

Inclusion of narcotics in the national accounts in the 2014 base

1. Why include narcotics in the national accounts?

The national accounts manuals, including the European System of Accounts (ESA 2010), explicitly consider that the legality or illegality and the declared or undeclared nature of a transaction is no reason not to describe it in the national accounts: the purpose of the national accounts is to trace all effective income flows.

It is therefore the existence of a mutual agreement between all the parties involved that legitimises the inclusion of a transaction in national accounting, and not whether it is legal and declared. For many years the French national accounts have therefore applied adjustments to source data (data of an administrative nature in particular) in order to ensure, for example, that the estimates of output and income do in fact take account of the activity concealed by enterprises (whether or not they have a legal existence) or private individuals. On the other hand, car theft is not tracked (even though it generates income for the people who engage in it) given that the criterion of mutual consent is evidently not verified.

Since the 2005 base was introduced the national accounts produced by INSEE have also incorporated adjustments to take account of tobacco smuggling in order to reflect the impact of this phenomenon, which has been steadily increasing since the duty on tobacco started to be increased in the 1990s. The estimation of tobacco smuggling was refined in the 2010 base, based on the data of the OFDT (French Monitoring Centre for Drugs and Drug Addiction) and the INHESJ (National Institute for Advanced Security and Justice Studies), taking account, based on the seizure data for contraband tobacco, of the elasticity of demand for contraband tobacco to changes in price.

And yet, until the 2010 base came in, the French national accounts included no adjustment to take account of the output, trafficking or consumption of narcotics, on the grounds that the phenomenon of addiction cast doubt on whether or not consumers were willingly engaging in the transactions: once addicted, the consumer is no longer really in a position to "choose" not to consume drugs.

However, this reasoning included two objective weaknesses:

- firstly, the consumer gave his consent to his first purchase of narcotics (he was not yet addicted);
- secondly, this reasoning could be applied to other products that also generate addiction, but whose consumption is legal and well tracked in the national accounts: alcohol, tobacco, gambling and gaming, etc. The exclusion of narcotics was therefore not self-evident. Discussions at European level with a view to harmonising the national accounting methods (notably for the calculation of the gross national income GNI which to a large extent determines the level of countries' contributions to the European Union) furthermore revealed that INSEE's stance on this issue was in the minority. INSEE therefore chose to come into line with the practices of the other European countries when it switched to the 2014 base.

It should be noted that other illegal activities are still not tracked in national accounting in the 2014 base, most notably certain forms of prostitution. Indeed, street prostitution is notoriously exercised by undocumented people, frequently minors, and controlled by illegal immigrants who have trafficked them into France and whom they reimburse by engaging in prostitution. These situations are more akin to a form of sexual slavery than the exercising of a profession of one's own free will: it is for these reasons that the national accountants do not make any adjustments to take account of these forms of prostitution.

Conversely, "discreet" prostitution exercised indoors and under cover of legal activities (bars, massage parlours, etc.) does not pose the same problems with regard to the criterion of mutual consent to the

transaction. This form of prostitution is probably captured via the tax sources relating to the establishments where these activities take place, as well as by the general adjustments made to take account of declared enterprises' concealed activities. For all that, it is not possible to isolate the quantitative impact on output or consumption of this form of prostitution given that the establishments concerned are officially carrying out a legal business (in order to avoid laying themselves open to accusations of pimping).

2. Inclusion of drug trafficking in the accounts - general methodology

The national accounts, in the input-output table, place side by side for each product:

- the resources, which allow the measurement in "value" and in "volume" (volume is close to the concept of quantity, but also includes changes in the quality of products) terms of the product available in France. In particular, resources cover:
- **resident output of the product**: in the case in point, for narcotics, it is necessary to include the amount corresponding to home-grown drugs in France;
- **imports at the basic price** (i.e. exclusive of trade margins and transport margins): in this case, for narcotics, this means estimating the amounts corresponding to imported drugs, including the cost of transport in the exporting country, but excluding the cost of transport after leaving the exporting country this transport being recorded in transport output (when it is carried out by a resident importer) or in transport imports (when it is carried out by a non-resident importer);
- **trade margins:** for narcotics, this will mainly be the difference between the resale price to the French customer (minus the cost of transport in France) and the purchase price of the imports paid at the French border by the trafficker;
- **transport margins**: for narcotics, this corresponds to the cost of transporting the drugs on French soil, whether this involves "go slow" or "go fast" type transport.
- uses, namely the final use of the product, and in particular:
- **household consumption**: the entire supply of drugs available on French soil is deemed to be consumed by resident households;
- thus, the drugs available in France in 2014 are considered to be neither exported nor stored. In addition, drugs are consumables, not an investment.

