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# **Legal and Economic Factors Determining Success and Failure in the Fight against Organized Crime: An Empirical Assessment of the Palermo Convention**

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## **ABSTRACT**

The legal and economic analysis presented here empirically tests the theoretical framework advanced by Kugler, Verdier, and Zenou (2004) and Buscaglia (1997). This paper goes beyond the prior literature by focusing on the empirical assessment of the actual implementation of the institutional deterrence and prevention mechanisms contained in the United Nations' Convention against Transnational Organized Crime (Palermo Convention). A sample of 107 countries that have already signed and/or ratified the Convention was selected. The paper verifies that the most effective measures against organized crime linked to high level public sector corruption (that captures and feudalizes public sectors) are mainly founded on three pillars: (i) the introduction of more effective judicial decision-making control systems causing reductions in the frequencies of abuses of procedural and substantive discretion; (ii) the higher frequencies of successful judicial convictions based on evidentiary material provided by financial intelligence systems aimed at the systematic confiscation of assets in the hands of criminal groups; and (iii) the operational presence of government and/or non-governmental preventive programs (that are funded by the private sector and/or governments and/or international organizations) addressing technical assistance to the private sector, educational opportunities, job training programs and/or rehabilitation (health and/or behavioral) of youth linked to organized crime in high-risk areas (with high-crime, high unemployment, and high poverty).

An empirical jurimetrics model is for the first time developed for the above three areas of anti-crime policies in order to assess legal implementation of organized crime laws. In this context, the empirical results point that high-impact prosecutions and effective convictions against criminal organizations are less driven by incarceration of physical persons and more focused on disrupting the production function of criminal groups through asset forfeitures

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<sup>1</sup> This paper provides empirical results based on the author's *in situ* judicial system evaluations of 107 national criminal justice systems (conducted between 1993 and 2006). The legal research assistance of 235 focal teams of lawyers and economists within 107 countries is acknowledged. This work has also benefited from comments made by colleagues at seminars and conferences on law and economics of development at the University of South Carolina School of Law-Barnes Symposium- (US), the ITAM School of Law and Attorney General Office (PGR) in México, Oxford University St. Anthony's College (UK), United Nations Seminar on Counteracting Terrorism and Organized Crime (UNITAR, Madrid-Spain), Yale University (US) and by three anonymous referees.

that reduce the amounts of net worth aimed at expanding public corruption rings to feudalize States. At the same time, preventive policies aimed at diminishing the flow of youth into criminal activities will also tend to disrupt the street-based operational capacities of organized crime.

Accordingly, a paradox of criminal dissuasion emerges that requires the adjustment of Becker's (1968) framework when applied to organized crime. As a result of the jurimetrics-based analysis presented in this study, just relying on traditional legal sanctions to counteract organized crime (e.g. increased incarceration and/or extradition) will tend to create an incentive for criminal groups to expand their corruption rings (in order to protect themselves from higher expected sanctions) thus increasing the feudalization of the state by criminal groups while enhancing their operational capacities. This unwanted result of applying traditional criminal sanctions will occur if the network of criminal assets (net worth in the hands of licit and illicit businesses) is not hampered by intelligence and judicial authorities first. The jurimetrics-based results in 107 countries show that, in the absence of an active financial intelligence-based criminal assets forfeiture program, high-level corruption grows rapidly while, paradoxically, public sectors continue to devote more criminal justice system resources to incarcerating increasing numbers of organized crime members. At the same time, empirical analysis shows that higher probabilities of sanctions combined with stiffer sentencing guidelines in the books against organized crime members do not play their dissuasive role in the absence of preventive programs to reduce the flow of youth to criminal groups. This constitutes the paradox of criminal sanctions where more frequent and stiffer punishments applied to physical persons lead to higher levels of organized crime and higher level corruption. Deteriorations of institutional performance against criminal enterprises in Afghanistan and México and the recent 2001-2007 significant improvements experienced by Colombia and Jordan can be explained jointly by financial intelligence, judicial capacities, and preventive capabilities coordinated by public sectors and civil societies.

## Introduction

The 2000 United Nations' Convention against Transnational Organized Crime (Palermo Convention) constitutes the most global international legal reference in the fight against organized crime. It contains legal, judicial, investigative, intelligence, and preventive practices in the fight against organized crime.<sup>2</sup> Strongly influenced by a relatively small number of countries with a track record in developing domestic laws and practices on the matter (e.g. the United States, France, The Netherlands, and Italy), the Convention includes special investigative techniques<sup>3</sup>, such as the use of controlled deliveries, electronic surveillance, collaborating/protected witness programs, and asset forfeitures<sup>4</sup>. The Convention also enhances the capacities of States by offering a fast-track judicial and legal international cooperation<sup>5</sup> with the purpose investigating, prosecuting and processing organized crime groups. Furthermore, the Palermo Convention addresses preventive measures<sup>6</sup> within the anticorruption, private sector, and civil society domains<sup>7</sup>.

This paper aims at identifying and applying a functional empirical framework to assess the impact of the Palermo Convention different degrees of implementation within a sample of 107 UN member states. The legal and economic analysis presented here tests the theoretical framework generated by Kugler, Verdier, and Zenou (2004) and moves further by focusing on the identification of the institutional mechanisms that have proven to reduce the gap between *the letter of the Convention* and *the actual domestic laws in action* within a sample of 107 UN member states that have already signed or ratified the legal instrument. Country-specific cases of impact indicators are presented detailing the factors enhancing/hampering effective legal implementation within the counter-organized crime judicial, financial intelligence, and preventive areas. In this context, this paper will show that those countries where prosecutions and effective convictions against the criminal organizations have been more focused on disrupting the production function of criminal enterprises -- by reducing their net worth aimed at expanding public corruption rings -- have also experienced significant drops in organized crime levels as a result. At the same time, preventive policies - aimed at diminishing the flow of youth into criminal activities and preventing the illicit use of private businesses by organized crime - will be assessed in terms of their impact on reducing organized crime capacities.

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<sup>2</sup> For the entire text of the Palermo Convention refer to [http://www.unodc.org/pdf/crime/a\\_res\\_55/res5525e.pdf](http://www.unodc.org/pdf/crime/a_res_55/res5525e.pdf)

<sup>3</sup> *Id* at Art. 20.2 and Art. 27(b)

<sup>4</sup> *Id* at Art. 12.

<sup>5</sup> *Id.* at Art. 7.4, Art. 12, and Art. 13.1

<sup>6</sup> *Id.* at Art. 31.

<sup>7</sup> *Id.* at Art. 8 and Art. 9.

The analysis below focuses on the transnational nature of the most serious expressions of organized crime<sup>8</sup> and uses the theoretical framework presented by Kugler, Verdier, and Zenou (2004) in which oligopoly-driven market structures in the hands of criminal organizations engage in competition by corrupting public officials in order to avoid punishment and acquire market power over illicit markets. Under a stronger public sector governance framework, providing higher efficiency salaries for public officials and effective anticorruption policies, one could expect higher sanctions and higher probabilities of prosecution to work as a deterrence effect. On the other hand, under a weak governance environment, the traditional Becker (1968) and Levitt (1998) deterrence frameworks will tend to increase levels of organized crime and corruption within the public sector. Under this low-governance situation, increasing policing and enhancing expected sanctions will produce higher crime rates by making organized crime extend corruption rings aimed at controlling their territories and feudalizing the state domain in order to gain greater impunity and a reduction of actual expected punishment. One should therefore expect that a higher frequency of successful prosecutions against illegal political campaign financing and successful convictions of high-level corrupt judicial officials will create the proper environment for a more effective fight against organized crime groups.

The globalization of socio-economic life entails increasingly complicated interactions among individuals and organizations at national and international levels. Furthermore, the mix of democratization, deregulation, liberalization of international trade, and the privatization of state enterprises undertaken in many countries have intensified the need to adapt legal frameworks to the new nature and scale of socio-economic interaction (Buscaglia 1997: 34). For example, the ever increasing porosity of national frontiers to international human and financial flows gives rise to new types and scales of criminal behavior (Buscaglia 1994: 30-31; Milhaupt and West 2000). Within criminal jurisdictions, globalization has a dark by-product that is the result of combining an increasing cross-border porosity and the use of advanced technologies for trafficking and money laundering purposes by criminal enterprises (Buscaglia 2001: 235-239). In this context, there is an increasing need for the effective implementation of a common legal framework to be designed, interpreted, and enforced in a consistent, coherent, and predictable manner within nation states and across international borders through legal/judicial cooperation (Buscaglia 1995: 10-14).

