APPLICATION OF A PRELIMINARY 'QUALITATIVE' LEXIMETRIC APPROACH VIA AN EXAMPLE: ANTI-DRUG LAWS, POLICIES AND SOCIAL OUTCOMES IN ITALY SINCE 2000

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ERANID-IDPSO ILLICIT DRUG POLICIES AND SOCIAL OUTCOMES: A CROSS-COUNTRY ANALYSIS (PRELIMINARY PILOT APPLICATION TO ITALY)

- This study aims to measure the impact that different drug-related legal frameworks have on society. ..

- ..Our proposal is to study the relationship between countries' drug laws and policies and key social indicators, by implementing, first, a state-of-the art comparative law technique that allows cross-country comparisons of drug laws and,

- .. …establishing a relationship between laws and key social indicators, we aim to contribute significantly to the ongoing discussion of drug laws and policies.

- **Even only in one country (Italy) and only since 2000, the approach is very interesting because 3 different anti-drug laws (and policies) have been in force between 2000 and our days: 2000-2006 (the least severe law of the period); 2006-2013 (the most severe law of the period); 2014-today (the law less severe than the second, but more than the first).**

FROM QUALITATIVE CLASSIFICATION (SEVERITY) TO QUANTITATIVE (LEXIMETRIC) PILOT CLASSIFICATION

- We will consider two articles of the law in force:

- art. 75 reserved for consumers (administrative penalty);

- art. 73 reserved for pushers (criminal sanction).

- In the three laws more or less harsh consequences for the two groups are provided and therefore a score can be assigned proportional to the expected level of repression:

- **Administrative penalty: score from 0-5 depending on the degree of strength.**

- **Criminal sanction: score from 5-10, depending on the level of maximum penalty established for the crime.**

PILOT LEXIMETRIC SCORES RELATED TO THE THREE ANTI-DRUG LAWS

| Punished conducts	DPR n. 309/90 in 2000		Law n. 49/2006		DPR n. 309/90 after Constitutional Court sentence n. 32/2014	
	Sanction	Leximetric score	Sanction	Leximetric score	Sanction	Leximetric score
Personal consumption of cannabis art. 75	Administrative sanction for a period between 1 month and 3 months regardless the amount owned	3	Administrative sanction for a period between 1 month and 1 year if the quantity of drug held is over a certain amount	5	Administrative sanction for a period between 1 month and 3 months	4
Personal consumption of hard drugs art. 75	Administrative sanction for a period between 2 months and 1 year regardless the amount owned	3	Administrative sanction for a period between 1 month and 1 year if the quantity of drug held is over a certain amount	5	Administrative sanction for a period between 2 months and 1 year	4
Possession not for personal use of cannabis art. 73, par. 4	Criminal sanction: detention from 2 to 6 years and the fine from about 5.000 to 25.000 euros	7	This law didn't differentiate anymore "hard drugs" from "soft drugs". Criminal sanction: detention from 6 to 20 years and a fine from about 26.000 to 260.000 euros	9	Criminal sanction: detention from 2 to 6 years and the fine from about 5.000 to 25.000 euros	7
Possession not for personal use of hard drugs art. 73, par. 1	Criminal sanction: detention from 8 to 20 years and a fine from about 26.000 to 260.000 euros	10	This law didn't differentiate anymore "hard drugs" from "soft drugs". Criminal sanction: detention from 6 to 20 years and a fine from about 26.000 to 260.000 euros	9	Criminal sanction: detention from 8 to 20 years and a fine from about 26.000 to 260.000 euros	10
Sale of cannabis art. 73, par. 4	Criminal sanction: detention from 2 to 6 years and the fine from about 5.000 to 25.000 euros	7	This law didn't differentiate anymore "hard drugs" from "soft drugs". Criminal sanction: detention from 6 to 20 years and a fine from about 26.000 to 260.000 euros	9	Criminal sanction: detention from 2 to 6 years and the fine from about 5.000 to 25.000 euros	7
Sale of hard drugs art. 73, par. 1	Criminal sanction: detention from 8 to 20 years and a fine from about 26.000 to 260.000 euros	10	This law didn't differentiate anymore "hard drugs" from "soft drugs". Criminal sanction: detention from 6 to 20 years and a fine from about 26.000 to 260.000 euros	9	Criminal sanction: detention from 8 to 20 years and a fine from about 26.000 to 260.000 euros	10
DEGREE OF SEVERITY OF THE LAW		**40**		**46**		**42**