In the products² classification, drugs are included in the pharmaceuticals category.

3. Inclusion of drug trafficking in the accounts - detailed methodology

The national accountants have mainly relied on a 2016 report "L'argent de la drogue en France" (*Drug money in France*) published by the MILDECA (Interministerial Mission for Combating Drugs and Addictive Behaviours) and the INHESJ.

This report provides estimates of the amounts corresponding to the consumption of the main drugs in 2010: €1,117m for cannabis, €902m for cocaine, €267m for heroin, €42m for ecstasy/MDMA and finally €13m for amphetamines, or a total of just over €2.3bn of final consumption expenditure for the year 2010 (*box*).

It provides detailed information on the structure of the different markets, which enables the consumption amounts (use) to be broken down into output, imports, trade margins and transport margins (supply), and therefore to balance the resources and uses for each main type of drug.

¹ In the past, however, France was an exporter of heroin, and this has been integrated into the backcasting.

This classification allows different products to be distinguished according to characteristics other than their function and use.

Box: drug consumption in France estimated by the INHESJ and the MILDECA

The methodology used in the "L'argent de la drogue en France" (*Drug money in France*) report published in 2016 to put a value on the consumption of drugs relies on information available on the country's demand ("demand-based approach"): prevalence of users via household surveys (proportion of consumers, frequency and intensity of consumption), knowledge available on their modes of consumption and procurement of the products, and on the different variables such as the retail price and quality of the drugs as close as possible to the year 2010.

As the INHESJ and the MILDECA emphasise, caution is required in an exercise of this type: "as the observation of underground markets is only partial, the evaluator uses different assumptions leading to estimates which can have a high confidence interval".

On the one hand, estimation of prevalence rests on declarative surveys of households conducted by the INPES (National Institute for Prevention and Health Education), whilst the illegal nature of this type of consumption may encourage respondents to under-declare or avoid answering these questions. However, in the case of cannabis, the scale of its prevalence probably means that it is possible to obtain a less skewed vision via the surveys as this product is in widespread use by the population and sometimes "trivialised" in its representations.

On the other hand, the robustness of the estimates concerning the price of the illegal drugs in question is a matter for debate. The estimates of drug consumption produced by the INHESJ and the MILDECA are based on a median price observed by independent sources in France (the ORCTIS (Central Office for the Repression of Illegal Drug Trafficking) and the OFDT (French Monitoring Centre for Drugs and Drug Addiction)). The convergence between these different sources confers a certain credibility to this figure, but it also masks wide territorial and organisational disparities.

a) Cannabis:

Cannabis is generally produced in a low-cost third country, for about €450 per kg. After it is transported to the French border, French wholesalers purchase the cannabis for a price of about €1,500/kg, before transporting it on French soil and selling it to French consumers at a price of a €6,500/kg.

Thus, transport and trade margins account for about 80% of the total cost of consumption.

The report further states that transport costs represent approximately 6% of the purchase cost at the border for "go fast" transport³ and 3% for "go slow" transport,⁴ which enables the transport margins to be estimated (€0.01bn) and to deduce from them the trade margins (€0.9bn) and then the imports (€0.1bn at the basic price). Home-growing (by resident households for their own use) is estimated at about €0.1bn.

b) Cocaine

Cocaine is produced is distant countries (Latin America mainly) for a cost of about €2,500/kg. A portion of the drug produced is purchased directly by French resident importers (assumed to be 60% of importers), who sell it on to traffickers with a first trade margin, at a resale price of €31,500/kg. The French dealers then sell the product to consumers at a very high price, of the order of €180,000/kg for pure cocaine.⁵

This information, assuming that the cost structure for the transport of cocaine in France is similar to that of cannabis, leads to an estimate of consumption of €0.9bn of cocaine, which breaks down in 2010 into €0.8bn of trade margins, €0.1bn of transport margins and €0.1bn of imports.

c) Other drugs

The consumption of other drugs (€0.3bn) is assumed to break down into 2/3 trade margins (€0.2bn), very little in the way of transport margins and imports of €0.1bn.

