# SUMMARY DRUG POLICY IN FIGURES III

FREYA VANDER LAENEN BRICE DE RUYVER JOHAN CHRISTIAENS DELFINE LIEVENS





# 1. INTRODUCTION

For several years, a clear choice at both national and international level for an evidence-based policy can be noticed (Leeuw,2005; Wyatt,2000). For several reasons, the "public expenditure-research" is an integral part of this evidence-based-policy. Firstly, it is impossible to execute a policy evaluation without having insight into the expenditures of the several authorities for the realization of their policy goals (Single et al., 2003). Secondly, a clear view on the outline of the costs is necessary to conduct a cost-effectiveness study. Thirdly, the inventory of public expenditures is part of the social cost-research of the drug phenomenon (Reuter, Ramstedt & Rigter, 2004; Moore, 2005, De Ruyver et al., 2007).

In Belgium, the importance of research into public expenditure is emphasised in the federal policy document on drugs of 2001. The Federal drug note (2001) indicates that, in the framework of an integrated and comprehensive approach, it is indispensable to map the public expenditures of the several policy levels and sectors. To this end, the research "Drug policy in Figures I" was carried out between 2001 and 2003 under Prof. dr. Brice De Ruyver as the promoter. From 2005 until 2006, Drugs in figures II performed a new measurement using the refined and updated methodology, to gain insight into the evolutions in public expenditure concerning the approach to the drug problem in Belgium. In the present research Drugs in figures III, the method is refined again and extended to estimate legal drugs (tobacco, alcohol and psychoactive medication). This extension allows -in line with the Joint Declaration of the Interministerial Conference on Drugs (2010) making no distinction between legal and illegal drugs- to obtain a full insight into all public expenditures with regard to an integrated and comprehensive drug policy.

# 2. RESEARCH OBJECTIVES

'Drugs in figures III' measures the public expenditures (anno 2008) of the Belgian drug policy. Its objective is to carry out a new estimation of public expenditures on illegal drugs and a first estimation for legal drugs (tobacco, alcohol and psychoactive medication).

Firstly, a conceptual and methodological framework is developed, based upon the previous Drugs in figures studies. Furthermore, an inventory of actors involved in the policy on illegal and legal drugs is created. During the next phase, a new estimation of public expenditures is carried out by collecting data top-down, followed by a check on the top-down approach. Fourthly, the research method is evaluated and this leads to proposals that could improve future measurements. Finally, the research drew up a scenario, allowing the federal, regional and local authorities -after finishing the present research- to estimate their drug-related public expenditures. The manual describes which methodological steps one has to follow for data collection and processing. This instrument allows to monitor the Belgian drug policy in the future.

## 3. CONCEPTUAL FRAMEWORK

The conceptual framework of this study starts from the concept 'drug budget', namely the expenditures of the public authorities are analysed at each level of competency for the different policy domains. This study focuses on the direct nature of the public expenditure, consequently the proactive expenditures -expenditures for actions expressly and directly aimed at implementing drug policy- are measured. Secondly, external and private expenditures are excluded, because these expenditures are beyond the scope of a public expenditure study. These expenditures are only studied in a social cost study (Vander Laenen, Vandam, De Ruyver & Lievens, 2008). Thirdly, labelled and non-labelled drug-related public expenditures are measured. The EMCDDA expect this method of classification from the national focal points (NFPs) in order to have a stronger comparability of results across countries of the Reitox network.

# 4. **RESULTS**

A public expenditure study can fulfil the potential role of informing the decision makers on three levels. Firstly, the study provides insight into how the drug expenditures are composed and what the public authorities so-called 'policy mix' is. Secondly, the study gives insight into the evolution of public expenditures on drugs over time. The results of the previous study Drugs in Figures II are considered as the point of comparison. The third level considers the potential role of public expenditures studies in a cross-country comparison.

## **4.1. TOTAL DRUG-RELATED PUBLIC EXPENDITURE**

In 2008, Belgian public authorities spent approximately 975,085,793 Euros on drug policy (for illegal drug, alcohol, psychoactive medication and tobacco). This expenditure is the mean of the low end estimate and a high-end estimate: the public authorities spend minimum 655,473,287 Euros and maximum 1,294,698,299 Euros on drug policy. These estimations are conducted because the calculations of expenditures for hospitalization and detention are based upon assumptions.

Secondly, an analysis is produced of the expenditures by pillar and competence level. Table 1 shows that the federal level is responsible for the biggest expenditures, because of the high expenditures for hospitalization and detection/sentence execution. The Flemish government holds the second position, with the expenditures for the centres mental health care (CGG) as most important cost. Furthermore, Wallonia spends more than half of the expenditures on prevention. The question remains if the proportions would change if a calculation of the mental health care centres (SSM) in Wallonia were possible, this was not the case in this study. Fourthly, Brussels Capital-region contributes to drug policy, in particular COCOF finances 15 organisations that have a focus on addictions. Fifthly, local expenditures only account for 0.28% of the total drug-related expenditures. The cities and municipalities focus mainly on the domain of prevention. Finally, the smallest contribution is provided by the provinces.