LEXIMETRIC EVOLUTION OF THE SINGLE VARIABLES DURING TIME
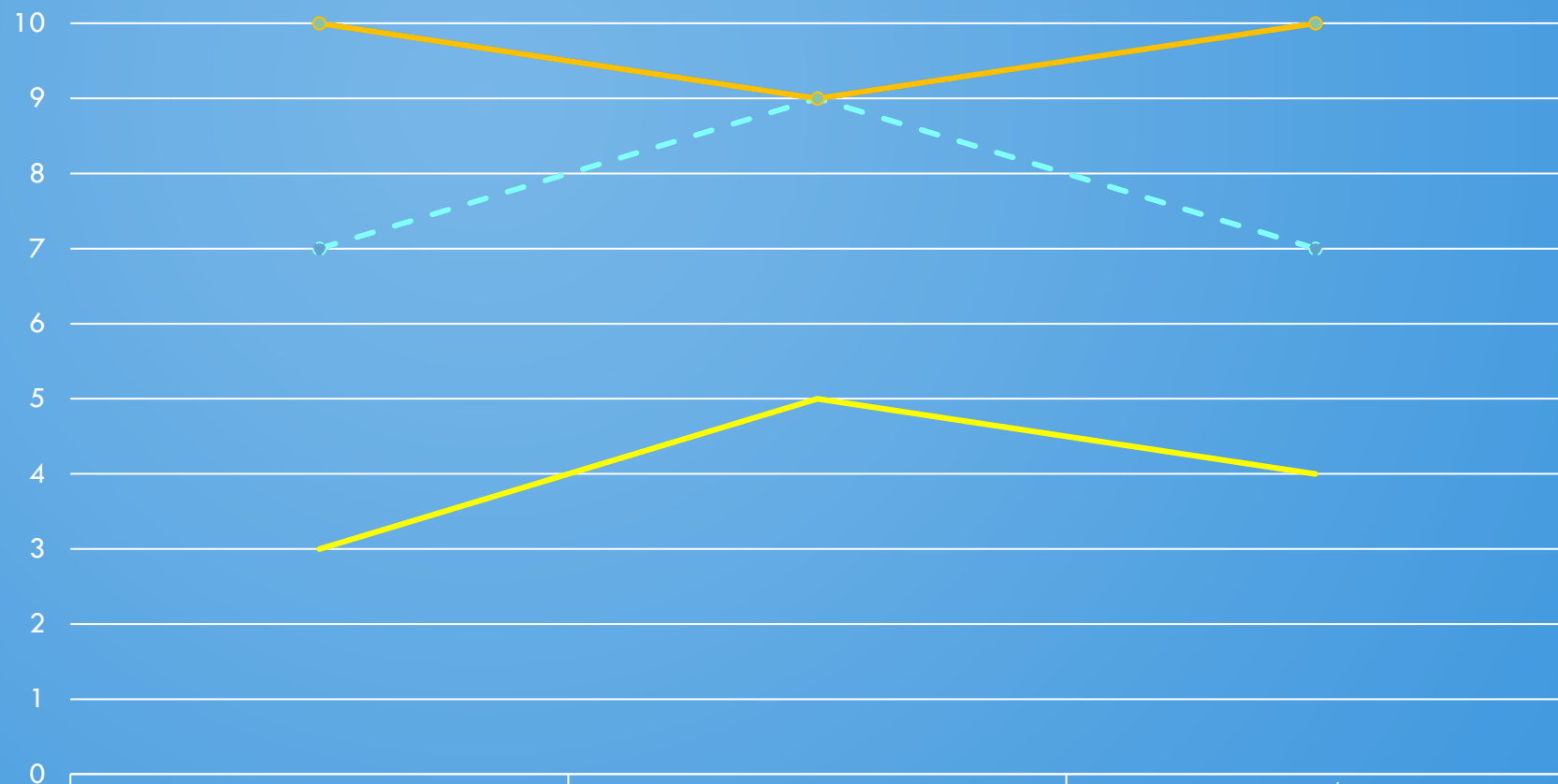
	DPR n. 309/90 in 2000	Law n. 49/2006	DPR n. 309/90 after Constitutiol Court sentence n. 32/2014
Consumption for personal use of cannabis	3	5	4
Consumption for personal use of hard drugs	3	5	4
Possession not for personal use of cannabis	7	9	7
Possession not for personal use of hard drugs	10	9	10
Sale of cannabis	7	9	7
Sale of hard drugs	10	9	10

