Quantifying organized crime in Latin America and the Caribbean: challenges and pitfalls

From the paper titled " A framework to quantify organized crime and assessment of availability and quality of relevant data in three selected countries of Latin America and the Caribbean "

Ernesto U. Savona

Professor of Criminology* @ Università Cattolica del Sacro Cuore, *Milan and Director of Transcrime

www.transcrime.it (*ernesto.savona@unicatt.it*)

INEGI/UNODC 1° International Conference on Statistics of Government, Crime,Victimization and Justice Aguascalientes (Mexico), 20th May and 22nd-25th May 2012.

The aim of this paper

- is to suggest a framework for measuring organized crime (OC) in Latin America and the Caribbean. Using this framework a tentative assessment of available data in three selected countries of this region is carried on.

- In order to do that the concept of OC has been divided into four dimensions and for each of them a set of indicators has been suggested.

- The resulting list could orient data collection, explaining what information is required for counteracting actions, and act as road map for collecting data and analyzing them .

- Starting from this framework, each country, according to its priorities and resources, can develop its own road map for data collection.

Why measuring OC

Understanding OC changes

- The more we know about OC and its fluctuations, the better and more informed decisions can be taken for preventing and controlling it and its consequences.
- The better the information a country has on OC, the more effective policies and actions it can produce.
- There are two main difficulties in assessing OC: conceptual borders and flexibility in its transformations. A planned collection of data on OC means overcoming these two challenges.
- For doing so, a monitoring activity should be planned; starting from what is useful and available at statistical level, moving to what is dispersed in many different sources.
- This means suggesting a road map and a methodology that could help countries with serious problems caused by OC and poor data, in order to improve the quality of their data and reduce this problem. Latin American and the Caribbean countries combine these two elements.

Assessing what

- Quantifying and understanding OC is very complex because it encompasses a number of dimensions which go beyond the identification of organized groups and the legal definition of crimes committed under the label of OC.

- Different types of information are needed to understand and dismantle OC, reducing its human, social and economic consequences and removing the structural conditions that facilitate its existence.

- Some of this information is qualitative, other is quantitative; and some relates to aggregates, other to individual cases or persons.

- This paper focuses on the aggregated quantitative aspect of measuring OC.

Assessing what/2

- It is proposed to frame quantitative information on OC in four main dimensions or clusters: **the groups, the activities, the state response and the enablers.**

- A complete view of the phenomenon is the result of the different views related to each of these dimensions/clusters, interrelated in a cost/benefit paradigm.

- The four dimensions (groups, activities, state response and enablers) can be divided into many different sub-dimensions that outline the OC phenomenon. The more they are known, the more precise the view of the phenomenon is and the more its strengths or weaknesses could be outlined.

- These strengths and weaknesses should drive policies and actions for dismantling this phenomenon. **Strengths of OC quite often correspond to the weaknesses of the policies and actions against it and vice versa**.

How

- Focusing on Latin America and the Caribbean we need to know the answers to some key questions:
  - ✓ **Which are the different OC groups in different parts of the country? What is their structure?**
  - ✓ **What is their criminal activity? How do they infiltrate in the legitimate business? How do they exploit the opportunities offered by geography and the economic system?**
  - ✓ **What are the systematic interventions that could drive their fluctuations?**
  - ✓ **How are current state policies (law enforcement and criminal justice) implemented? What are the weaknesses? What is lacking and what should be introduced and where?**
- To answer these questions, this paper has developed a framework for data collection concentrated on the already mentioned dimensions containing sub-dimensions and related indicators.
- The list developed has been pointed out more as a dream list than a real source of information. At the same time, it could orient the data collection explaining what could satisfy a basic information and for what, and what could be better developed for more precise actions.

Which data and for what: developing a road map

- Starting from theories, research experiences and best practices in combating OC, it is possible to customize a road map based on a single country situation, where collected data and enacted/planned policies are reciprocally connected.

- The road map should gradually provide answers to the key questions outlined before, collecting and analyzing data at the “possible” level, which means what could be collected considering systematic obstacles, present and future capabilities and resources.

- Data should be collected for each dimension and could be at a basic or advanced level depending on their availability and on the capability in planning data collection on this topic.

- Each data level (basic and advanced) has its specific goal but gives only partial information on the whole dimension considered. In order to develop the most comprehensive framework of each dimension, and thus create a deeper knowledge of the problem, basic and advanced data should be mixed together.

Existing methodologies for measuring organized crime

Two different approaches: top-down and bottom-up

- The **top-down methodology** is adopted whenever the aim is to break down the whole complex phenomenon and have a more specific and in-depth view, analyzing its sub-components. This methodology focuses on macro units of analysis and tries to move from the general view to the smallest and more specific sub-components.

