

# Illicit drug policies and social outcomes: a cross-country analysis

## IDPSO

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## Leximetric assessment of laws and drugs policies

In the framework of the second transnational call of ERANID, an international research group is developing a project called 'Illicit drug policies and social outcomes: a cross-country analysis' (IDPSO, <https://www.eranid.eu/projects/idpso/>). In this project, especially in the WP2, we are developing a new methodology to analyze the drug policies through 'leximetric approach'. The analysis focuses on illicit drug laws and policies in seven countries, including Italy, during the last twenty years. This kind of analysis is based on a quantitative study of law that has never been applied before in the drug policy field. The first step consists in identifying the most significant criminal conduct common to the laws of the different countries and the most relevant court decisions (in particular for common law country). Then, each conduct is evaluated by assigning to it a value – either on a binary system or on a scale out of ten – that can express the degree of severity of the related punishment. If from one side, the binary system is more certain, from the other side it is not able to reflect the different shades of the legal language. For this reason, we have decided to use the decimal system, also in order to mark the differences between the criminal and the administrative offenses related to drugs. The final aim is to create a tool that, by assigning a degree to the law, facilitates cross-country analysis of drug policies, allows to compare the evolutions of the laws in a same country throughout the years and, finally, measures the impact of the different drug related policies on key indicators. We have identified ten core variables to measure the degree of severity of the law and the consequences that prohibitionist drug policies have on specific indicators. We have focused on the following variables: consumption, possession, traffic, cultivation,

## Healthcare outcomes

### Oly-drug supply and consumption

The new habits related to use concern, for example, the poly-use that derives from the poly-drug supply, that spread in Italy after 2006 when the Law 49/2006 anti-drug law entered into force (Figure 1). The new Law was more restrictive, particularly with regard to cannabis. In fact, the consequences, both criminal and administrative, for sellers and consumers of cannabis were equalized to those of other illegal substances (heroin, cocaine, ...), not applying the scientific classification, used in the rest of the world, distinguishing substances in "soft" and "heavy" according to the effects resulting from use.

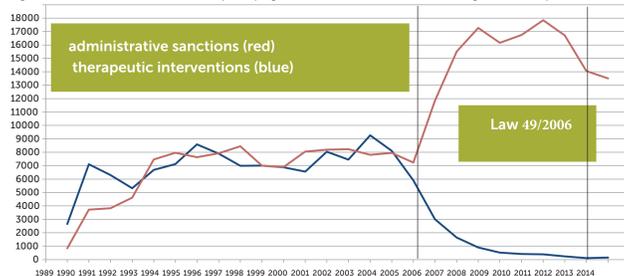
<http://2017.festiveconomia.eu/-/cannabis-proibire-leggare-g-liberalizzare>

Figure 1. Frequency of seizures of several substances in a single police operation in the different provinces of Italy in 2000 and 2007.



For drug dealers, the biggest punitive aggravation resulted from the modification of Article 73: since 2006, the same penalties for the sale of all substances without distinction. Even for consumers, the aggravation (amendment of art.75) was remarkable: they could no longer avoid the administrative sanction (suspension of driving license, passport withdrawal, ...) even accepting therapeutic intervention to limit the use of the substance (secondary prevention), as it was possible with the DPR 309/90 before 2006. The trends change much "worse" with respect to consumers do not need comment (Figure 2).

Figure 2. Behaviours of the numbers of therapeutic programs and administrative sanctions for drug consumers reported for art. 75.



From the official data on the seizures of DCSA (Central Direction of Anti-Drug Services) it appears that, immediately after the entry into force of Law 49/2006, the poly-drug dealing increased and, as a consequence, poly-drug use increased soon and is quite high in Italy (<https://journals.sagepub.com/doi/pdf/10.2478/nsad-2014-0027>).

### Minors drug use behaviour and health consequences

In order to analyse the impact of drug laws and policies on behaviours of minor consumers, in particular High Risk Drug Users (HRDU), Italian administrative data sets have been used and analysed in recent years.

The results show that:

- ▶ The proportion of reported minor drug consumers is increasing;
- ▶ The age of drug use onset is decreasing;
- ▶ The proportion of assisted drug users (15-19 years old) is increasing;
- ▶ The proportion of hospitalizations of minors due to drug use is increasing.