The preventive, law enforcement, judicial, and intelligence legal tools instilled within the Palermo Convention, when ratified by a state, provide the potential for the most comprehensive set of policy measures to address organized crime.<sup>9</sup> Yet, as Watson (1978), Seidman (1978) and Berkowitz, Pistor and Richard (2003) show, most countries have transplanted international frameworks into their domestic legislations with different degrees

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<sup>8</sup> Data compiled data shows that the most frequent organized crimes are ranked (from top to bottom) as drug trafficking and smuggling of firearms, first and second, respectively, smuggling of cigarettes, car theft, consumer fraud victimization (the International Crime Victim Survey), and trafficking of human beings (human trafficking database of the United Nations Office on Drugs and Crime). Refer to Statistical tables showing the results of the study presented here can be found at: [www.derecho.itam.mx](http://www.derecho.itam.mx)

<sup>9</sup> Buscaglia, Gonzalez-Ruiz, and Ratliff (2005) at 13.

of success in their later implementation. The success of the legal transplant is mostly determined by the nature of the process used to adapt the legal instrument to the public/private institutional structure of the importing country and by legal idiosyncrasies of the domestic judicial environment. Berkowitz, Pistor, and Richard (2003) have also shown that prior familiarity with the transplanted legal instrument, gradual adaptation of the transplant to the local legal context, and the later frequent use of the legal instrument by legal intermediaries (e.g. judges and prosecutors) will drive more effective implementation. Transplanting legal rules and standards found within the Palermo Convention into domestic legislations and legal practice is no exception to this general rule.

### **Pre-Conditions for the Implementation of the Palermo Convention**

Abundant research has shown the significant positive impacts of a rule of law state on economic well being (Hayek 1960 and 1973; North 1988; Buscaglia 1994: 158; Maoro 1995: 5-60; de Soto 1996: 12-14; and Buscaglia and Dakolias 1999). For the purposes of the analysis contained here, a rule of law state consists of a social environment within which the enactment of formal and informal rules, their interpretations, application, and their enforcement operate in a coherent, consistent, and predictable manner through effective and efficient adjudication systems backed by a social consensus (Hayek 1973). As a derivation of this general condition, organized crime emerges as a direct result of a partial or total break-down of the rule of law within a society. Therefore, a society and state need to first take measures towards establishing a rule of law state in order to effectively counteract organized crime later. World Bank data show that that under the gradual presence of increasing levels of “voice and accountability” within the public sectors, civil societies will be able and willing to build effective social control mechanisms that will reinforce the states’ capacities to prevent and fight crime.<sup>10</sup> But when unaffordable licit and illicit costs are imposed on individuals and organizations by rapacious public officials, when unpredictable regulatory frameworks are applied to life and property, and when inconsistent applications of the laws are the norm, then systemic and high levels of organized crime find the natural environment to grow and prosper.<sup>11</sup> In this pernicious context, the national political structures and electoral systems that benefit from the financial infiltration of criminal funding need to be first reformed through greater transparency and much stronger political competition aimed at the possible replacement of the incumbent political actors before sustainable legal and judicial reforms aimed at fighting organized crime are achieved. Yet, such legal and judicial reforms tend to play against the interests of the political incumbent, thus blocking change. Under such circumstances, a generalized institutional crisis, where the state is perceived as not being able to confront criminal groups, can act as a catalyst of meaningful reforms. These crisis situations can be sometimes characterized by high levels of organized crime-related violence and entrenched public sector corruption at all levels affecting the well-being of the average voter. These

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Refer

to:

<http://web.worldbank.org/WBSITE/EXTERNAL/WBI/EXTWBIGOVANTCOR/0,,contentMDK:20771165~menuPK:1866365~pagePK:64168445~piPK:64168309~theSitePK:1740530,00.html>

<sup>11</sup> Refer to Milhaupt and West (2000).

types of institutional crises tend to challenge the privileged political position of incumbents forcing them to choose between a crisis-prone *status quo* that could cost them dearly in the next election, and the acceptance of legal/judicial reforms that could cost them dearly in the longer term, by limiting their capacities to benefit from illicit funding of their campaigns.

Many developed and developing countries have attempted to reform their laws and judiciaries as a result of their political and social efforts to strengthen democracy, to enhance the protections of human rights and to foster private sector investment. Yet, within the civil and criminal justice domains, an international comparative analysis demonstrates that legal and judicial reforms have shown mixed results around the world (Buscaglia and Dakolias 1999: 4). In this context, dysfunctional or limited judicial capacities to enforce and apply laws within the police, prosecutorial, and judicial domains are still serious impediments to enhancing public sector governance (Buscaglia 2001: 245).

Using a smaller sample of 67 UN member states, Buscaglia, Gonzalez Ruiz, and Ratliff (2005) show that transnational organized crime represents a constant source of poor public sector governance within the judicial system sectors worldwide. Moreover, organized crime is among the three most important factors associated with war and conflicts in Africa, Asia, and the Middle East (Buscaglia 2001). In this context, the Palermo Convention against Transnational Organized Crime has aimed at promoting uniform standards of international legal and judicial cooperation in order to “to prevent and combat transnational organized crime more effectively” (Art. 1 Statement of Purpose).<sup>12</sup> The law and economics of development approach applied here aims at identifying legal enactments, improvements in the scale and scope of financial intelligence operations leading to confiscation of criminal assets, and improvements in the interpretation and application of criminal statutes that have been able to reduce the growth of organized crime worldwide. Accordingly, one key aspect in the law and economics of growth/development literature applied to this paper focuses on identifying the characteristics of legal and judicial systems that are able to reduce organized crime as (Buscaglia 1997: 15-25). Within this discipline and based on empirical studies performed during the past ten years in 107 countries, the analysis below aims at accounting for the necessary conditions within the preventive, financial intelligence, and judicial systems that need to be present in order to combat organized crime with more effectiveness.

### **Institutional Feasibility of Legal Transplants and Economic Efficiency**

There are two main choices for a country when selecting the source of its laws. A country can adopt a law from within the evolution of its own socio-juridical tradition implemented through its own institutional mechanisms, or it can transplant rules from outside its political-legal zone of dominance (Watson 1978; Mattei 1993 and 1997). A key need in the analysis of legal transplants is to determine a framework for predicting which of the two options is the most effective to enhance the expected impact of the law. Watson (1978) and Berkowitz, Pistor, and Richard (2003) have shown the genesis and evolution of legal reforms linked to transnational transplants. Therefore, one should also aim at explaining

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<sup>12</sup> For the entire text of the UN Convention refer to [http://www.unodc.org/pdf/crime/a\\_res\\_55/res5525e.pdf](http://www.unodc.org/pdf/crime/a_res_55/res5525e.pdf)

why, from an international pool of laws available for transplant, certain rules and institutions are commonly used and later enacted in different jurisdictions while others are rejected.

To a greater or lesser degree, adopting the Palermo Convention requires a study of the feasibility of transplanting its clauses within domestic legal jurisdictions. The adoption of an internationally common legal understanding of transnational organized crime as “*a structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit*” (Article 2)<sup>13</sup> entailed treading towards the adoption of a common framework for legal and judicial cooperation. Before the signing of this UN Convention in the city of Palermo (Italy) in 2000, only 37 percent of all UN members possessed a legal definition of organized crime within their domestic statutes. By 2007, 138 signatories had ratified the Convention and 78 percent of all UN member states have adopted a legal definition of organized crime that is compatible with Article 2 above. Moreover, and in accordance to Article 32 of the United Nations Convention against Transnational Organized Crime, member states established a Conference of State Parties to the Convention with a mandate to improve the capacity to fight transnational organized crime through monitoring and technical assistance in the implementation of the Convention. This also represents a coordinated institutional framework to ensure the international transplant of a legal instrument.

