European Monitoring Centre
for Drugs and Drug Addiction

Estimating drug market size

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Why?

- Practical uses
  - Gauge the relative importance of the markets for different drugs
  - Prioritise interventions.
  - Provide a scale against which law enforcement and other drug related activities can be compared.
  - Overtime, evaluate the impact of new legislation and policies.
- Substantive interest
  - The calculation involves a range of topics relating to consumption, an understanding of which is central to the drug situation.
- Other Imperatives
  - A perceived interest by policy makers.
  - A growing literature on the topic.
  - Inclusion in the estimates of GDP for a range of countries.

Approaches.

- Supply side
  - Amount produced – (Seizures + Losses) = Amount available & consumed
  - Amount available * Purity adjusted price = Market value
- Demand side
  - No. of users * Av. days of use * Amount used/day = Total consumption
  - Total consumption * Purity adjusted price = Market value
- Expenditure estimates.
  - Surveys of how much users spend on drugs.

Initial considerations.

- Which drugs should be selected.
  - In the first instance concentrate on cannabis and opiates.
  - In the medium term include cocaine and ATS other than cocaine.
  - Data issues preclude the others.
- Geographical breakdown.
  - Construct country level estimates.
  - Given that there are likely to be gaps:
  - Construct regional estimates where possible.
  - Evaluate whether a European level figure is credible.
- Unit of the estimate.
  - Quantity or price.
- Time period.

The devil is in the detail.

- Data is the main issue.
- Segmentation of the market is necessary to improve accuracy.
- How the market should be broken down is open to debate, though some typology of users is required.
- The typologies to date are constructed on the basis of the frequency of use.
- Data at the various levels may not be available.

Typologies of users (cannabis)

Previous studies	Groupings (% of users)	Countries
Van Laar et al, 2013	Chippers <11 days in past year (37-66%); Occasional 11-50 days (13-37%); Regular 51-250 days (12-25%); Intensive 251+ days (5-25%)	BG, CZ, IT, NL, PT, SE, E&W
Hakkarainen et al, 2008	Experimenters (17%), Modest occasional (41%), Frequent occasional (22%), Weekly users (14%), Daily users (6%)	FI
Kilmer et al, 2009	Past month users, Past year not past month users	A, BE, CY, CZ, DK, ET, FI, F, DE, G, H, I, IT, LA, LT, NL, N, P, PT, SK, E, SE, UK
Legleye et al 2008	<10 days in past month; 10-29 days in past month; daily users.	F
Pudney et al, 2006	Problematic users; recreational users	UK

Data issues related to a demand-side estimate.

- How to obtain the number of users.
  - Surveys such as the GPS?
  - What user typologies are available?
  - What years are available?
  - Do we adjust for under-reporting/under-coverage?
- Amount used per day.
  - Form: resin, herb, oil ..
  - Mode: joint, pipe, bong, vaporiser, food
  - Sharing or alone.
- Price levels.
- Purity levels.
- Imputation for missing data.

Issues for discussion

Dealing with variability of data

- Missing values / Undercoverage / Varying reliability & precision

Level of complexity

- Trade-off between simplicity, robustness and validity

Coverage of estimate

- Country-level &/or EU / What drugs / drug types?

What data is available to support this approach?

- Users / User types / Use patterns

Issues around use /misuse of data

- Presentation / representing uncertainty / handling updates

How you can help

- Propose to set out a short survey with questions on availability of information and country studies.