In summary: All data sets regarding "visible" HRDU minors show increasing trends.

In particular: The proportion of minor drug users reported to Prefectures-UTG (up to 14 years and 15-17 years) shows a noticeable increase and confirms that the age of the first drug consumption has decreased (Figure 3) and females show a greater increase than males (Figure 4).

Figure 3. Percentage of minors among subjects reported for drug use (2006-2016).

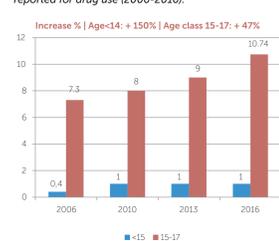
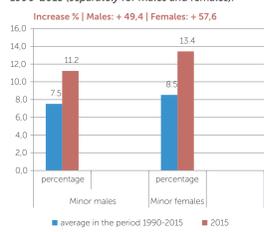


Figure 4. Percentage of minors among subjects reported for drug use (2006-2016), separately for males and females.



## Objectives

The objective of this project is to assess how differences in national drug laws and policies related to illicit drug production, distribution/trafficking, and consumption impact on key social indicators. To do so, this project involves four steps: (i) the use of leximetrics to allow cross-country comparison of national drug policies (measuring 'law in books'); (ii) a quantitative and qualitative study to assess the perceptions of key actors regarding those policies (capturing perceptions of 'law in books' and 'law in action'); (iii) a careful analysis of key social indicators directly or indirectly related to illicit drug use (e.g., health indicators, such as HIV or hepatitis infection rates; demand indicators, such as illicit drug consumption rates; or justice system indicators, such as number of drug-related offences or imprisonments); and (iv) an in-depth understanding of the relationship between national drug laws and policies (steps (i) and (ii)) and social indicators (step (iii)).

## Methodology

The project proposes to analyse 7 countries – Portugal, France, Italy, the Netherlands, England, Canada and Australia – over time, that is, we propose to look at each country's drug laws and policies ideally over twenty years (1996-2016). In order to allow for cross-country comparisons, we will use a comparative law state-of-the-art technique (leximetrics), as well as a carefully designed quantitative and qualitative study on drug policy perceptions. Using advanced quantitative techniques (econometrics and simultaneous equations methods, text mining techniques), we will then carefully explore the intricate and complex relationships that exist between drug law and key social indicators.

production and distribution, differentiating each of them in two sub variables if they are related to "hard" drugs or "cannabis" and also money laundering, harm reduction, treatment and prevention.

Then we have highlighted the conducts and/or the law provisions, the court decisions and the policies' guidelines from 1990 to 2017 that take into account the variables that we have chosen.

From this analysis – on which we are still working to assign a specific mark to each variable – we can anyway deduct a general trend of the degree of severity of the drug policies in the last 30 years that can be summarized as follows:

▶ The law n. 162 of 1990 started a period of increased repression compared to the previous one, we detected this trend especially from the conduct of detention for personal use that, both for cannabis and hard drugs, was considered a criminal offence if the amount held exceed the "daily average dose".

▶ In the 1993, it intervened a referendum that abolished the limit of the "daily average dose" so that personal consumption was decriminalized regardless the amount owned.

It also abolished the article 72 of the law mentioned: a "manifesto norm" that expressed the policy climate of the 'war on drugs'.

It started a period that lasted until 2006 that, even in a general prohibitionist framework, we can define characterized by a less severe degree of repression against the drug related behaviors, at least for personal use.

▶ The 2006 represents a turning point in the Italian drug policy legislation due to the L. 49/2006, that provided the same criminal penalties

for all the conducts of possession, traffic, cultivation, production and

distribution regardless the kind of drug the conducts were related to. It means that the cultivation of cannabis also for personal use was potentially punished with a period of prison from 6 to 20 years. From 2006 to 2014 it has been the most prohibitionist period Italy has lived.

▶ In 2014 the Constitutional Court with the sentence n. 32 declared anti-constitutional the law n. 49/2006 so that now is once again applied the law that comes out from the referendum of 1993, partially modified by the l. n. 79/2014.