The economic analysis of the law can provide an explanation and guide for legal transplants by applying tests to determine if the legal rules transplanted are also the most politically feasible choices for a subsequent efficient and effective implementation. In this case, an inter-temporal political cost-benefit analysis applied within each legal jurisdiction could provide an explanation of why 78 percent of all UN member states have already adopted domestic legal statutes complying with the UN Convention. Legal reforms are subject to the normal political supply and demand exercised by pressure groups from within or from outside the State.<sup>14</sup> In other words, public/private interests groups (licit or criminal groups) that may feel threatened or benefit by alterations in the incumbent legal system may be all ultimately partly responsible for the effective legal application, interpretation, and enforcement of new laws. That is, the costs and benefits assessed by these groups may ultimately explain the success or failure in legal enactments and implementations. Adapting this group-based cost-benefit analysis to the context of the Palermo Convention, the economic efficiency hypothesis proposes that different legislatures may compute the costs and benefits of legal rules differently because initial economic and governance factors (such as electoral rules or anti-public sector corruption programs) are different across different regions and nations. Under this scenario, legal jurisdictions and legislatures with lower levels of organized crime infiltration within the public sector and, thus, less corruption (i.e. high-quality governance) are more willing to accept the Palermo

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<sup>13</sup> At [http://www.unodc.org/pdf/crime/a\\_res\\_55/res5525e.pdf](http://www.unodc.org/pdf/crime/a_res_55/res5525e.pdf) (p. 4)

<sup>14</sup> Mattei, Ugo (1997) at 34-37.



Convention as a transplant and, accordingly, enact/implement legal measures against organized crime.

During the 1970s, a leading group of pioneer countries such as France, Germany, Italy, The Netherlands, the United Kingdom, and the United States of America sought a common international legal framework to be transplanted to other countries in order to combat criminal enterprises through international legal/judicial and operational mechanisms. However, the very legal definition of organized crime represented, at first, a barrier to an international agreement. In the legal domain, a few countries successfully pioneered the enactment of legal measures that criminalized conspiracy to commit a crime (e.g. The United States of America). Other national jurisdictions criminalized membership or participation in criminal enterprises (e.g. France). Illicit association as a form of criminal activity has been introduced into many criminal codes around the world, in particular in France, Italy, Spain and in Latin America.<sup>15</sup> Other countries had established crimes committed by groups as criminal offences. In Italy, these are called “associated crimes” or “Mafia-type crimes”. In the United States of America, legislators enacted the Racketeer Influenced and Corrupt Organizations Statute (the so-called RICO statute), which prohibits engaging in an enterprise involved in a pattern of criminal activity (racketeering). In the case of the US under conspiracy law and the Racketeer Influenced and Corrupt Organizations Act,<sup>16</sup> judicial criteria indicate that a “RICO enterprise” must entail an organizational structure that carries on its business by means of activities that are primarily criminal and where there is a high degree of probability that the criminal activities will continue in the future. In all of these country-specific laws, the judicial capacity to dismember a criminal organization was greatly enhanced by the enactment of innovative statutes.<sup>17</sup>

At the same time, law enforcement agencies in Europe developed a number of operational definitions of the term “organized criminal group” in order to produce intelligence aimed at generating evidentiary material as part of judicial proceedings against criminal enterprises. These definitions agreed that such a group must be structured, must possess some degree of permanence and continuity through time, must commit serious crimes for profit, must use violence, must corrupt public officials, must launder criminal proceeds and must be found to reinvest these proceedings in the licit economy. Common European operational approaches were adopted by law enforcement. The “Falcone checklist” is such an example.<sup>18</sup> In addition, three supplementary protocols to the Palermo Convention were

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<sup>15</sup> For participation in a criminal association, see the French Criminal Code, Title V, articles 450-1-450-4; the Italian Penal Code, Royal Decree No. 1398 of 19 October 1930, articles 416, “Association for purposes of committing offences”, and 416 bis, “Mafia-type association”; and the Spanish Criminal Code, articles 515 and 516, on illicit association.

<sup>16</sup> 18 U.S. Code sect. 371, and 15,630 under 21 U.S. Code sect. 846 or sect. 963 and Racketeer Influenced and Corrupt Organizations Act, Pub. L. No. 91-452, §901(a), 84 Stat. 941 (1970).

<sup>17</sup> Ibid.

<sup>18</sup> The Falcone framework is a checklist that provides an operational account of organized criminal groups operating within a certain jurisdiction by describing the composition, structure, modus operandi, licit/illicit

adopted, one dealing with the trafficking in persons, the second one with the smuggling of migrants and the third one with the trafficking in firearms.<sup>19</sup>

## **Empirical Framework**

In order to assess the process of modernization of law enforcement and judicial capacity to implement organized crime laws within any chosen jurisdiction, and based on the best practice experience of the national jurisdictions mentioned above, one needs to provide an objective analysis of the institutional *effectiveness* of the court, prosecutorial, intelligence and police subsystems. In this case, an assessment of the institutional *effectiveness* to counteract organized crime must use an empirical model to account for the main factors identified by Buscaglia and Van Dijk (2003) and Kugler, Verdier, and Zenou (2004). The model, based on the components 1 through 8 below, capture the theoretical framework developed by Kugler, Verdier, and Zenou (2004) and move further by aiming at the account of the missing links explaining the expansion of corruption rings “protecting” organized crime from prosecution while also covering preventive aspects linked to criminal enterprises.

Within the aforementioned theoretical context, the following explanatory variables will be jurimetrically assessed below:

1. The quality of judicial decisions measured through the average frequencies of legal errors found in organized crime case-files (i.e. lack of legal foundation and motivation within court rulings focused on transnational organized crime case-types) during the period 2003-2006 (This variable assesses the implementation of Art. 29 of the Palermo Convention);
2. The Public sector corruption composite index where measurement is based on three perceptual and one objective criminal indicator for the period 2003-2007 (assessing the implementation of Art. 8 y Art. 9 of the Palermo Convention);
3. The monetary value of transnational organized criminal assets forfeitures during the period 2003-2006 (assessing the implementation of Art. 12 of the Palermo Convention);
4. The existence of counter-organized crime field specialization and training of personnel within the police and prosecutorial domains during the period 2003-2006 (assessing the implementation of Art. 14.3 (a) and Art. 29.2 of the Palermo Convention);
5. The existence of an operationally coordinated financial intelligence and criminal justice system infrastructure jointly addressing organized crime case-files during the period 2003-2005 (assessing the implementation of Art. 27(a) and (d) of the Palermo Convention);

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linkages and other important aspects necessary for the investigation and prosecution of criminal networks. For more details on this matter, refer to S. Gonzalez-Ruiz and E. Buscaglia (2002)

<sup>19</sup> To access the text of the three Protocols, refer to [http://www.unodc.org/pdf/crime/a\\_res\\_55/res5525e.pdf](http://www.unodc.org/pdf/crime/a_res_55/res5525e.pdf)

6. The processing capacity of financial intelligence units for the period 2003-2005 (number of pro-active and reactive intelligence reports issued as a percentage of domestic and transnational organized crime prosecutions) that are later reflected in the judicial resolutions as part of proceedings (assessing the implementation of Art. 7.1 (b) of the Palermo Convention);
7. Number of Instances in which the country engaged in international judicial cooperation for the purposes of handling transnational organized crime case types during the period 2003-2006 (assessing the implementation of Art. 12 - linked to forfeitures-, Art. 16.5 (b), Art. 20.2 and Art. 27 (b) of the Palermo Convention);

An eighth variable is introduced accounting for preventive measures linked to organized crime.

8. The variable covering “Prevention” policies measures the number of government and/or non-governmental programs (funded by the private sector and/or governments and/or international organizations) addressing technical cooperation with the private sector organizations (e.g. banks), educational and/or job training programs and/or rehabilitation (health and/or behavioral) aspects of youth linked to organized crime in high-risk areas (with high-crime, high unemployment, and high poverty) in each of the 107 countries sampled for this study (assessing the implementation of Art. 31 of the Palermo Convention).

Components 1 through 8 above constitute areas of counter-organized crime instilled within the Palermo Convention. A framework of hypotheses to analyze the impact of each component on an indicator of organized crime activities will be presented in the next section.

