



# The social cost of drugs in France

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Studies on social cost allow public authorities to evaluate the economic burden of a social problem on the community. In order to update the data on social cost of legal substances (alcohol and tobacco) and illegal substances as a whole, the French National Health Directorate has subsidised a study on this subject. Further to a call for tenders led by the French Monitoring Centre for Drugs and Drug Addiction (OFDT), this study was entrusted, at the end of 2013, to Pierre Kopp, professor at Paris 1 University and researcher at the Economics Centre at the Sorbonne and the Paris School of Economics. A (French-language) note outlining the main conclusions of this undertaking is now available on the OFDT website<sup>1</sup>; the full report will be published by the end of 2015.

The objective of this study is to measure the monetary cost of the consequences of drug use and trafficking. It complies with the international standards of studies on social cost (Single et al., 1995) while the calculation parameters comply with the public calculation methodology recommended by the public authorities in France (Quinet, 2013).

## METHOD AND RESULTS

Two types of information are taken into account when calculating the social cost:

- External costs, consisting of costs hitting drug market stakeholders (value of human lives lost, loss of quality of life) and costs affecting stakeholders outside the drug market (loss of corporate and government output).
- Cost to public finances, consisting of the difference between expenditure for prevention, repression and health care, and tax revenue from alcohol and tobacco, together with savings in expenses related to unpaid pensions.

Different health data relating to mortality (deaths attributed to use of different types of substances) and morbidity (number of patients by pathologies mentioned, calculated using attributed fractions of these deaths) are taken into account. Economic data (estimation of output losses by years of life lost, public expenditure related to treatment, repression and prevention) are also included in these calculations. Given the data processing time-frames, these data are from 2010.

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1. <http://www.ofdt.fr/index.php?cid=791>

## Social cost of drugs in 2010

	Alcohol	Tobacco	Illegal drugs
Number of deaths	49,051	78,966	1,605
Number of patients	1,418,237	683,396	121,560
Number of «problem users»	3,800,000	13,400,000	300,000
<b>1. External costs (2+3+4) (€M)</b>	<b>-114,319</b>	<b>-105,391</b>	<b>-5,909</b>
2. Cost of lives lost	-66,218	- 65,057	-2,719
3. Cost of loss of quality of life	-39,167	- 31,695	-2,655
4. Output losses	-9,014	-8,639	-535
<b>5. Cost for public finances (€M) (6+7+8+9)</b>	<b>-3,049</b>	<b>-13,881</b>	<b>-2,327</b>
6. Cost of treatment	-7,696	-25,887	-1,459
7. Pensions savings	1726	1791	45
8. Prevention and repression	-283	-182	- 913
9. Tax	3,204	10,397	0
<b>10. Effect on wellbeing* (€M)</b>	<b>-3,658</b>	<b>-16,658</b>	<b>-2,792</b>
<b>11. Social cost (1+10) (€M)</b>	<b>-118,057</b>	<b>-122,049</b>	<b>-8,701</b>
12. Public finances/GDP (%)	0.20%	0.69%	0.12%
13. Social cost/»problem users» (€)	31,068	9,108	29,002

Note: \* line 10 is equal to the line 5 multiplied by 1.2, i.e. the opportunity cost of public funds.

The "social cost" of alcohol is equal to 118 thousand million euros. The social cost for tobacco amounts to 122 thousand million euros. The social cost related to illegal drugs reaches 8.7 thousand million euros.

External costs constitute the bulk of the social cost for each substance or drug group: this represents 97% for alcohol, 86% for tobacco and 68% for illegal drugs. This very high burden is linked to mortality related to use of these substances (49,051 alcohol-related deaths, 78,966 tobacco-related deaths and 1,605 illegal drug-related deaths), together with the cost defined for a lost year of life (115,000 euros). "Human life losses" thus represent more than half the social cost for alcohol and tobacco (56% and 53%, respectively) and nearly a third for illegal drugs (31%). It should be noted that the external cost of alcohol is 8% higher than for tobacco, although the number of tobacco-related deaths is higher than the number of alcohol-related deaths. The reason is twofold: the average age of death is lower for alcohol than for tobacco (63 years vs. 71 years) and numerous accidental deaths due to alcohol occur at an earlier stage.

"Loss of quality of life" represents 33% of the social cost for alcohol, 26% of the social cost for tobacco and 30% of the cost of illegal drugs. Hence, while the "cost of lives lost" is 2% higher for alcohol than for tobacco (see above), the "cost of loss of quality of life" is 24% higher for alcohol than for tobacco. Alcohol, in fact, gives rise to numerous disorders which are highly incapacitating for long periods of life; these disorders thus have a very high social cost.

This is followed by the "cost of treatment" for tobacco and illegal drugs, corresponding to 21% and 17%, respectively, of the social cost, ahead of output losses, representing 7% and 6%, respectively, of the social cost. For alcohol, output losses represent 8% and cost of treatment 6%.

The cost of drugs for public finances represents 1% of GDP. Each year, the State pays out 3 thousand million, 13.9 thousand million and 2.3 thousand million euros, respectively, for alcohol, tobacco and illegal drugs. On the whole, 33% of the French budget deficit is said to be due to the negative burden of drugs on public finances. Observation of the flow of public finances shows that the State budget, regardless of the drug considered, is negatively affected by the existence of drugs. Hence, tax revenues are lower than the "cost of treatment" (8.5 and 25.9 thousand million euros, respectively). Taxes on alcohol only represent 42% of the cost of treatment of disorders caused by alcohol, whereas taxes on tobacco are also insufficient to cover the cost of treatment resulting from tobacco use, and represent 40% of tax revenue.

## ADDITIONAL INFORMATION

- ▶ The social cost of alcohol cannot be added to that of tobacco or illegal drugs.

The attributed fractions which determine the value of lives lost – i.e. the predominant share of the social cost – do not, in fact, take comorbidities into account. Some individuals who died due to alcohol were also smokers, and vice versa. This is also the case for illegal drugs.

- ▶ Since the last study, the parameters for the calculation of the social cost have been extensively modified, which makes any comparison difficult.

The social cost for drugs, calculated in France for 2010, is much higher than that obtained in previous assessments. This study generates social costs by drug category, approximately three times higher than for the previous study published in 2006, and using data from 2000 onwards (social cost of alcohol estimated at 37 thousand million euros, 47 thousand million euros for tobacco, and 3 thousand million euros for illegal drugs) (Kopp and Fenoglio, 2006).

This noteworthy change stems from improved epidemiological knowledge (notably in taking into account tobacco-related deaths) and a change in the methodology for the public economic calculation officially adopted by the public authorities (higher value for human life taken into account). The percentage for output losses, calculated from GDP, automatically decreased in the social cost.

- ▶ This study does not offer any international comparisons.

The study meets the international standards for calculations on this subject; however, certain conventions (value of human life, discount rate) vary from one country to another, in the same way as the scope and guidelines for recording expenses. Due to these factors, a reliable comparison between different countries cannot be provided.

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