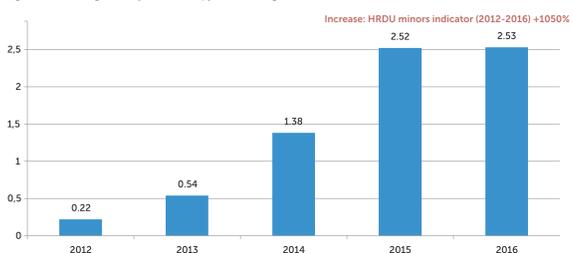
Therefore in the very few last years we mark a decrease in the degree of severity of the law.

At this stage, it is relevant to verify if and how the different drug policies and the related degree of criminal enforcement are linked with some key indicator. Suitable measures of the social outcomes are essential to provide drug policy evaluation and to be related to the leximetric. Social outcome measures shall be based on administrative data and on survey data, to be properly collected, and organised to calculate indicators; then different drug laws and policies can be compared and quantitative evaluation obtained.

The examples of evaluation of social outcomes reported here are only a small advance of what will be addressed and developed in the project. In fact, given the long duration of the observation of the policies and the leximetric evaluation, some indicators, among which the epidemiological ones developed and adopted at European level (EMCDDA epidemiologic 5 indicators), are no longer suitable on their own to monitor the situation regarding use of illegal substances, given that there have been profound changes in supply and, therefore, in the demand for substances.

In Figure 5, the proportion of assisted drug users (15-19 years old) are reported in the period 2012-2016.

Figure 5. Percentage of subjects in therapy under the age of 19 considered as a HRDU minors indicator.



The proportion of hospitalizations of minors due to drug use is increasing (Figure 6) and two indicators are reported in Figure 7.

Figure 6. Number of hospitalizations due to any drug use: minors (left axis) and total (right axis).

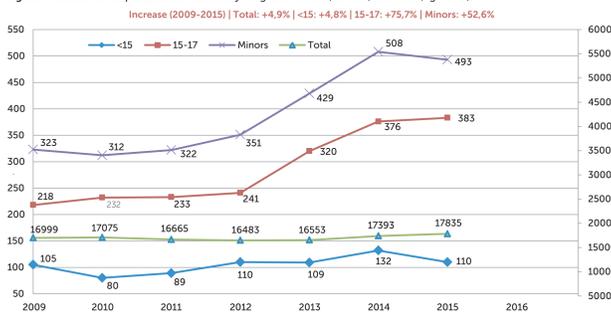
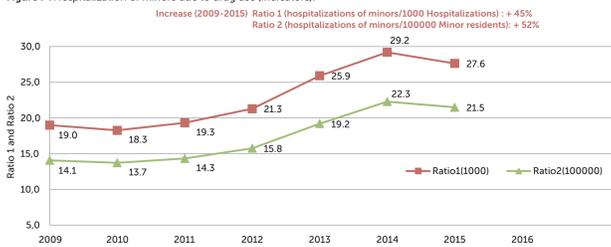


Figure 7. Hospitalization of minors due to drug use (indicators).



## Justice outcomes

In the WP4 of the project we are developing a framework within which to estimate the social costs of drug policies in seven countries during the last twenty years. In particular, the first results presented here concern Italy.

The evaluation of social costs linked to the drug phenomenon, takes into account the variables studied in the leximetric analysis on WP 2 (consumption, possession, traffic, cultivation, production and distribution, money laundering, harm reduction, treatment and prevention). The analysis framework from which we started is the "Sigle, Kopp model" for the analysis of social costs related to the illegal use of substances.

International guidelines for estimating the costs of substance abuse | IJ edition (Sigle, Kopp 2003).

The estimates are conducted on the basis of data from public and private bodies and ad hoc surveys on selected populations that cover different time series concerning the period of the analysis (years 1990-2017). The data were collected and systematized within a framework that allows the each data sets to be associated with the variables studied in WP 2 and with the different types of social costs subject to estimation.