### **Jurimetric Assessment of the Factors Linked to Counter Organized Crime.**

In this section, tests of the hypotheses are presented in order to explain to what degree the percentage changes in the organized crime levels detailed within the data base of 107 national jurisdictions are affected by high level corruption (i.e., feudalization of the state), lack of governance within the judicial and intelligence systems’ domains, and lack of preventive measures focused in high-risk areas.

To measure the prevalence of organized crime in 107 countries, the index of complex crimes first presented in Buscaglia and van Dijk (2003) and Buscaglia, Gonzalez-Ruiz and Ratliff (2005) has been modified (and the sample has been expanded here from 67 to 107 countries).<sup>20</sup> The development of an international index of organized crime starts from the agreed upon definition discussed in the previous section. The extent of organized crime in each of the 107 countries was assessed on the basis of indicators of the various defining elements contained both in operational investigations conducted by law enforcement agencies and judicial authorities within the frame of a Checklist denominated “Falcone

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<sup>20</sup> *Id.*

Checklist.”<sup>21</sup> The Falcone checklist is an investigative tool serving the purpose of providing an operational, structural, and illicit-markets account of organized criminal groups operating within a certain jurisdiction. The Checklist describes the composition, structure, modus operandi, licit/illicit linkages and other important aspects necessary for the investigation and prosecution of criminal networks. In addition, the scope of organized crime is here framed within the Palermo Convention and its three protocols.

Official data on police records of criminal activities offered little reliable information on the extent of organized crime activity in a country and other sources had to be found or developed. One potentially relevant source was the World Economic Forum’s survey of businesses measuring the costs imposed by organized crime on firms, which provided an estimate of the extent of victimization of businesses by organized crime. The country ranking based on the World Economic Forum’s index was subsequently correlated with indices of violence (homicides). The three indices were found to be highly correlated across the large group of countries presented on the Graph below and, as a result, a composite index of non-conventional crime was constructed. It was subsequently decided to seek additional available country data on the core activities of organized criminal groups such as credit card fraud and trafficking in drugs, trafficking of persons, illicit traffic of firearms, stolen cars and cigarettes. In particular, data were compiled on smuggling of firearms (taking into account data on manufacturing, sales, imports and exports already computed by the United Nations), estimates on smuggling of cigarettes, car theft and consumer fraud victimization (the International Crime Victim Survey), the number of homicides (the United Nations, the International Criminal Police Organization (Interpol) and the World Health Organization), size of the informal economy and the business sector’s perceptions of organized crime prevalence (World Economic Forum), inflows of laundered money in millions of dollars per year as a proportion of gross domestic product (the Walker index) and trafficking in persons in terms of nationalities of suspects (human trafficking database of the United Nations Office on Drugs and Crime).<sup>22</sup> The index presented here ranked each country for each variable in order to compute the composite organized crime index as an average of the rankings that each country showed for each item mentioned above. Each component showed strong correlations with the index, with costs to business, homicide and money laundering being the best predictors.<sup>23</sup> The indicator for drug trafficking, estimated through the ranked-levels of trans-border transportation of illicit drugs, did show correlation with the other organized crime factors mentioned above and was subsequently

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<sup>21</sup>For more details, see E. Buscaglia and Gonzalez Ruiz (2002). The Falcone Checklist was named in honor of Judge Giovanni Falcone assassinated by the Mafia in Italy.

<sup>22</sup> Refer to [http://www.unodc.org/pdf/crime/a\\_res\\_55/res5525e.pdf](http://www.unodc.org/pdf/crime/a_res_55/res5525e.pdf) and to <http://web.worldbank.org/WBSITE/EXTERNAL/WBI/EXTWBIGOVANTCOR/0,,contentMDK:20771165~menuPK:1866365~pagePK:64168445~piPK:64168309~theSitePK:1740530,00.html>

<sup>23</sup> The index considered here only included those countries for which there were at least three observations out of which at least two were “core activity” factors. Higher values corresponded to greater prevalence of organized crime. *Id.* at 56.

included from the analysis for the first time.<sup>24</sup> Finally, a composite index was constructed that included indicators of six core activities (trafficking in persons, drugs, firearms, stolen cars and cigarettes and fraud). This composite index of percentage changes in organized crime is measured on the vertical axis of the Graphs below.

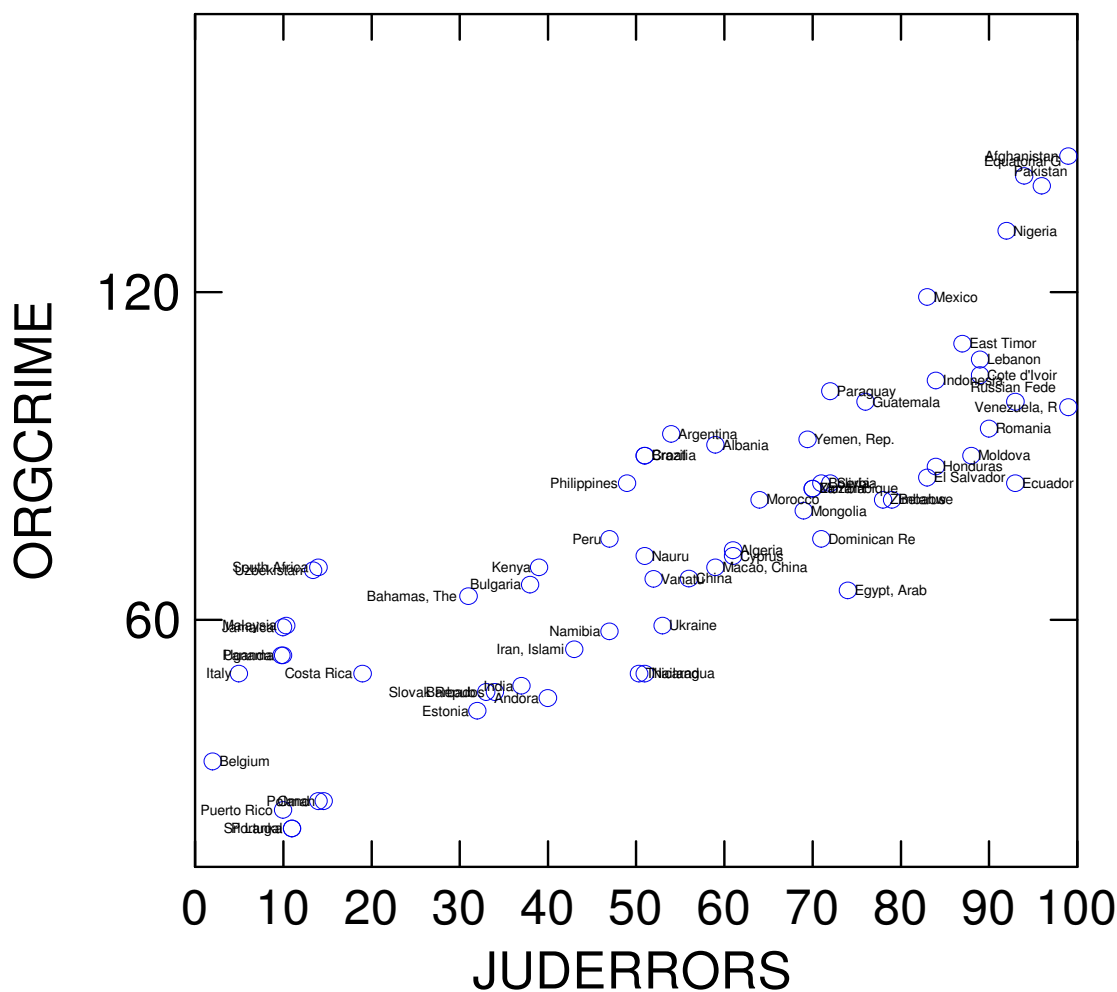
The measures of judicial errors found in case files were calculated after reviewing a sample of between 10 and 12 percent of each of the countries' annual flows of criminal case-files involving transnational criminal groups of indicted individuals. The index of judicial errors calculates the annual frequency of legal errors caused by lack of proper legal foundation and/or lack of motivation found within prosecutorial indictments and judicial rulings.