- The **bottom-up methodology** focuses on the smallest unit of analysis or few single cases. It is adopted whenever the aim is to reconstruct the general view of the problem and assess it (in this case OC). This methodology analyzes micro data with the purpose of evaluating the extent of OC within the considered area (macro level).

The use of the top–down or bottom–up methodology depends on which data are available and what are the researcher's purposes.

Top-down methodologies

- "**Composite Organized Crime Index**" [van Dijk 2007, 2008]: data on perceived prevalence of OC in the country, instrumental violence, grand corruption, money laundering and black economy (markers) → general framework of the extent of OC in a given country using data usually available and easily accessible.

- **Index combining indicators of five principles OC activities** (trafficking in persons, firearms, stolen cars and cigarettes, fraud) and **four secondary factors** (costs of business, extent of the informal economy as a proportion of gross domestic product, violence and money laundering [Buscaglia and van Dijk 2003].

- **Model to assess comparative higher risk levels of criminal activities and illicit markets** in a given area in order to identify where criminals can be caught [Albanese 2008], considering illicit markets as unit of analysis. The purpose of this model was to assess the presence of OC in "areas that may or may not have a history of organized crime involvement" [2008, 263].

The bottom-up methodologies

- Methodology mainly used by **law enforcement agencies** within specific reports on OC aimed at assessing its threat or harm upon society [i.e. BKA, EUROPOL, MPS, ACC, KLPD].
  - ✓ Focused on OC groups and their structure;
  - ✓ Aim: guiding law enforcement decision-making and government in the fight against emerging risks from OC in a given country.

- Some contributions from **European and American academics** have been also produced:
  - ✓ **von Lampe**: model for representing three dimensions (task environment, broader social context and institutional framework) and their relations with criminal network;
  - ✓ **Kortekaas**: two-step risk analysis (identification of threats and their assessment and judgment) aim at identifying changes in OC due to developments in ICT;
  - ✓ **Klerks**: methodology to assess the threat posed by a criminal group. It provides a list of 28 attributes on which a group can be scored. The higher the score, the more threatening a group is.

Mix of top-down and bottom-up

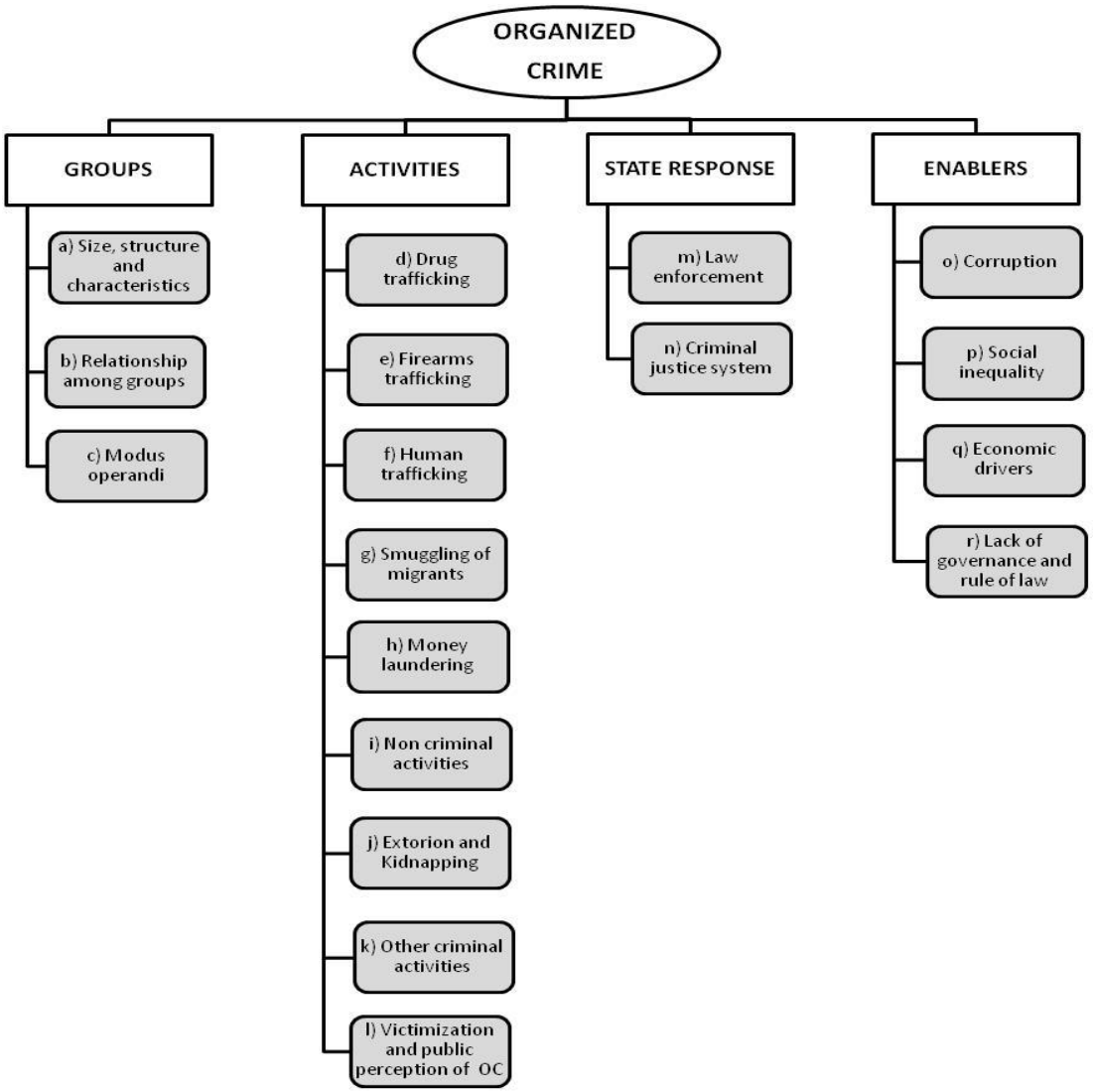
- Focus on both criminal groups and illegal activities.
- Aim: measuring OC risk by means of several indicators and variables regarding criminal groups, activities, law enforcement effectiveness and impact upon society.
- **Van der Beken and the Ghent University** [2004b] risk-based methodology for measuring OC in Belgium:
  - ✓ measurement based on *environmental scan, estimation of criminal networks, analysis of legal and illegal markets;*
  - ✓ assumptions → the higher the capacities of criminal groups, the greater the opportunities in illegal markets are; the higher the vulnerabilities in legal economy, the higher the risks for society are.
- **Project IKOC** methodology [Savona 2009] for assessing OC risk by means of measuring the probability of OC activities and their impact:

Crime risk = Probability (Threat) x Impact (Harm)

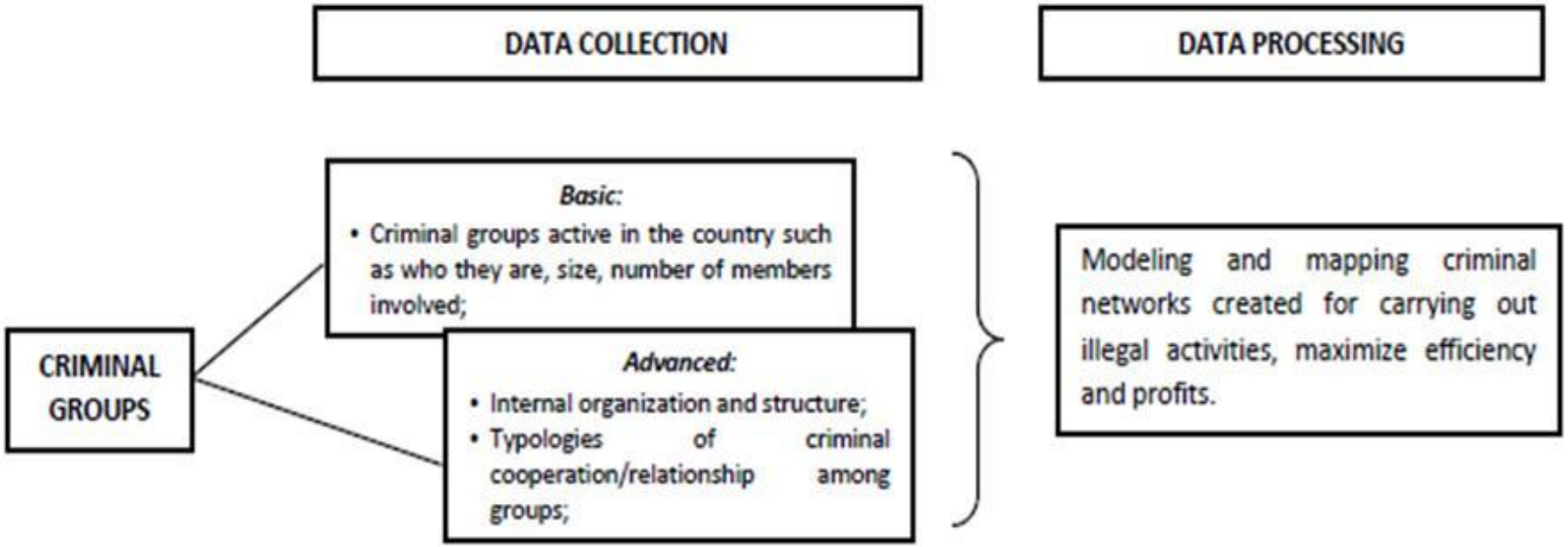
  - ✓ probability is given by characteristics of OC groups involved in a given crime + law enforcement risk for a given crime;
  - ✓ impact is given by primary damage for crime + cost of public response to crime.