Here we present the first results of the estimates of direct costs (focused on public expenditure) related to the application of Italian legislation on drugs (Law 309/1990) in the three sectors of law enforcement and criminal justice:

The general outline of the analysis, with further refinements, was borrowed from the method of estimating the cost of crime, presented in the "Annual Report to the Italian Parliament on drugs and addictions 2015". See the Annual Report to Parliament on drugs and addictions 2015: a shared path with institutions and civil society (page 83 Estimate of the cost of crime). <http://www.politicheantidroghe.gov.it/media/1729/parte-1.pdf>

- ▶ imprisonment costs;
- ▶ law enforcement agency costs;
- ▶ costs of criminal courts.

In particular, to refine the estimates, here we have chosen to use, where available and usable, the cost for Missions and Programs reported in the Italian Budget Laws. This choice, in perspective, could pave the way for a comparison at European level using the Cofog classification with which the classification for Missions and Programs at national level is connected.

The classification of public expenditure by function used in national accounts refers to the Cofog acronym of Classification Of Function Of Government), an international classification adopted as standard by the Sec95. The Cofog is divided into 3 levels of analysis: the first level consists of ten divisions, each of which is divided into groups, in turn divided into classes. According to article 14, paragraph 1, letter b) d. Legislative Decree 118/2011, each Program is linked to the relative codification of the second level Cofog Groups. In the case of non-univocal correspondence between Program and second level Cofog classification (Groups), the corresponding Cofog functions must be identified.

### Imprisonment costs

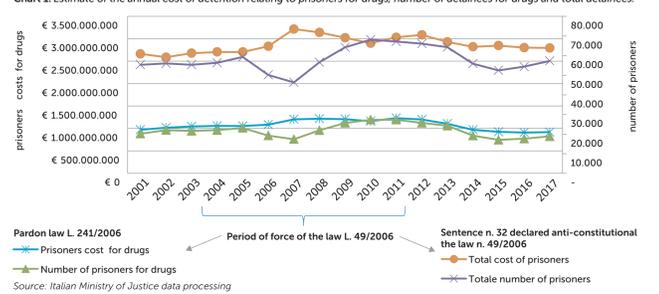
For the reclusion sector, the analysis conducted has made it possible to estimate the cost of prisoners resulting from the application of the legislation on drugs in Italy.

The estimate for detention is the product of the number of prisoners for drug-related crimes for the average daily cost for a prisoner. The daily cost of all inmates for drugs (presences) was multiplied by 365, to get an estimate of the annual total.

Chart 1 shows that in Italy a very large proportion of the cost of detention is determined by the legislation on drugs. In 2011 the total expenditure for detainees imprisoned for drugs reached a peak of € 1.2 billion, equal to 40.6% of total expenditure on prisoners and then decreased in recent years slightly above 30% (€ 0.9 billion).

Furthermore, Chart 1 shows that in the period 2007-2013, there was an increase in drug inmates that peaked in 2011 due to the entry into force of the Law 49/2006 (Italian drug policy legislation), in force from 2006 to 2014 that has been the most prohibitionist period Italy has lived. The sharp decrease in the total number of prisoners between 2006 and 2007 (including drug-related detainees) can be explained by a pardon for crimes committed up to 2 May of the same year, approved by Law 241/2006. However, in the following years, even following Law 49/2006, there was a rapid increase in the prison population.

Chart 1. Estimate of the annual cost of detention relating to prisoners for drugs, number of detainees for drugs and total detainees.

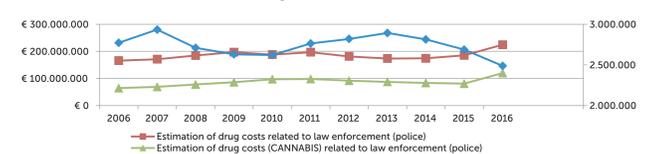


### Law enforcement agency costs

The estimate on the costs of Italian police forces related to the repression of the drug phenomenon is represented in Chart 2 which shows that since 2006, the costs of law enforcement have increased progressively to stand in 2016 around € 220 million. The cost of repression related to the fight against cannabis trafficking, records the same trend and represents about half of the total cost. Moreover, the total number of crimes reported has dropped sharply since 2013 while the number of reported crimes related to the legislation on drugs has grown, an element that justifies the growth of the estimated costs of the law enforcement related to the law enforcement activity, to drug trafficking.