³ Rapid transport using a large, powerful vehicle

⁴ Transport on the secondary road network using a vehicle with a small engine

Cocaine is usually cut with other substances before resale, which implies a lower face value of the drug sold to the French consumer, somewhere between €45,000 and €80,000 per kilo for 45% pure cocaine, according to the report.

d) Switching from the year 2010 to 2014, then estimating the drug market each year

The amounts obtained for 2010 were then "aged" until 2014, taking various effects into account:

- changes in the quantities consumed for each of the types of drugs, based among other things on the periodic publications of the OFDT, which provides indications of changes in the numbers of consumers;
- possible changes in the "quality" of the drugs sold (for example THC content for cannabis), based on a variety of publications by the same organisations;
- changes in the prices for each of the types of drugs, either based on information from the publications of the OFDT and the INHESJ, or by using the CPI when no specific information is available. The same process is applied for every year after 2014 and specific monitoring of the publications relating to this activity has been organised, in order to include in the accounts any possible change in consumption habits or any modification of the structure of the drug market.

The impact on GDP of the inclusion of narcotics trafficking corresponds to total drug consumption (€3.1bn) minus imports (€0.4bn), i.e. €2.7bn for the year 2014.

4. Employment in drugs rings

The "L'argent de la drogue en France" report also provides detailed information on the organisation of drugs trafficking rings, particularly for cannabis and cocaine.

This information enables hypotheses to be formulated on the number of jobs and the hours worked to be integrated into the account as a result of the inclusion of narcotics trafficking.

- Under physical persons, only traffickers for whom drug trafficking is their principal activity are recorded. As it is likely that many small-scale dealers are in other employment at the same time, and that trafficking ringleaders are likely to have a "cover job", the number of physical persons added into the accounts is low, of the order of 1,000 physical persons, or approximately 0.004% of total domestic employment.
- Drug-related employment in full-time equivalent (FTE)⁶ terms is estimated on the basis of information provided by the report on the profits made by the "ringleader" and on the wages paid to small-scale dealers. These profits and wages, for which we can estimate a unit value based on information in the report, correspond to the trade margins already estimated. The number of FTEs is then calculated by dividing the total trade margins by the unit wages, which results in about 21,000 FTEs, or 0.08% of total FTEs in 2014.
- The hours worked by traffickers and dealers are also worked out using information in the report on the different drugs-related jobs, ultimately being estimated at just over 30 million hours, or approximately 0.07% of total hours worked in 2014.

5. Backcasting the series

Household consumption has been backcasted in real terms ("volume") to 2005 by formulating hypotheses on consumption volumes for each drug on the basis of the regular publications of the OFDT, "Drogues, chiffres clés" (*Drugs, key figures*) and by adding in any changes in the quality of the drugs consumed (increase in THD content in cannabis, changes in the degree of purity of cocaine consumed, in particular). Drug prices are generally assumed to change in line with the consumer price index.

From 1992 to 2005, backcasting in real terms of household consumption relies on the document "Vingt ans d'évolution de l'usage de drogues en France, héritage et nouvelles transformations" (20 years of drug use in France, legacy and new transformations) written by F. Beck, in combination with the graphs published by the Health Barometer. The volume thus calculated is then valued according to the consumer price index to estimate nominal ("value") consumption.

⁶ Full-time equivalent employment corresponds, for a given activity, to the total number of full-time jobs, plus, on a pro rata basis according to the number of hours worked, the jobs held part-time or worked over part of the year.

Household consumption was then backcasted to 1959 based on quantitative data from a variety of sources: development of the use of heroin in the 1970s, explosion in the use of cannabis, cocaine and ecstasy in the 1980s.

The other economic aggregates (output, transport margin and trade margins) are assumed to change over time in line with household consumption, with the exception of foreign trade (imports and exports), which take account for the period between 1960 and 1970 of the effect of the "French Connection", where the scheme consisted of bringing large quantities of opium and morphine from Turkey into the South of France, converting the drugs into heroin, and then exporting them to the United States.

Bibliography

INHESJ, MILDECA: "L'argent de la drogue en France – Estimation des marchés des drogues illicites en France", 2016.