How the degree of severity of the law changes between the different laws and leximetric value of the law

	DPR n. 309/90 in 2000	Law n. 49/2006	DPR n. 309/90 after Constitutinal Court sentence n.32/2014
Consumption for personal use of cannabis or hard drugs	3	5	4
Possession not for personal use of cannabis or sale of cannabis	7	9	7
Possession not for personal use of hard drugs or sale of hard drugs	10	9	10
leximetric value of the Law	40	46	42
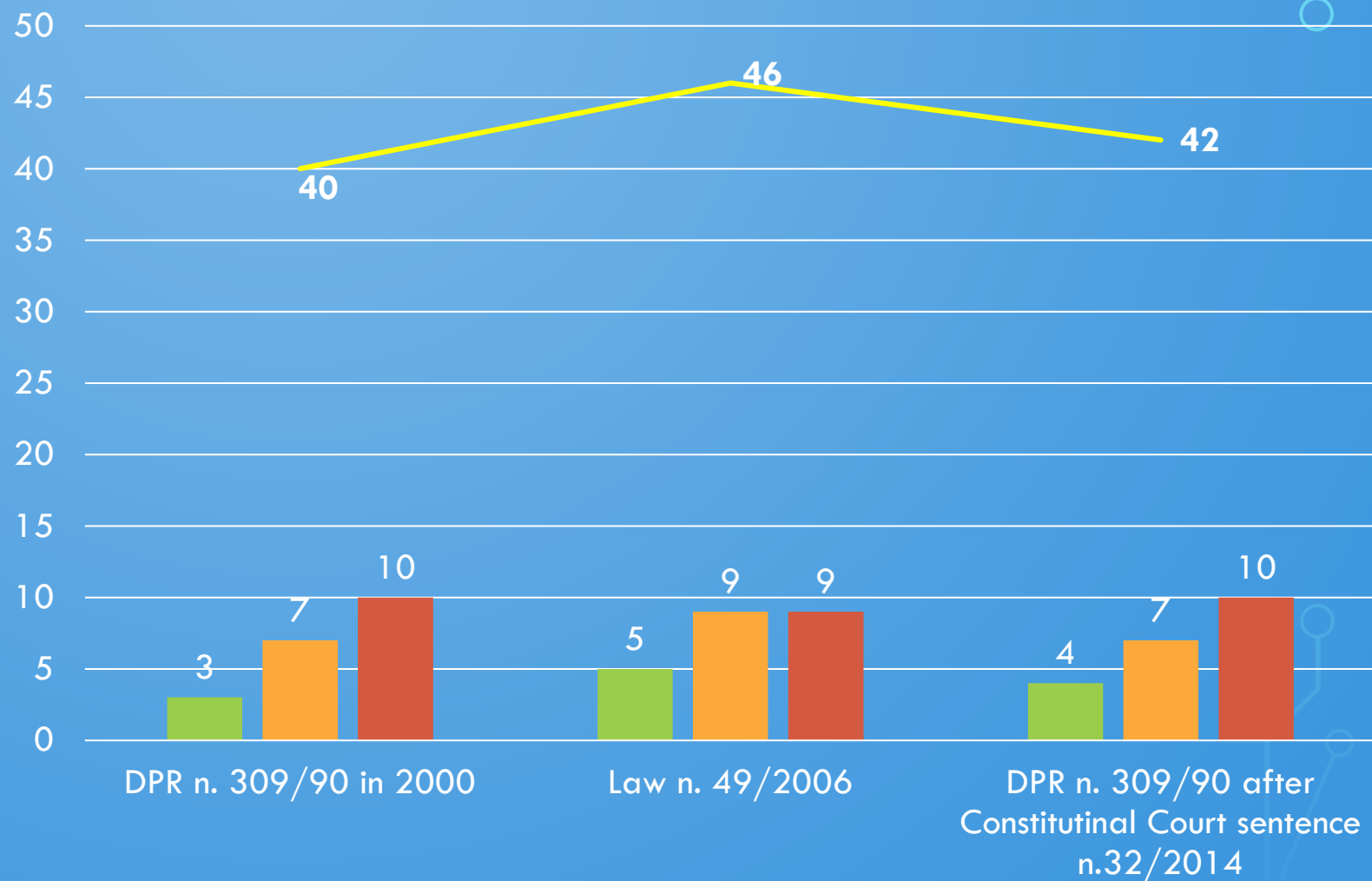
# A VERY ANTI-DRUG LAW (LAW N. 49/2006): MAIN ASPECTS