Framework for measuring OC in Latin America and the Caribbean

Dimensions and sub-dimensions of OC in Latin America and the Caribbean



Road map for GROUPS dimension



Indicators for GROUPS dimension

Table 1 - Suggested indicators for analyzing size, structure and characteristics of OC groups

BASIC INDICATORS
Number of organized crime groups active in the country
Number of active members of organized criminal groups (number of suspects for organized crime)
ADVANCED INDICATORS
Number of anti-government armed groups involved in organized crime
Number of indigenous and/or non-indigenous groups
Number of indigenous organized crime groups involved in other countries
Number of organized crime groups directly or indirectly involved in political activities
Most relevant criteria for affiliation (ethnic, family, local, youth gangs, etc.)

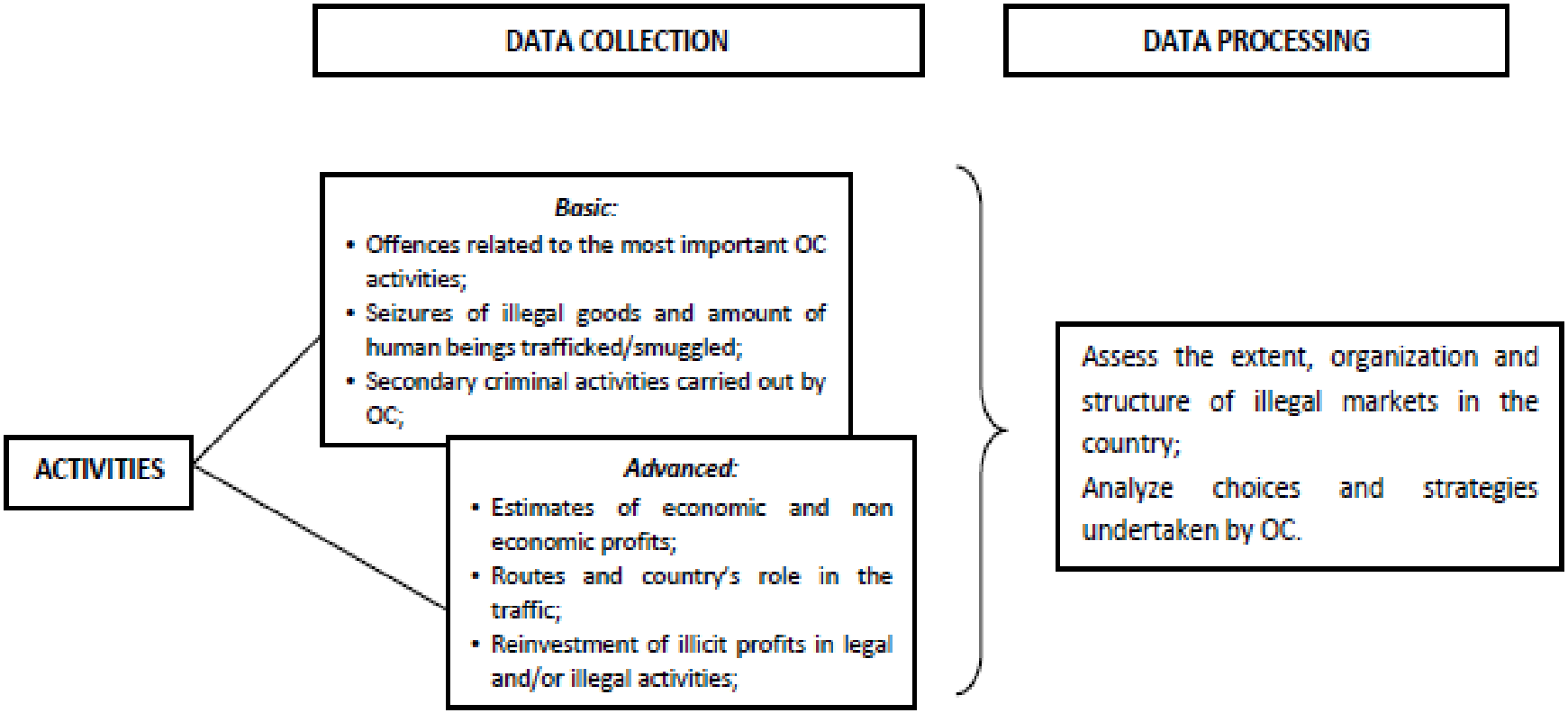
Table 2 - Suggested indicators for analyzing OC groups modus operandi