The horizontal axis on the Graph below measures the frequencies of judicial errors found, within actual disposed criminal case files in each of the 107 national criminal jurisdictions examined, by identifying the average frequency of abuses of procedural and substantive errors caused by lack of proper legal foundation and motivation. The most frequent abuses included contradictions in the value or weight attached by the judge/prosecutor to the evidentiary material that represented a contradiction with the prevailing doctrines and jurisprudence. The most frequent substantive abuse of judicial discretion were found in case-files where the criminal acts did not fit the criminal code-related categorization of the indicted crimes (e.g., simple homicide indictments in cases where the clear evidence points at three or more conspirators operating in a concerted manner over a period of time). Other abuses included unjustified procedural delays, contradictory uses of the jurisprudential criteria within the same case-types sampled within the same criminal court, and the use of irrelevant jurisprudence or unrelated (i.e. incorrect) laws to support judicial rulings.

As one can see from the Graph found on the next page, by measuring changes in the organized crime levels and errors in judicial rulings with a two-year lag, there is a relationship between more consistent and more coherent judicial rulings linked to reductions in organized crime levels (e.g., Belgium). These improved consistency and coherency is assured by effective judicial decision-making control systems applied to rulings by either judicial councils or appellate court systems. On the other hand, those countries found to lack consistency and coherence in their rulings (i.e., high frequencies of abuses of judicial discretion) are also countries where organized crime presents high levels (e.g., Indonesia and Venezuela).

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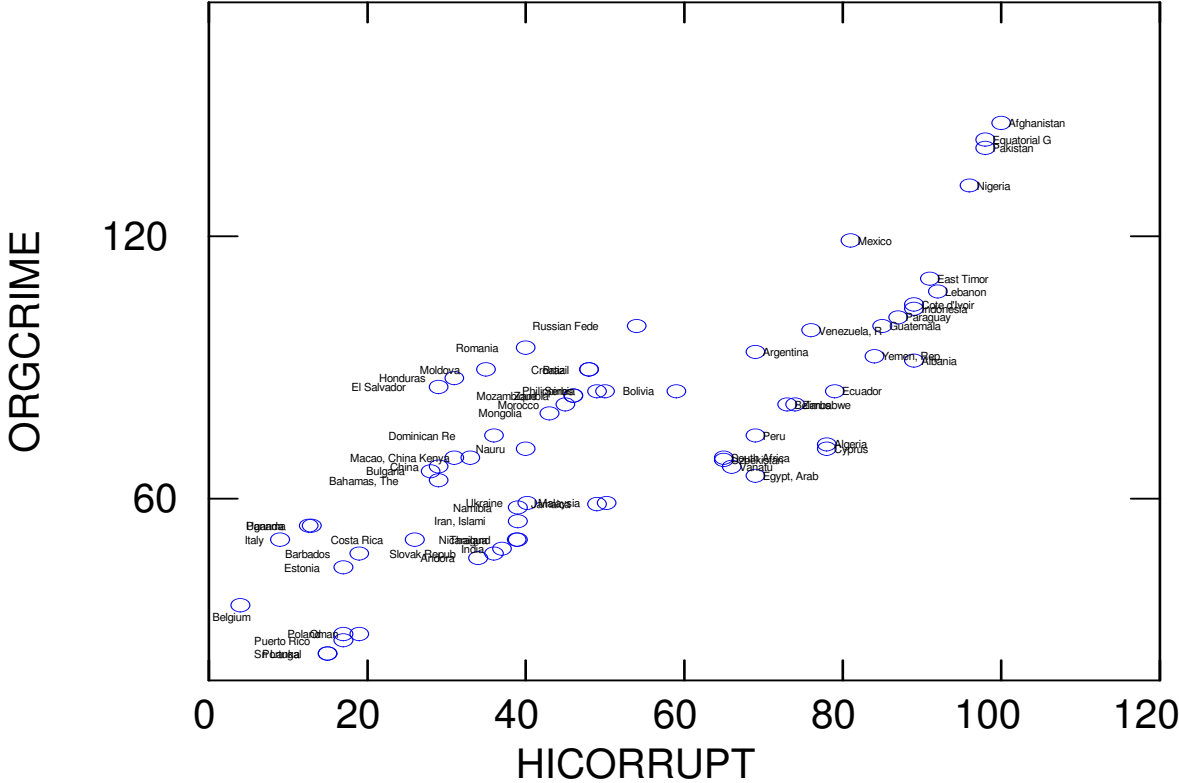
<sup>24</sup> This represents a change of methodology in the calculation of the index with respect to Buscaglia and Van Dijk (2003) and Buscaglia, Gonzalez Ruiz and Ratliff (2005) where drug trafficking was excluded due to the lack of reliance of police reports of seizures.



Moreover, substantive flaws are found during audits of court rulings (sometimes performed by judicial councils) where, for example, case-related facts are systematically not adjusted to the required categorization stipulated within the criminal codes or within the specialized organized crime/money laundering laws. These and other types of abuses of judicial discretion constitute the main factor hampering effective legal implementation within the judges' domain, thereby causing an increasing gap between the law-on-the-books and the legal implementation of these statutes.

A variable measuring high-level corruption focuses on the frequency of abuse of public high-office at the local level (2181 local jurisdictions) and within 107 central levels of governments. This high level corruption composite index was drawn from a survey of 10 to 15 percent of all of the court users (of individuals and businesses) covering the following four areas: (i) perception of nepotism and cronyism in high-level political and judicial appointments; (ii) the feudalization of local government authorities in the hands of organized crime (organized crime protection by local and central government public officials); (iii) the court users' perception of biased judicial rulings in criminal cases (that,

in our present analysis, shows a strong and significant 0.89 Spearman indicator correlation with the objective assessment of frequencies of judicial errors found in the analysis of actual case files (explained above) sampled for this study), and (iv) an objective (non-perceptual) indicator measuring the proportion of organized crime-related homicides of public officials (politicians and justice system officers) that go unresolved without any arrests or indictments. The four indicators show a 0.91 Spearman correlation index (high) and are therefore grouped with equal weights within a composite index of high-level corruption used below. The graph below shows the close parallels between the composite index measuring high-levels corruption and the composite index of organized crime for 107 national jurisdictions. These results provide support to the theoretical findings of Kugler, Verdier, and Zenou (2004) where there is a need of organized crime groups to expand its rings of public sector corruption in order to sustain and expand their levels of criminal activities. In this context, the traditional deterrence framework provided by Becker (1968) would not render its expected results. For example, Afghanistan, Pakistan, and Mexico show the largest proportions of perceived nepotism, state capture, and killings of public officials by organized crime groups that go unresolved without any arrests or indictments while this ineffectiveness of the judicial system can be explained by the high levels of organized crime infiltration within the police and prosecutorial domains (Buscaglia and Gonzalez Ruiz 2002).



A third dummy variable aimed at explaining variations in organized crime levels focuses on the presence or absence of specialized police and prosecutors trained for the purpose of

conducting investigations, generating complex (e.g., financial) evidence and prosecutors issuing indictments against organized crime.

A fourth variable assesses the presence of explicit of inter-institutional coordination through a dummy variable that accounts for the presence of specialized prosecutors and police conducting the investigation jointly through a task-force approach supported by a financial intelligence agency providing inputs for the indictment and judicial ruling (Yes=1; No=0).