- 1) All illegal drugs become equal with respect to the repressive application of the law for those who possess them for personal use (art. 75) and also for pushers (art. 73): no distinction between hard drugs and soft drugs; cannabis is treated in the same way as heroin, cocaine and any other illegal substance;

- 2) For personal consumption, administrative penalties are always provided, which can now be up to one year, and can no longer be avoided by accepting to enter therapy.

- This absolute **ascientific** law caused serious consequences much more serious than the previous law of how much 15% increase in the leximetric value can represent.

LEXIMETRIC SCORES ARE SUFFICIENT TO TAKE INTO ACCOUNT IDEOLOGICAL APPROACHES??

- The leximetric approach unfortunately does not allow to take into account ascientific aspects of anti-drug laws and policies such as those mentioned.

- A specific measurement score should be introduced for similar aspects, as done in the statistical field, moving from the "classic" approach to the "Bayesian" approach, which is much more flexible and advanced.

- We will only use an important example to highlight both the limitation of leximetric scores and that of "classic" key indicators, used to measure the social costs deriving from anti-drug policies, particularly from those ideologically aspects.

ALL DRUGS ARE EQUAL BEFORE THE LAW IS NOT INCLUDED IN THE LEXIMETRIC SCORE: CONSEQUENCES

- The scientific classification distinguishing substances in "soft" and "hard", according to the effects resulting from use, was not applied for users and for pushers in Italy according to Law n. 49/2006 in action since 2006 to 2013.

- Consequences concern the extention of the poly-drug supply, as shown in the maps where the frequency of seizures of several substances in a single police operation, in the different provinces of Italy, in 2000 and 2007 is reported.

2000

2007
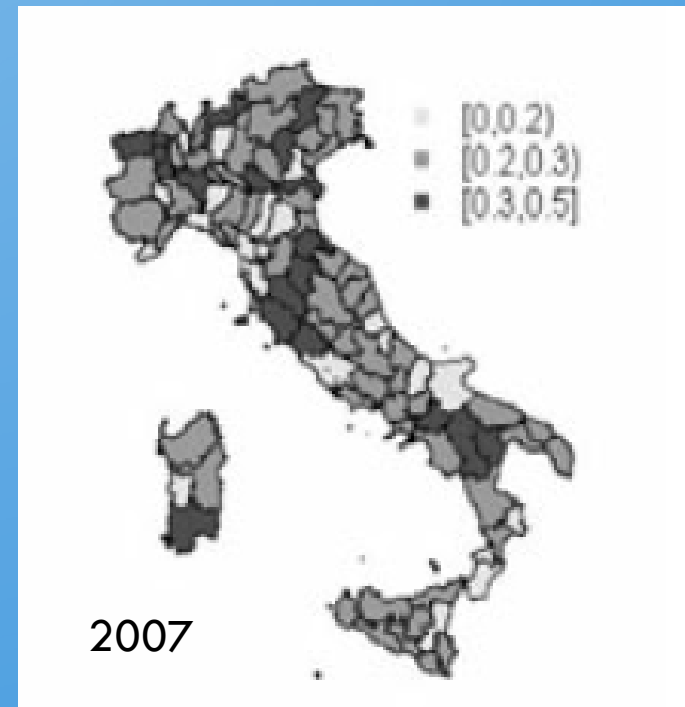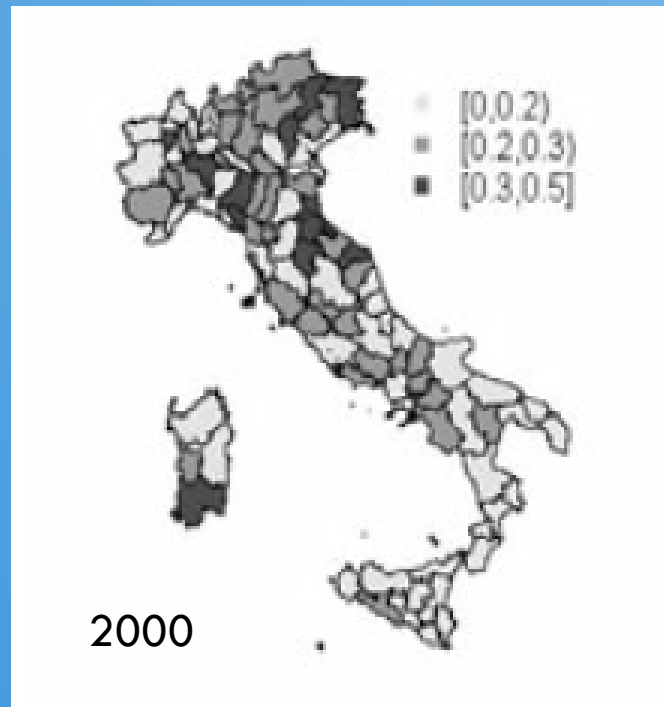
- Poly-drug supply caused poly-drug use, that can be measured by new indicators, which resulted higher in Italy with respect to the other 37 countries involved in the ESPAD study 2014 (Mammone et al., 2014).