BASIC INDICATORS
Violent methods
Number of intentional homicides
Number of intentional homicides related to organized crime
Number of attempted homicides related to organized crime
Number of intentional homicides targeting members of organized crime
Number of intentional homicides committed with firearm
Number of attempted homicides committed with firearm
ADVANCED INDICATORS
Violent methods
Number of homicides targeting government personnel/representatives of institutions (e.g. politicians, policemen, judges)
Number of homicides targeting members of the civil society (e.g. journalists, bloggers, businessmen, citizens)
Number of assaults/threats against members of institutions, civil society, general public
Alternative methods
Number of elected representatives and civil servants arrested/prosecuted/convicted for organized crime (or having facilitated organized crime)
Number of members of the civil society, media representatives arrested/prosecuted/convicted for organized crime (or having facilitated organized crime)
Number of state representatives arrested/prosecuted/convicted for organized crime (or having facilitated organized crime)

Table 3 - Suggested indicators for analyzing the relationships among OC groups

ADVANCED INDICATORS
Number of inter-groups homicides
Number of court cases involving different organized crime groups cooperating in the same illegal activity
Number of cases of cooperation among groups (i.e. for drug-trafficking)

Road map for ACTIVITIES dimension



Indicators for ACTIVITIES dimension

Table 4 - Suggested indicators for analyzing the illegal drugs market

BASIC INDICATORS
Number of homicides related to drug-trafficking
Number of attempted homicides related to drug–trafficking
Total amount of drug seizures (if available by type, purity, destination and origin)
ADVANCED INDICATORS
Estimates of drug production by type
Main role of the country (production, transit and/or destination country)

Table 5 - Suggested indicators for analyzing money laundering

ADVANCED INDICATORS
Total amount of seizure bulk cash smuggled
Number of suspicious transactions reported

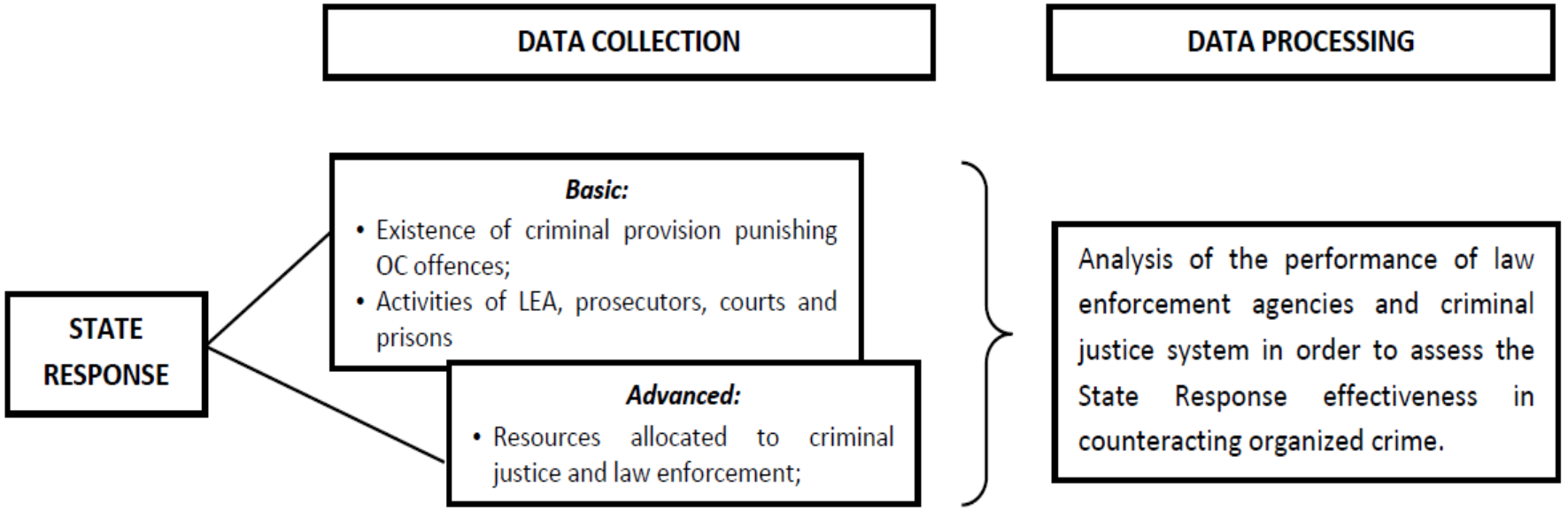
Table 6 - Suggested indicators for analyzing the firearms market

B ASIC INDICATORS
Number of offences for firearms trafficking related crimes
Total amount of illegal firearms and ammunitions seizures (if available by type, destination and origin)
ADVANCED INDICATORS
Main role of the country (production, transit and/or destination country)

Table 7 - Suggested indicators for analyzing the level of victimization and perception of safety connected with OC

ADVANCED INDICATORS
Population who has been victim of OC (Number, percentage or rates per inhabitants, if available by type of crime)
Number of victims of threats from members of OC groups
Percentage of population who has been victim of threats from members of OC groups (or rates per inhabitants)
Population's perception of safety
Population's perception of OC presence (or threat, prevalence, support, etc.)