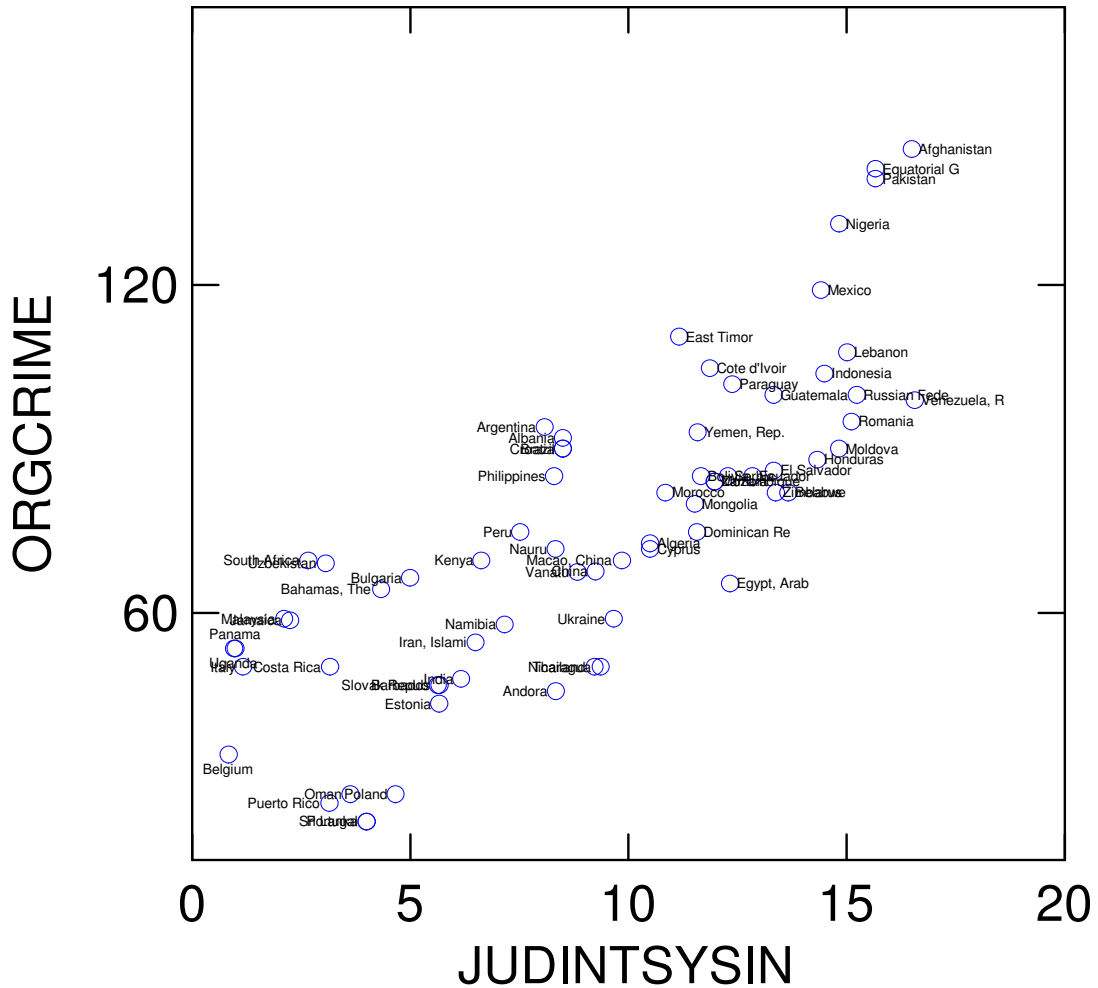
A fifth variable measures the capacity of the financial intelligence unit to generate reports that are later incorporated within court proceedings.

Given that previous explanatory variables accounting for the effectiveness of the judicial and financial intelligence systems (i.e., judicial system specialization, judicial system coordination, quality of judicial resolutions, and capacity of the financial intelligence unit to instill their analysis within court decisions) present a pattern of high and significant correlations among them, after performing factor analysis, a composite index was developed measuring the judicial and financial intelligence ineffectiveness in prosecuting and processing organized crime (JUDINTSYSIN).

The graph below shows the clear pattern of association between the composite index of organized crime (ORGCRIME) and the composite index of joint judicial and intelligence systems ineffectiveness (JUDINTSYSIN).



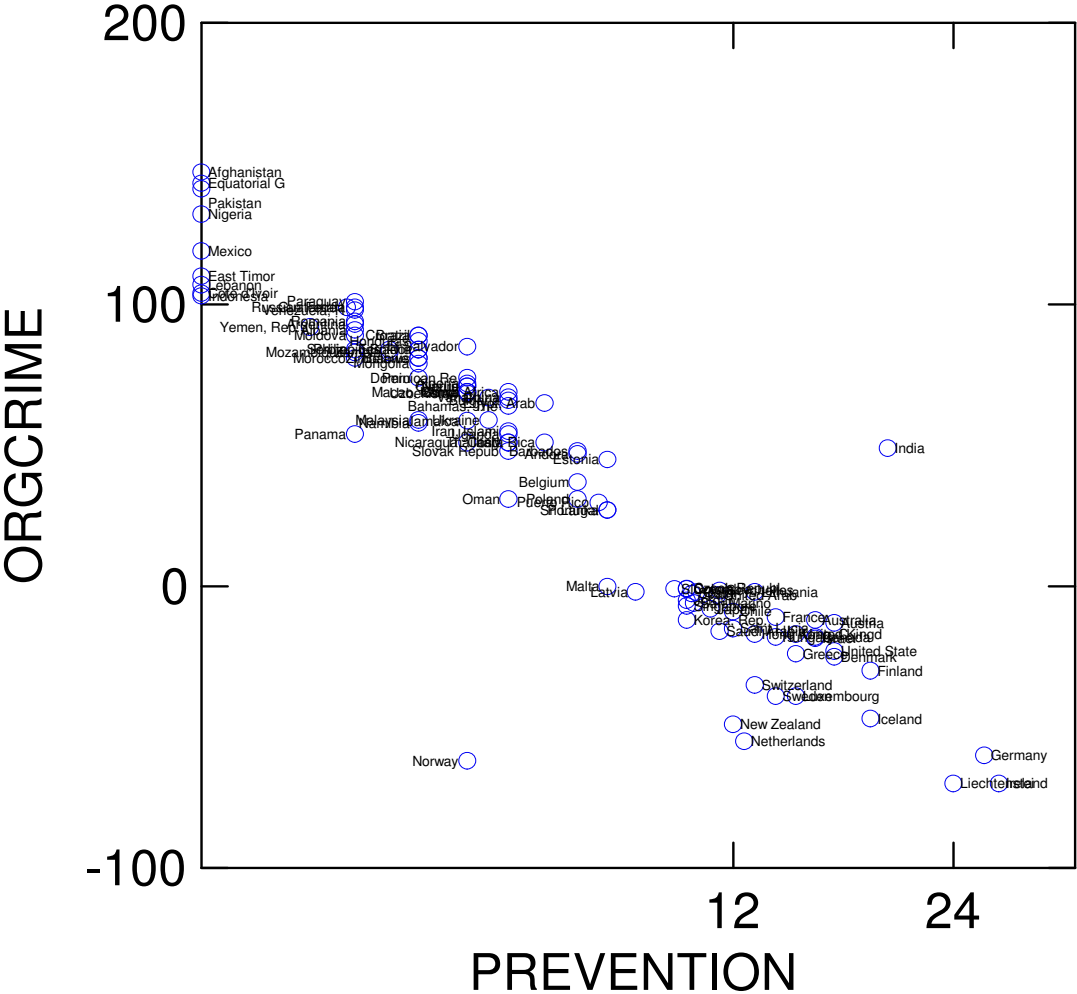
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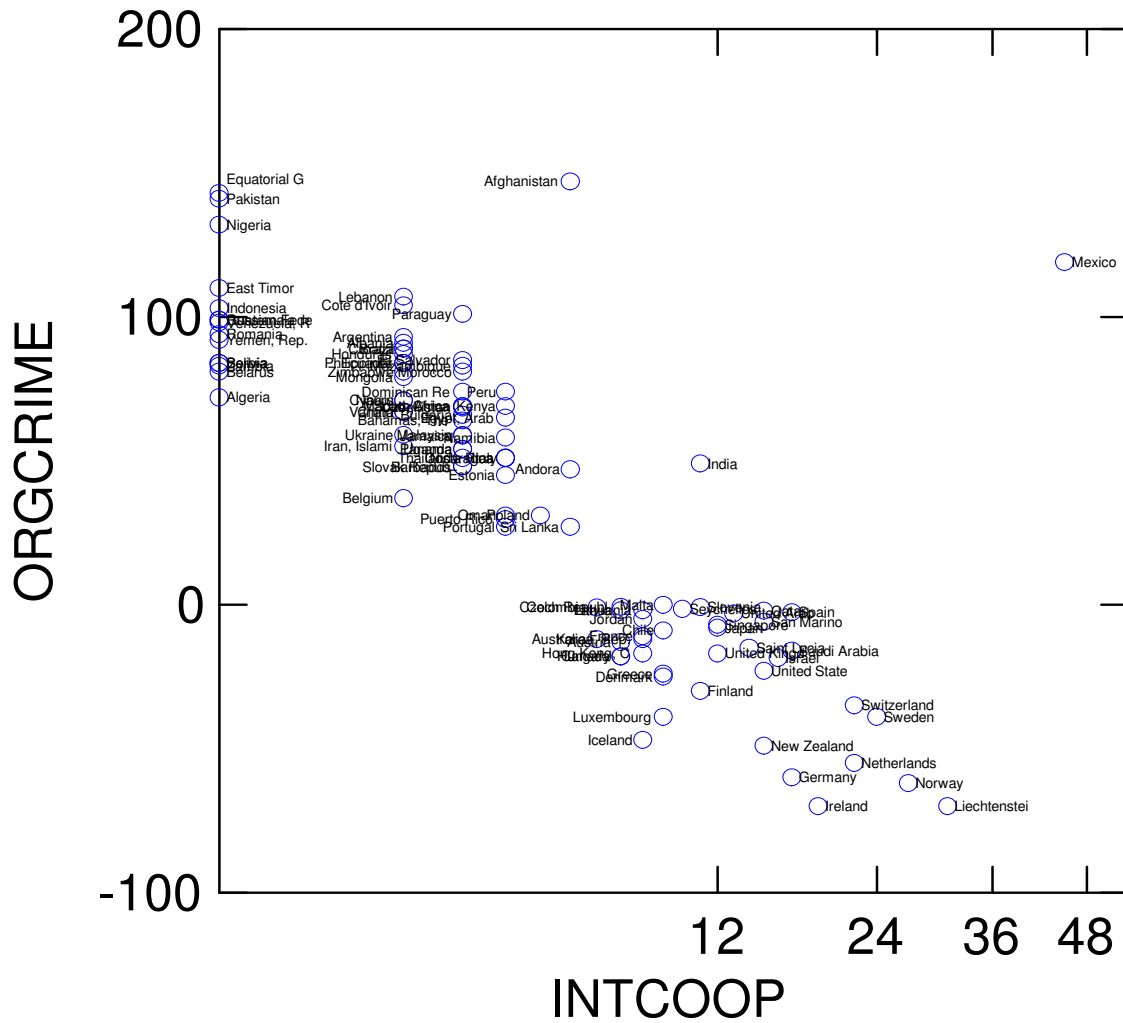
A separate explanatory variable measures each of the 107 countries' monetary values of asset forfeitures from transnational criminal groups for the period 2004-2006.