FUNDAMENTAL SCIENTIFIC IMPORTANCE IN THE DISTINCTION OF SUBSTANCES AT THE LEVEL OF ANTI-DRUG LAW

- The different drugs may call for different strategies and policies, because there are large differences in toxicity, addiction potential and societal burden between them. Consequently, the most efficient approach to limit the health and economic burden of licit and illicit drug use is to focus the policy measures on drugs with the highest overall harm, including the physical, psychological and social harm to users and society (i.e. non-users) (van Amsterdam et al., 2015).

- In 2019, the Global Anti-drug Policy Commission also published the report CLASSIFICATION OF PSYCHOACTIVE SUBSTANCES: WHEN SCIENCE WAS LEFT BEHIND inviting the severity scores of individual substances to be taken into account in drug policy decisions, as suggested by papers as Nutt et al. (2008) and van Amsterdam et al. (2010, 2015) (https://www.globalcommissionondrugs.org/reports/classification-psychoactive-substances).

- **Some applications of this approach, using new indicators, are shown in the poster of Eranid-Alama which is available.**

SOCIAL COSTS AND CLASSIC KEY INDICATORS TO BE USED FOR DRUG POLICY EVALUATION IN THE ERANID-IDPSO PROJECT

- The social cost of "illegal" drugs measures the monetary and social cost of the consequences, most unintended, of the trafficking and selling illegal drugs and the consumption of them. They depend a lot on the laws and policies adopted, therefore they can be related to leximetric values.

- The social cost is composed of the external cost (value of lost human lives, loss of quality of life, production losses…) and the cost to public finances (prevention, repression, care expenditures…), (Kopp, 2015).

- **Some indicators of these costs are shown in the poster available on Eranid-IDPSO, here we examine some further aspects, in particular related to mortality and morbidity (first Kopp key indicators).**