Road map for STATE RESPONSE dimension



Indicators for STATE RESPONSE dimension/1

Table 8.a - Suggested indicators for evaluating the efforts by law enforcement

BASIC INDICATORS
Law enforcement activity
Number of people arrested for organized crime
Number of people arrested for drug production (if available by type of drugs and citizenship of traffickers)
Number of people arrested for drug trafficking (if available by type of drugs and citizenship of traffickers)
Number of people arrested for drug possession (if available by type of drugs and citizenship of traffickers)
Number of people arrested for firearms trafficking-related crimes
Number of people arrested for human trafficking-related crimes
Number of people arrested for smuggling of migrants-related crimes
Number of people arrested for money laundering-related crimes
Number of people arrested for extortion-related crimes
Number of people arrested for stolen vehicles trafficking
Number of people arrested for kidnapping
Number of people arrested for intentional homicides
Number of people arrested for attempted homicides
Number of intentional homicides for which the offender has been identified by the police (clearance rate)
Number of kidnappings for which the offender has been identified by the police

Table 8.b - Suggested indicators for evaluating the efforts by law enforcement

ADVANCED INDICATORS
Resources addressed to law enforcement
Number of policemen (resources addressed to law enforcement)
Presence of police forces specifically addressed to fight organized crime (if available also the number of those policemen)
Population's confidence
Reporting rate to the police (if available by crime)
Population's confidence toward police (or any other measure assessing population's trust, attitude, support, etc.)

Indicators for STATE RESPONSE dimension/2

Table 9.a - Suggested indicators for evaluating criminal justice system effectiveness

BASIC INDICATORS
Prosecutors activity
Number of people prosecuted
Number of people prosecuted for organized crime
Number of people prosecuted for drug production (if available by type of drugs and citizenship of traffickers)
Number of people prosecuted for drug trafficking (if available by type of drugs and citizenship of traffickers)
Number of people prosecuted for drug possession (if available by type of drugs and citizenship of traffickers)
Number of people prosecuted for firearms–related crimes
Number of people prosecuted for human trafficking–related crimes
Number of people prosecuted for smuggling of migrants–related crimes
Number of people prosecuted for money laundering–related crimes
Number of people prosecuted for extortion–related crimes
Number of people prosecuted for vehicles theft
Number of people prosecuted for stolen vehicles trafficking
Number of people prosecuted for kidnapping-related crimes
Number of people prosecuted for intentional homicides
Number of people prosecuted for attempted homicides

Table 9.b - Suggested indicators for evaluating criminal justice system effectiveness

BASIC INDICATORS
Courts activity
Total number of people convicted
Number of people convicted for organized crime
Number of people convicted for drug production (if available by type of drugs and citizenship of traffickers)
Number of people convicted for drug trafficking (if available by type of drugs and citizenship of traffickers)
Number of people convicted for drug possession (if available by type of drugs and citizenship of traffickers)
Number of people convicted for firearms–related crimes
Number of people convicted for human trafficking–related crimes
Number of people convicted for smuggling of migrants–related crimes
Number of people convicted for money laundering–related crimes
Number of people convicted for extortion–related crimes
Number of people convicted for vehicles theft
Number of people convicted for stolen vehicles trafficking
Number of people convicted for kidnapping-related crimes
Number of people convicted for intentional homicides
Number of people convicted for attempted homicides