The model presented here also includes explanatory variable accounting for the presence or absence of organized crime-related preventive programs. This variable measures the number of government and/or non-governmental programs with proven impact indicators linked to documented inputs, activities, and objectives formally established (that are funded by the private sector and/or governments and/or international organizations) addressing technical assistance to the private sector (e.g. training for banks aimed at avoiding money laundering), educational programs, job training programs, and rehabilitation (health and/or behavioral) aimed at youth linked to organized crime in high-risk areas (with high-crime, high unemployment, and high poverty). As one can see from the graph below, the functional presence (in the field) of a larger number of these diverse programs is associated

with a clear pattern of percentage reductions in organized crime. The linear correlation provided by the Pearson index shows an impressive 0.881.



The assessment also includes a variable measuring the frequency of criminal cases linked to organized crime developed through international judicial cooperation (INT COOP) as mandated in Articles 12, 16.5(b), 20.2 and 27 (b) of the Palermo Convention. The graph below shows the strong association between the degree by which countries engage in international judicial cooperation (e.g., extraditions and asset forfeitures) and their levels of reduction experienced in organized crime levels. As one can see, higher frequencies of international judicial cooperation when handling transnational organized crime case types is closely associated with reductions in organized crime levels.



Now this empirical framework moves further by testing the degree to which the joint effects of high-level corruption (LOG HICORRUPT), judicial and intelligence ineffectiveness i.e. as a composite index including judicial system specialization, judicial system coordination, quality of judicial resolutions, and capacity of the financial intelligence unit to instill their analysis within court decisions (LOG JUDINTSYSIN), lack of international judicial cooperation (LOG INT COOP), weak asset forfeiture programs (LOG CONFISC), and lack of preventive programs (LOG PREVENTION) have a significant effect on increasing the levels of organized crime (measured through its natural log)

**TABLE 1**

Dep. variable: LOGORGCROME N: 107 Multiple R: 0.972

Adjusted squared multiple R: 0.943 Standard error of estimate: 12.666

Effect	Coefficient	Std Error	Std Coef	Tolerance	t	P(2T)
LOG PREVENTION	-1.793	0.388	-0.215	0.250	-4.625	0.000
LOG INTCOOP	-2.022	0.313	-0.252	0.354	-6.470	0.000
LOG HICORRUPT	0.457	0.082	0.262	0.245	5.592	0.000
LOG CONFISC	-0.799	0.135	0.331	0.173	-5.937	0.000
LOGJUDINTSYSIN	2.319	0.471	0.173	0.436	4.918	0.000

Analysis of Variance

Source	Sum-of-Squares	df	Mean-Square	F-ratio	P
Regression	282003.409	5	56400.682	351.580	0.000
Residual	16202.503	101	160.421		

25

After testing for the compliance with regression assumptions, the analysis performs a linear log-linear regression analysis by first regressing judicial and intelligence ineffectiveness (LOG JUDINTSYSIN), lack of international judicial cooperation (LOG INT COOP), weak asset forfeiture programs (LOG CONFISC), and lack of preventive programs (LOG PREVENTION) against high-level corruption (LOG HICORRUPT) while later using the adjusted coefficients of the first regression to obtain the adjusted coefficients regression shown in Table 1 above. All explanatory variables explained above are significant at the 1 percent levels. The positive sign shown by the judicial and intelligence systems ineffectiveness coefficient (LOG JUDINTSYSIN) is as expected and significant at the 1 percent level. In this case, a 1 percent improvement in judicial and intelligence system coordination/specialization will reduce on average organized crime levels by 2.319 percent. On the prevention side, a 1 percent increase in the number of prevention programs addressing youth at risk and technical assistance to the private sector (e.g., banks), show a reduction of organized crime levels equal to 1.793 percent. As expected, high level corruption is positively linked to higher organized crime where a 1 percent decrease in the high-level corruption indicator will reduce organized crime by 0.457 percent. On the asset forfeitures dimension, a 10 percent increase in forfeitures of criminal assets is linked with a 8 percent reduction in organized crime levels. Finally, one of the most impressive results shows that 10 percent increases in the frequencies of international judicial cooperation are linked with 20.22 percent decrease in organized crime levels. In short, better compliance with the articles of the Palermo Convention mentioned above explain 94 percent of the improving variations that we observe in organized crime levels within the data base of 107 national jurisdictions. Results also show that countries that are able to implement (and not just enact) the deterrence and preventive measures instilled within the Palermo Convention have been experiencing significant reductions in the growth of organized crime groups.

<sup>25</sup> A separate time-series analyses reveal Durbin-Watson D statistic equal to 2.023 and First Order Autocorrelation that amounts to -0.058

The empirical analysis show that a paradox of criminal dissuasion emerges requiring the adjustment of Becker's (1968) framework when applied to organized crime. As a result of the jurimetrics-based analysis presented in this study, just relying on traditional legal sanctions to counteract organized crime (e.g. increased incarceration and/or extradition) will tend to create an incentive for criminal groups to expand their corruption rings (in order to protect themselves from higher expected sanctions) thus increasing the feudalization of the state by criminal groups while enhancing their operational capacities. This unwanted result of applying traditional criminal sanctions will occur if the network of criminal assets (net worth in the hands of licit and illicit businesses) is not hampered by intelligence and judicial authorities first. The jurimetrics-based results in 107 countries show that, in the absence of an active financial intelligence-based criminal assets forfeiture program, high-level corruption grows rapidly while, paradoxically, public sectors continue to devote more criminal justice system resources to incarcerating increasing numbers of organized crime members. At the same time, empirical analysis shows that higher probabilities of sanctions combined with stiffer sentencing guidelines in the books against organized crime members do not play their dissuasive role in the absence of preventive programs to reduce the flow of youth to criminal groups. This constitutes the paradox of criminal sanctions where more frequent and stiffer punishments applied to physical persons lead to higher levels of organized crime and higher level corruption.