The estimate of police costs was obtained by dividing the cost of employees in the police sector (excluding the prison police whose costs are already included in the estimate for detention) for the total number of crimes reported by the police to courts of justice. The average cost was then multiplied by the number of crimes related to the drug legislation. The estimate of the cost of police related to cannabis trafficking was obtained, as for other sectors (detention and courts) using data on drug complaints (with indication of the substance) of the law enforcement authorities to the judicial authority.

Chart 2. Estimated costs related to law enforcement drug enforcement activities.



Source: Processing on Italian Ministry of Economy and Finance data (Compartiment Annual Account: Police and contract bodies).

### Criminal courts costs

The estimate on the costs of criminal courts is only indicative and susceptible to further investigation. The costs relating to criminal proceedings on drug legislation remain substantially stable over the period considered (2011-2016), coming to just over 120 million euro in 2016. About half of these costs are attributable to proceedings concerning cannabis.

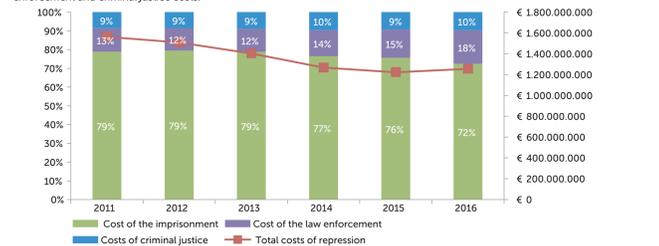
Two different types of estimates were used to define the annual cost of criminal proceedings relating to drugs: - the first estimation method used data relating to expenditure for Missions and Programs reported in the Italian State Budget Laws. The average cost of the criminal and civil proceedings was determined in advance, multiplied by the number of criminal proceedings related to the legislation on drugs, which determined the estimate of the annual cost of criminal proceedings relating to narcotic and psychotropic substances (Law 309/90). - however, given that the first method described above, underestimates the cost of the criminal trial, for reasons linked to the greater refinement and reliability of the estimates, it was decided to use the method based on the average cost figure of the criminal trial (referred to the proceedings pursuant to art. 73/74 of Presidential Decree 309/1990) presented in the Annual Report to the Parliament on drugs and dependencies 2012 referred to the year 2010.

### Conclusion: justice outcomes

Summing up the estimates of costs about the three sectors of the law enforcement and criminal justice area: prison costs; police costs and costs of criminal courts., we obtain the estimate of the total costs for Italy relating to the contrast and repression of the drug phenomenon. With all the cautions already indicated above with regard to the estimate of the costs, which for some sectors (criminal courts and police) will be further refined, the estimates produced for the years 2011-2016 record an average annual cost (years 2011-2016) of 1.36 billion or 0.08% of GDP. The highest expenditure was recorded in 2011 with over 1.5 billion and then stood at over 1.2 billion in 2016.

Chart 3 shows the percentage incidence of the sectors: imprisonment, police and criminal courts on the total direct costs for the contrast and repression of the drug phenomenon. As you can see, the detention sector absorbs most of the resources destined to combat and suppress the drug phenomenon (76% in 2016).

Chart 3. Percentages and total costs related to the activities of contrast and repression of the drug phenomenon: Area law enforcement and criminal justice costs.



PROJECT'S WEBSITE <https://drugpoliciesevaluation.eu/>

PARTNERS  
Católica Porto Business School, Universidade Católica Portuguesa  
Paris School of Economics, Université Paris I (Paris-Sorbonne)  
Consorzio per lo sviluppo delle metodologie e delle innovazioni nelle pubbliche amministrazioni (MIPA)  
Faculty of Law, University of Amsterdam

MIPA  
Consorzio per lo sviluppo delle metodologie e delle innovazioni nelle pubbliche amministrazioni  
address: Via Arenula, 16 - 00186 Roma  
e-mail: [mipa@consorzioimipa.it](mailto:mipa@consorzioimipa.it)  
phone: 06 68 30 15 04  
website: <https://www.consorzioimipa.it/>