Indicators for STATE RESPONSE dimension/3

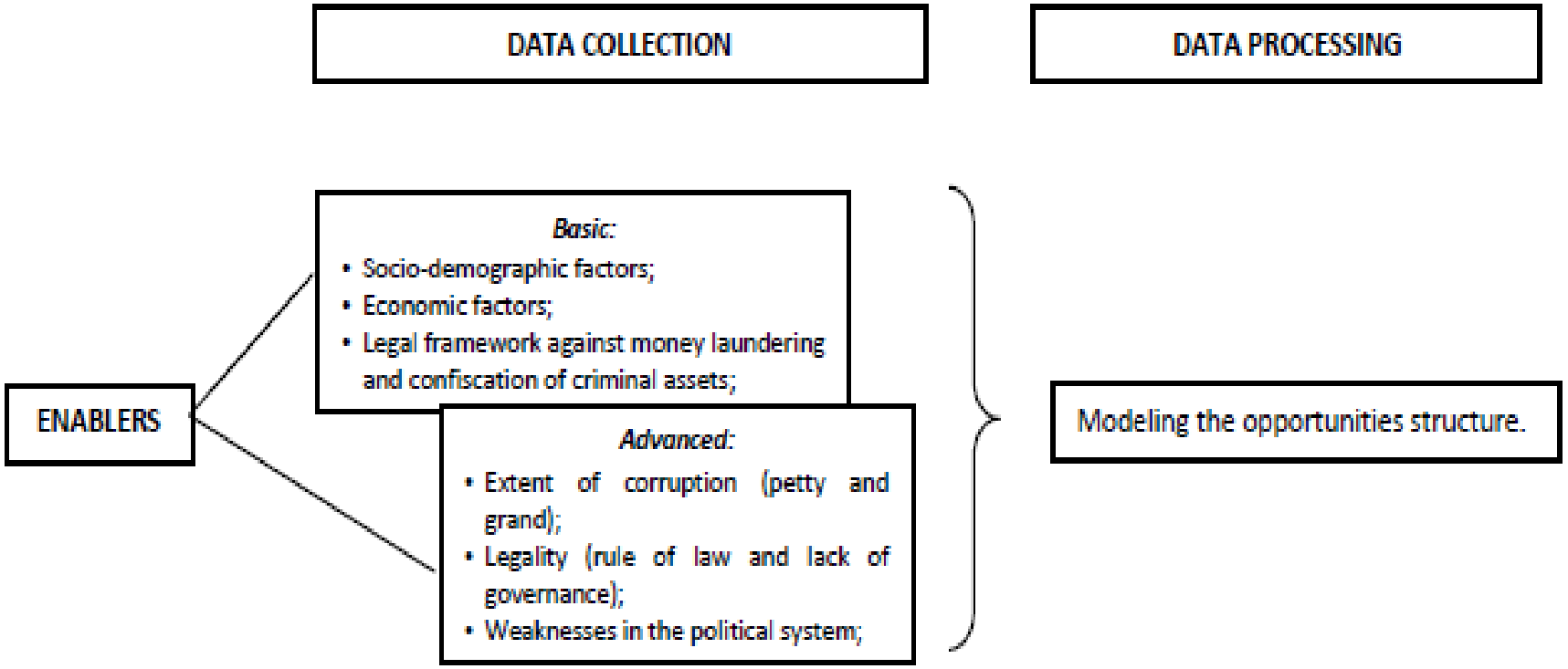
Table 9.c - Suggested indicators for evaluating criminal justice system effectiveness

BASIC INDICATORS
Prison system
Total number of inmates
Number of inmates detained for organized crime
Number of inmates detained for drug production
Number of inmates detained for drug trafficking
Number of inmates detained for drug possession
Number of inmates detained for firearms–related crimes
Number of inmates detained for human trafficking–related crimes
Number of inmates detained for smuggling of migrants–related crimes
Number of inmates detained for money laundering–related crimes
Number of inmates detained for extortion–related crimes
Number of inmates detained for vehicles theft
Number of inmates detained for stolen vehicles trafficking
Number of inmates detained for kidnapping-related crimes
Number of inmates detained for intentional homicides
Number of inmates detained for attempted homicides
Legal framework to fight organized crime
Any existing criminal provision punishing organized crime–related offences per se (if it exists collect the sentencing range)

Table 9.d - Suggested indicators for evaluating criminal justice system effectiveness

ADVANCED INDICATORS
Resources addressed to criminal justice system
Number of courtrooms
Number of judges
Number of prosecutors
Number of specialized anti-organized crime prosecutors

Road map for ENABLERS dimension



Indicators for ENABLERS dimension

Table 10 - Suggested indicators for analyzing corruption

ADVANCED INDICATORS
Petty corruption
Number of corruption-related offences regarding civil servants
Number of civil servants arrested/prosecuted/convicted for corruption
Number of civil servants arrested/prosecuted/convicted for bribery
Number of corruption trials in which civil servants are involved
Grand corruption
Number of corruption–related offences regarding high ranking officials and elected representatives
Number of high ranking officials and elected representatives arrested/prosecuted/convicted for corruption
Number of high ranking officials and elected representatives arrested/prosecuted/convicted for bribery
Number of corruption trials in which high ranking officials and elected representatives are involved

Table 11 - Suggested indicators for analyzing the level of social inequality

BASIC INDICATORS
Percentage of unemployed population
Percentage of unemployed youth population
Percentage of inactive population
Percentage of population living under the poverty threshold
Percentage of population not completing first-level education, e.g. primary school
Percentage of population using the Internet
GINI coefficient on income

Table 12 - Suggested indicators for analyzing the main economic drivers in a country

BASIC INDICATORS
Gross Domestic Product (GDP)
Import–export as a percentage of the GDP (or any other measure of the degree of openness of the economy)
National informal economy estimates
The most relevant economic sectors
The most important commercial partners according to the amount of commercial trading

Table 13 - Suggested indicators for analyzing lack of governance

ADVANCED INDICATORS
Political Stability and Absence of violence indicator of the World Bank
Rule of law indicator of the World Bank
Average duration of penal and civil processes
Public confidence in courts (or other measures regarding population's trust/confidence toward the justice system)
Existence of other conflict resolution systems (e.g. mediation or arbitration)

Assessment of data availability in three selected countries

Introduction

- A pilot exercise has been conducted to assess the availability of the suggested data in Latin American and the Caribbean countries.