THERAPEUTIC PROGRAMS AND ADMINISTRATIVE SANCTIONS FOR REPORTED DRUG USERS: INFLUENCE ON MORTALITY INDICATOR

Law n. 49/2006 in action
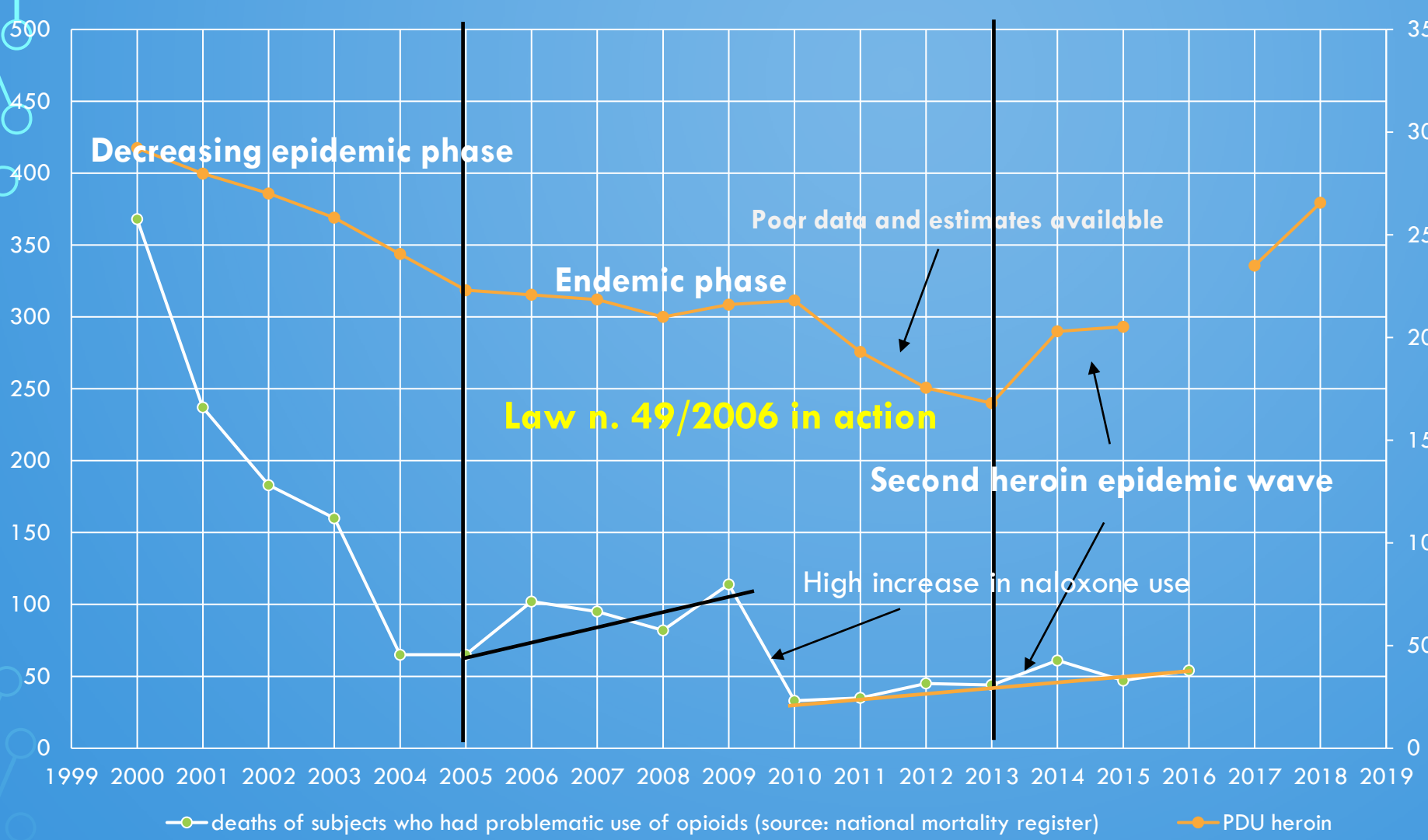
Therapy   Administrative penalties
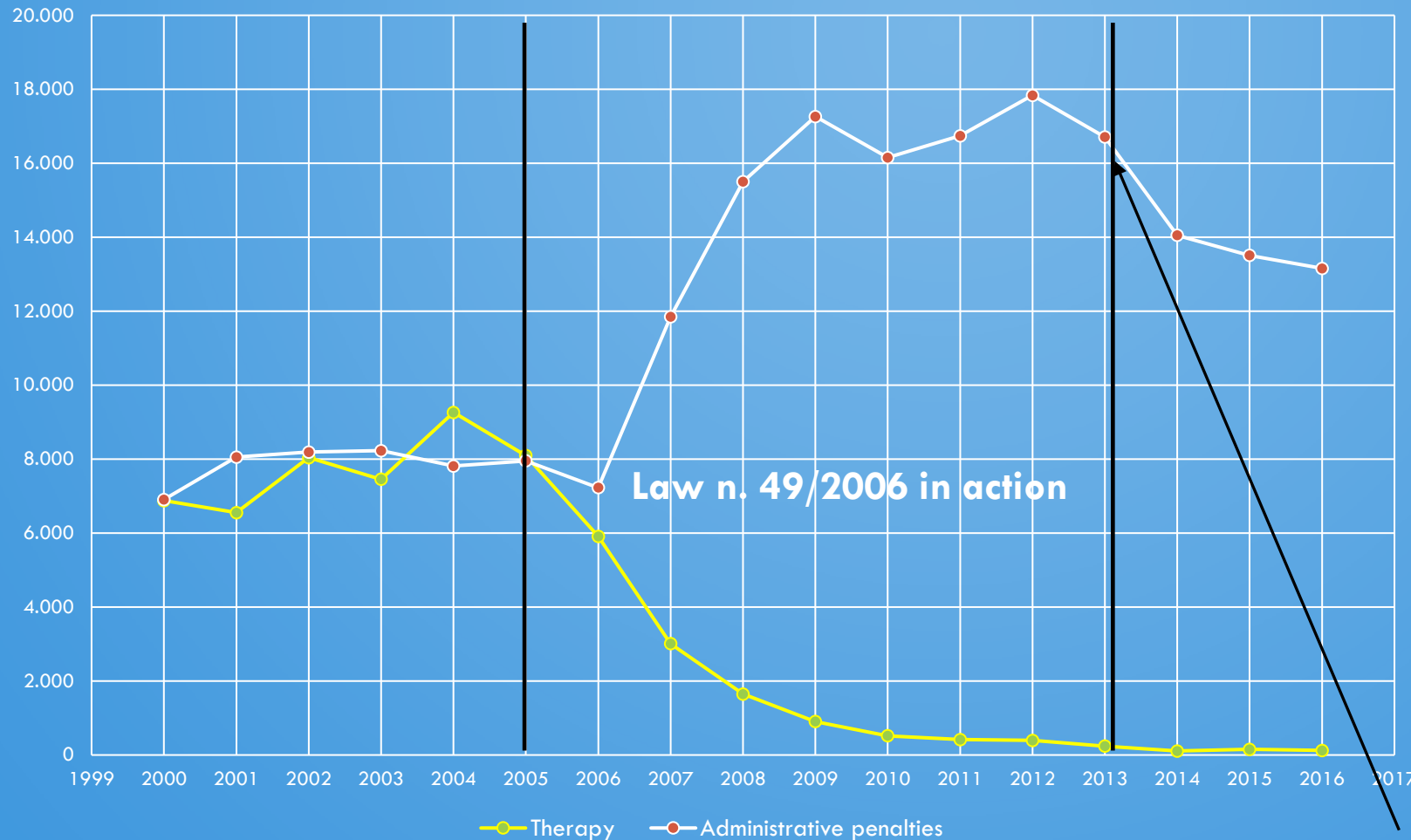
The secondary prevention, that took place with the start of therapy before 2006, was blocked by the Law n. 49/2006.