Among the countries experiencing significant reductions in organized crime, Colombia and Jordan stand out. The main areas of reforms in seven Colombian and two Jordanian pilot courts, where criminal case files were sampled, show that improving Convention-compatible measures included:

- (a) An improved, uniform and comprehensive case management system coupled with transparent and consistent rules for the assignment of cases;
- (b) The implementation of uniform and predictable administrative (i.e. personnel- and budget-related) measures founded on rewards and penalties driven by performance-based indicators, with a consequent clarification of the career paths for judicial and law enforcement officers;
- (c) Specific reforms of the organizational structure of the justice system, including the introduction of category-specific organizational roles for judicial, prosecutorial and police personnel in order to secure their own internal independence;
- (d) The enhancement of the capacity of the judiciary to review the consistency of its own decisions in court rulings by improving the effectiveness of judicial (appellate-based) reviews but also by allowing for the monitoring of civil society-based social control mechanisms working hand in hand with the media;
- (e) Governance-related improvements in the links between the political sphere and the judiciary in accordance with the preconditions described above.

The pilot courts in Colombia and Jordan also monitor and control the progress of cases from filing to disposition by following a group management approach, with first instance court judges and pools of prosecutors jointly managing cases with financial intelligence officers. Asset forfeiture programs are active and working at full speed with financial intelligence constantly flowing to specialized police and well trained prosecutors who can assess the opening of new lines of investigation based on intelligence reports. Moreover,

assignment of cases to different management tracks (i.e. express, standard or complex tracks based, among other factors, on the quality and quantity of evidentiary material) can also reduce procedural times and abuse of discretion in case assignments and rulings. Such a system of proactive management is supported by computerized case-tracking technologies, which made it possible to handle case assignment and to deal with judicial officers' concerns online in real time. Technical personnel and professional staff development was therefore aimed at adopting more advanced information technologies to support case management.

On the other hand, the lack of operational coordination among judges, prosecutors and financial intelligence officers is characteristic in countries such as Afghanistan, Mexico, and Pakistan that are all experiencing greater levels of organized crime. In this high-organized crime areas, asset forfeiture lacks organizational capacity and enough scale (in relation to organized crime levels) and high level corruption is rampant while criminal groups feudalize local government at will. It is noteworthy that, according to the data, Afghanistan, México and Pakistan do not comply with the conditions (b) through (e) above, and they violate between 65 and 87 percent of the clauses established in the Palermo Convention.

In contrast, Colombian and Jordanian systems to implement asset forfeiture and financial management of criminal assets have been upgraded in order to include the most effective measures to strike at the roots of organized crime and high-level corruption. As an incentive to achieve greater operational efficiency, law enforcement agencies are allowed to retain the proceeds of asset forfeiture, allocated to staff welfare accounts, health ministries, or spent on organizational improvements. (In Chile, Colombia, Jordan, and Singapore, for example, an autonomous agency handles payment of fines and refunds of bail electronically, with payments credited to the law enforcement departments achieving predetermined levels of performance.) Previous experience reveals that higher salary levels tend to attract more qualified personnel if subject to strict performance-based indicators, thus making corrupt practices less likely. Yet structural reforms of the judicial system are needed first, including strengthening and modernizing financial management and budgeting while training and developing administrative staff.

In short, the countries performing best legal implementation strategies within the organized crime domain have developed computerized case management processes for police, prosecutors and judges, co-developing multi-agency "task force" systems (for investigations and prosecutions) and computerizing court administration. Such reforms have made internal corruption and infiltration by organized crime less likely through the introduction of organizational re-engineering, including elimination of procedural complexity, and through reductions in the abuse of procedural and substantive judicial discretion. Once again, Afghanistan, México and Pakistan do not comply with these conditions where the judicial system must be further trained to take on innovative electronic means for handling and assessing complex evidence linking many case files while enacting subsidiary legislation for better case management and better control of judicial argumentation by the judicial councils.

## **Final Remarks**

Based on the analysis presented in previous sections, the most effective policy measures against organized crime linked to high level public sector corruption (that captures and feudalizes states) are mainly founded on three pillars: (i) the introduction of more effective judicial decision-making controls causing reductions in the frequencies of abuses of procedural and substantive criminal courts' discretion; (ii) the higher frequencies of successful judicial convictions based on effective financial intelligence systems generating the much-needed evidentiary material to ensure the systematic confiscation of assets in the hands of criminal groups; and (iii) the operational presence of government and/or non-governmental preventive programs with proven impact indicators of documented inputs, activities, and objectives (that are either funded by the private sector and/or governments and/or international organizations) addressing educational and/or job training programs and/or rehabilitation (health and/or behavioral) aspects of youth linked to organized crime in high-risk areas (with high-crime, high unemployment, and high poverty) in each of the 107 countries sampled for this study.

An empirical jurimetrics model is for the first time developed for the above three factors. In this context, the success of prosecutions and convictions against criminal organizations should be measured less by incarceration of physical persons and should be more focused on disrupting the production function of criminal enterprises through forfeitures, thus reducing the amounts of net worth aimed at expanding public corruption rings to feudalize States. At the same time, preventive policies aimed at diminishing the flow of youth into criminal activities have already shown their capacity to disrupt the street-based operational capacities of organized crime.

As stated above, a paradox of criminal dissuasion emerges that requires the adjustment of Becker's (1968) framework when applied to organized crime. As a result of the jurimetrics-based analysis presented in this study, just relying on traditional legal sanctions to counteract organized crime (e.g. increased incarceration and/or extradition) will tend to create an incentive for criminal groups to expand their corruption rings (in order to protect themselves from higher expected sanctions) thus increasing the feudalization of the state by criminal groups while enhancing their operational capacities. This unwanted result of applying traditional criminal sanctions will occur if the network of criminal assets (net worth in the hands of licit and illicit businesses) is not hampered by intelligence and judicial authorities first. The jurimetrics-based results in 107 countries show that, in the absence of an active financial intelligence-based criminal assets forfeiture program, high-level corruption grows rapidly while, paradoxically, public sectors continue to devote more criminal justice system resources to incarcerating increasing numbers of organized crime members. At the same time, empirical analysis shows that higher probabilities of sanctions combined with stiffer sentencing guidelines in the books against organized crime members do not play their dissuasive role in the absence of preventive programs to reduce the flow of youth to criminal groups. This constitutes the paradox of criminal sanctions where more frequent and stiffer punishments applied to physical persons lead to higher levels of organized crime and higher level corruption.

Evidence-based results show that the inter-institutional coordination and the field specialization of judicial and intelligence systems are a necessary condition for successfully addressing organized crime. Moreover, the effectiveness of combining deterrence and preventive measures to counteract organized crime, as shown above, are both necessary to expect reductions in organized crime.

Certainly, it would be quite naïve to just think that ratifying and later enacting Palermo Convention provisions prescribing punitive and preventive measures alone would be enough to guarantee successes in the fight against crime. The judicial and intelligence systems reforms described in the previous sections, when applied in best practice countries, required a background of socio-political consensus that included the legislative, executive, judicial, and civil society domains with actors all willing and able to design, implement, and support such reforms. The gaps between the Palermo Convention-related domestic laws in the books and the same laws in action will be reduced whenever the political will to enact legal reforms coexists with the technical capacities to implement the aforementioned reforms. Failures to fully implement much-needed institutional improvements have been mostly due to the lack of governmental long-term commitment, political instability, armed conflicts, and a lack of participatory stakeholders (i.e., civil society-based) experimenting with preventive approaches supporting reforms. These failures have also been characterized by non-committed legal transplants of the Palermo Convention into domestic legislations in order to appease international organizations. These lessons from experience must be taken into account whenever public authorities plan their operational strategies and legislatures design, draft, and enact laws.



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