfeldt, Keith and Mayock, Tom. 2009. "Crime and Housing Prices." Department of Economics and DeVoe Moore Center, Florida State University.
- Lindgren, Sue and Gifford, Lea. 2000. "Criminal Justice Expenditure and Employment Extracts Program." Washington D.C.: US Department of Justice, Bureau of Justice Statistics.
- Londoño, Juan Luis; Gaviria, Alejandro; and Guerrero, Rodrigo (Editors), *Asalto al Desarrollo: Violencia en América Latina.* Washington D.C.: Inter-American Development Bank.
- Londoño, Juan Luis and Guerrero, Rodrigo. 2000. "Violencia en América Latina: epidemiología y costos." In: Londoño, Juan Luis; Gaviria, Alejandro; and Guerrero, Rodrigo (Editors), *Asalto al Desarrollo: Violencia en América Latina*. Washington D.C.: Inter-American Development Bank.
- Ludwig, Jens and Cook, Philip. 2001. "The Benefits of Reducing Gun Violence: Evidence from Contingent-Valuation Survey Data." *Journal of Risk and Uncertainty*, 22: 207–26.



- Mayhew, Pat. 2003. "Counting the Cost of Crime in Australia: Technical Report." Technical and Background Paper Series N° 4. Canberra: Australian Institute of Criminology.
- McCollister, Kathryn; French, Michael; and Fang, Hai. 2010. "The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation." Drug Alcohol Depend 108: 98–109.
- Mejía, Daniel and Restrepo, Pascual. 2011. "Crime and Conspicuous Consumption." CEDE Document, Ediciones Uniandes. Cali, Colombia: Universidad de los Andes.
- Mora, John James. 2002. Introducción a la teoría del consumidor: de la preferencia a la estimación. Cali, Colombia: Universidad ICESI.
- Nagin, Daniel; Piquero, Alex; Scott, Elizabeth; and Steinberg, Elizabeth. 2006. "Public Preferences for Rehabilitation versus Incarceration of Juvenile Offenders: Evidence from a Contingent Valuation Survey." Criminology and Public Policy, VI. 5(4): 627–51.
- National Commission on Law Observance and Enforcement. 1931. Report on the Cost of Crime and Criminal Justice in the United States. Washington D.C.: NCLOE.
- Olavarría Gambi, Mauricio. 2005. Costos económico del delito en Chile. Santiago, Chile: Government of Chile, Ministry of the Interior, Citizen Security Division.
- ———. 2009. "Estudio nacional sobre costos humanos, sociales y económicos de las drogas en Chile, 2006." Final Report. Santiago, Chile: CONACE.
- ———. 2010. "Costos de la violencia en América Central: marco conceptual y metodológico." Inter-American Development Bank. Estudio sobre Costos de la Violencia en América Central: Sistematización de Herramientas Metodológicas Estandarizadas para la Medición del Fenómeno. Washington D.C.: IDB.
- Olavarría Gambi, Mauricio and Allende González, Claudio. 2012. "Crimen en barrios: evidencia de Santiago de Chile." Programa de Estudios de Gobierno, Universidad de Santiago de Chile.
- Pérez, Augusto; Wilson, Ernesto; Valencia, Juan. 2003. "Estudio sobre los costos humanos, sociales y ede las sustancias psicoactivas." Inter-American Drug Abuse Control Commission. CICAD/OAS.
- Pfizer. 2001. "Responding to the Global Public Health Challenge of Violence." The Pfizer Journal, Global Edition, 11(1).
- Rolings, Kiah. 2008. "Counting the Cost of Crime in Australia: A 2005 Update." Research and Public Policy Series N° 91. Canberra, Australia: Australian Institute of Criminology.
- Ronconi, Lucas. 2009. "Los costos de la delincuencia en Argentina: estimación en base a Encuestas de Victimización." Laboratorio de Investigaciones sobre Crimen, Instituciones y Políticas. Universidad Torcuato Di Tella.
- Roper, Tim and Thompson, Andrew. 2006. "Estimating the Cost of Crime in New Zealand in 2003/04." New Zealand Treasury Working Paper 06/04. Willington, New Zealand: The Treasury.
- Smith, Eugene. 1900. The Cost of Crime. The New York Times; November 29, 1900.
- Soares, Rodrigo. 2009. "Welfare Cost of Crime and Common Violence: A Critical Review." In: World Bank, The Cost of Violence. Washington D.C.: The World Bank.
- UN (United Nations). 1999. Global Report on Crime and Justice. New York: Oxford University Press.



- ———. 2007. *Crimen y desarrollo en Centro América: atrapados en una encrucijada*. Slovakia: United Nations Publications.
- Van Dijk, Frans. and De Waard, Jaap. 2000. "Legal Infrastructure of the Netherlands in International Perspective." The Netherlands: Ministry of Justice.
- WHO (Word Health Organization). 2003. *World Report on Violence and Health.* Scientific and Technical Publication N° 588. Washington D.C.: WHO.
- ———. 2004. The Economic Dimension of Interpersonal Violence. Geneva, Switzerland: WHO.
- Witte, Dryden and Witt, Robert. 2001. "What We Spend and What We Get: Public and Private Provision of Crime Prevention and Criminal Justice." NBER Working Paper 8204. Cambridge, MA: NBER.
- World Bank. 2006. "Crime, Violence and Economic Development in Brazil: Elements for Effective Public Policy." World Bank Report N° 36525. Washington D.C. The World Bank.
- ——. 2007. "Crime, Violence, and Development: Trends, Costs, and Policy Options in the Caribbean." World Bank Report N° 37820. Washington D.C.: The World Bank and the United Nations.
- Zarkin, Gary; Cates, Sheryl; and Bala, Mohan. 2000. "Estimating the Willingness to Pay for Drug Abuse Treatment: A Pilot Study." *Journal of Substance Abuse Treatment*, 18: 149–59.