This situation resulted, in the first few years since 2006, in the unexpected increase in deaths, that constitute the first key indicator proposed by Kopp, especially for heroin (and opiates), indeed the substance with the highest score in van Amsterdam et al. (2010, 2015) as in Nutt et al.(2008).

The trend in the annual number of sanctions is consistent with the trend in the pilot leximetric score of the 3 laws.

The decrease in administrative sanctions since 2014 derives from the reintegration of cannabis among the soft drugs in the third Law.

DEATHS OF OPIATES (HEROIN IN PARTICULAR) PDU AND OFFICIAL ESTIMATES OF HEROIN PDU (RIGHT AXIS)

Decreasing epidemic phase

Poor data and estimates available

Endemic phase

Law n. 49/2006 in action

Second heroin epidemic wave

High increase in naloxone use

—○— deaths of subjects who had problematic use of opioids (source: national mortality register)   —●— PDU heroin

The increase in deaths at the beginning of the **Law n. 49/2006** entry is possibly related to the limited possibility of therapy to avoid administrative sanctions by consumers; this is explained by the important study VedeTTE on heroin users (sample size greater than 10000). The results, available since 2005, showed that the annual mortality rate was 0.1% for subjects in therapy and 1.1% for those not in therapy (Davoli et al. 2007).

Much more information on the second heroin epidemic wave in the western countries is in the poster of Centro Studi Statistici e Sociali which is available.