- The study has been focused on three countries, one for each of the three main Latin American regions (Caribbean, Central America and South America):
  - ✓ Dominican Republic;
  - ✓ Mexico;
  - ✓ Colombia.

- These countries have been chosen because of to the high level of accessibility to their data/information and due to their representativeness in terms of OC presence.

- For each dimension (criminal groups, activities, state response and enablers) UNODC-INEGI referents have searched for and collected basic and advanced available data.

Results of the pilot research on data availability

GROUPS

- **Mexico and Colombia** are undoubtedly on the right track regarding the collection of data about active OC groups.
  - ✓ In both countries improvements should be implemented regarding the collection of advanced information and, in particular, the use of non-violent methods by the OC groups.

- The data situation in the **Dominican Republic** is definitively worse, since no reliable information on this dimension exists.

ACTIVITIES

- **Mexico and Colombia** have a larger number of available data than the Dominican Republic.
  - ✓ It should be possible to have a sufficiently defined vision of some criminal activities, since for some of them there is both basic and advanced information.
  - ✓ Data about legal activities or investments conducted by OC groups are totally missing.
- The **Dominican Republic** situation is again strongly inadequate for providing valid and usable information.

STATE RESPONSE

- The **Mexican situation** can be considered quite good, although improvements should be made, especially regarding data on people arrested for different crimes.

  ✓ Data collection should be mainly focused on obtaining advanced information.

- For **Colombia and Dominican Republic** indicators are unequivocally lacking.

  ✓ Huge efforts should be made in order to obtain an adequate picture of the state response to OC.

  ✓ These data are fundamental for understanding the weakness of the system and for a better management of the available resources.

ENABLERS

- Enablers dimension is the one with the most complete set of available indicators in each of the analyzed countries.
- The only deficiency is the lack of indicators about corruption in **Colombia and Dominican Republic.**
- Collected data could allow a satisfactory understanding of the socio-economic factors that could enhance or mitigate the role of OC within each country.

Conclusion

- The pilot study suggests that data actually available are generally scarce in all the selected countries, especially in the **Dominican Republic**.

- **Mexico**, above all, and **Colombia** have a discreet amount of indicators, but they are not always sufficient for conducting neither qualitative nor quantitative analysis of the OC presence in the country.

- There is a lack of data, although to a different extent, regarding almost all the four dimensions (criminal groups, activities, state response and enablers).

- This scenario highlights the difficulties and weaknesses in data collection processes and suggests future improvements.

How to use this information for measuring OC

- Collecting all the suggested indicators, or just a part of them, is the first stage for obtaining an estimate of OC presence in a country.

- This large amount of information needs to be managed and refined in order to make it more comprehensible and practically useful.

- This process is fundamental for enabling the planning of effective practices and targeted policies.

- The complexity of this procedure arises two main questions that have to be answered:

  1) How is it possible to assess whether the values of the data collected show a high or a low level?

  2) How to condensate all these information in few values for representing the different characteristics of OC in each county?

1) How is it possible to assess whether the values of the data collected show a high or a low level?

- Before expressing whether a value is actually high or low, a benchmark should be defined. However, this can be quite tricky due to the lack of a homogenous coverage of at least a basic set of indicators for all the Latin American and the Caribbean countries, as well as to the difficulties connected with the data comparability.

- A possible solution could be to compare the value of each indicator with the mean of the available values for the same indicator in all the other Latin American and the Caribbean countries.

- Each indicator should be standardized by dividing its value by the mean value recorded all over the region: in this way if the final result is above 1, the indicator reveals a low value of the related phenomenon and vice versa.

2) How to condensate all these information in few values for representing the different characteristics of OC in each county?

- In order to solve the second problem, a methodology for reducing complexity summarizing a lot of indicators in a fistful of parameters should be used.

- A straightforward and easy way to obtain this result is creating a single index for each sub-dimension, which could condensate all the information regarding each one of these particular aspects of the phenomenon under study.

- The average value of all the standardized indicators included in each sub-dimension will be considered as the index expressing this particular aspect.

- To each indicator a positive or negative sign will be assigned, according to the supposed relationship with, or effects on, OC (i.e. in the second sub-dimension, the number of inter-groups homicides will be considered as negatively related to the level of collaboration among OC groups).

- This process results in 17 indexes that can be used for assessing the level of OC in all Latin American and then Caribbean countries, and expressing differences among many possible aspects of this phenomenon.

Quantifying organized crime in Latin America and Caribbean: challenges and pitfalls

From the paper titled " A framework to quantify organized crime and assessment of availability and quality of relevant data in three selected countries of Latin America and the Caribbean "

Ernesto U. Savona

Professor of Criminology **Università Cattolica del Sacro Cuore,** ***Milan and Director of Transcrime***

www.transcrime.it (*ernesto.savona@unicatt.it*)