MORBIDITY: HOSPITAL ADMISSIONS AND DISCHARGES RELATED TO DRUG USE
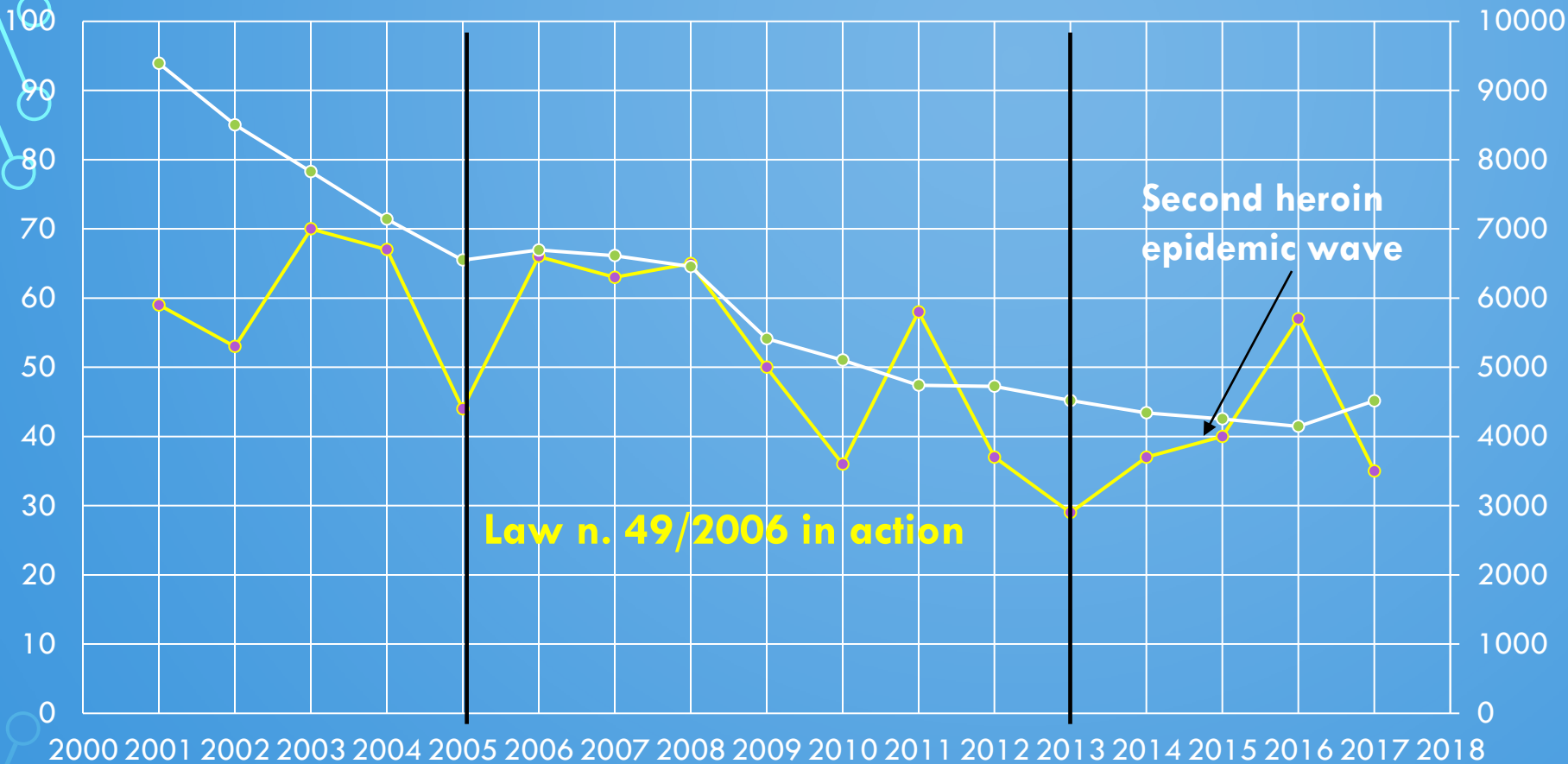
The initially decreasing trend (less on average for the under-18s) increases at the beginning of **Law n. 49/2006**'s entry into force, in particular for the under-18s in 2006, remains constant for 3 years and then decreases again but is influenced by the second heroin epidemic wave in recent years in which it becomes slightly increasing (especially, on average, for users under 18).

Second heroin epidemic wave

Law n. 49/2006 in action

—o— hospital admissions for opiates use under the age of 18 years

—o— hospital admissions for opiates use

Further, classic and new indicators will be used during the last year of the project Eranid-Idpso.

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THANK YOU VERY MUCH FOR YOUR ATTENTION