	Prevention	Treatment	Harm	Law	Other	Total
			reduction	enforcement		
Federal government	2,589,842	725,667,575	299,746	216,744,689	3,159,094	948,460,946 97.27%
Flemish government	3,882,021	7,625,207	461,203		38,250	12,006,682 1.23%
Wallonia	3,474,460	1,752,737	1,066,608			6,293,805 0.65%
Brussels Capital-region	1,054,467	2,894,997	173,808			4,123,272 0.42%
Provinces	982,347	455,745	-			1,438,092 0.15%
Towns and municipalities	1,268,330	902,278	328,388		264,000	2,762,996 0.28%
Total	13,251,468	739,298,540	2,329,752	216,744,689	3,461,344	975,085,793

Table 1: Drug policy expenditures for illegal drugs, alcohol and psychoactive medication for the different levels of competency (2008)

In this third part the expenditures per capita are examined. Belgium's population stood at 10,666,866 inhabitants in 2008. This means that public expenditure on drug policy represented 91.41 Euros per inhabitant. Taking into account the level of spending per pillar, this 91.41 Euros may be divided as follows:

Pillar	Euros per capita
Prevention	1.24
Treatment	69.31
Harm reduction	0.22
Law enforcement	20.32
Other	0.32
Total	91.41

Table 2: Distribution of public expenditure by pillar (2008)

### 4.2. COMPARISON ACROSS SECTORS

#### 4.2.1. ILLEGAL DRUGS, ALCOHOL AND PSYCHOACTIVE MEDICATION

Belgian public authorities spent approximately 963,568,683 Euros on drug policy (for illegal drug, alcohol and psychoactive medication). Figure 1 illustrates that treatment accounts for 76.5% of the total drug policy expenditures, and enforcement expenditures represent about one-fifth (21.67%). Prevention (1.24%), harm reduction (0.24%) and other policy activities (0.35%) are minor components of spending.

Figure 1: Visualization of the drug policy expenditures for illegal drugs, alcohol and psychoactive medication (2008)



Further analysis shows that this policy mix is largely affected by the treatment of alcohol abuse in hospitals. The total expenditure for hospitalization of alcohol is 553,217,388 Euros or 57.41% of the total drug-related public expenditure. This indicates that alcohol generates high cost to society. The previous statement is also applicable to the pillar law enforcement, namely on the level of detection (by police) and sentencing. High expenditures for alcohol arise because the biggest part of the police reports and convictions is alcohol-related<sup>1</sup>. We conclude that alcohol use generates high expenditures for treatment and the criminal justice system, in particular for the levels detection and sentencing.

<sup>&</sup>lt;sup>1</sup> Detection: 1% of the police reports is drugrelated and 1.41% is alcoholrelated

#### 4.2.2. Товассо

It was feasible to measure the exact amount for tobacco policy, therefore the distribution by pillar is presented separately in figure 2. This figure presents the expenditures for the tobacco policy ( $\leq$  11,517,110) and shows that enforcement is the largest expenditure (68.88%), treatment with 18.74% is second in rank and prevention accounts for 11.54%. The hospitalisation costs for treatment of lung cancer is not included, because these external expenditures are only measured in a social cost study.



Figure 2: Visualization of the drug policy expenditures for tobacco (2008)

The tobacco policy mix will change in future measurements, because the reimbursement of tobacco dependence will increase. Since 2009, the reimbursement of tobacco dependence is extended to each patient that wants to quit smoking. This means that public expenditure for tobacco will raise, for example for the year 2009 the budget was 3.4 million Euros. Consequently, the policy mix of tobacco would change for 2009 to: prevention (8.90 %), treatment (37.34 %), law enforcement (53.11 %) and other (0.65 %). Even after this shift in the composition, the pillar law enforcement remains the biggest pillar, because the control on smoking ban in the catering industry remains an important cost for tobacco policy.

## 4.3. COMPARISON 2004 VERSUS 2008

In this national comparison over time, the expenditures of 2008 are being compared to the ones of 2004, derived from 'Drugs in figures II' (De Ruyver et al., 2007). The latter study had a research scope limited to illegal drugs, in other words a comparison over time is only possible for illegal drugs. Furthermore, it is difficult to make a comparison with the 2004 estimate, because of differences in research scope and methods of performing the calculations. Therefore, a new calculation is made for the year 2008 using the same proration techniques as in 2004. This provides a consistent comparison across years, allowing for direct comparisons between past and future budgets produced with the same methods. The public expenditures for illegal drugs are presented in table 3, adapting the 2004 expenditures of to inflation<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> The expenditures mentioned in the 2004 study are expressed in terms of their real value in 2008. Inflation is taken in account (general index= 111,32 base 2004, year 2008)

	2004		2008	
Prevention	12,294,733	3.72 %	11,412,257	2.91 %
Treatment	130,909,594	39.58 %	133,557,858	34.05 %
Harm Reduction	min. 340,628 <sup>3</sup>	0.10 %	2,329,752	0.59 %
Enforcement	186,038,337	56.24 %	243,000,490	61.96 %
Other	1,190,329	0.36 %	1,890,813 0.48 %	
Total	330,773,622	100 %	392,191,170	100 %

Table 3: Estimated drug policy expenditures (illegal drugs), Belgium, 2004 versus 2008

#### Prevention

Firstly, the total public expenditures for prevention are decreased with 7,18%. This decline took place on the level of regions and communities (French community and Cocof). The subsidies 'prevention des assuétudes' from the French community are decreased with 10%. In Brussels Capital-region a decline of expenditures is localised for Cocof due to changes in content of the activities of 14 the subsidized organisations (focus more on treatment instead of prevention<sup>4</sup>).

Table 3: Expenditures prevention (illegal drugs), Belgium, 2004 versus 2008

	2004		200	8
Federal government	1,820,224	14.80 %	2,304,105	20.19 %
Flemish government	3,333,784	27.12 %	3,060,618	26.82 %
Wallonia	3,773,711	30.69 %	3,212,533	28.15 %
Brussels Capital-region	1,499,838	12.20 %	1,038,397	9.10 %
Provinces	596,859	4.85 %	740,347	6.49 %
Towns and municipalities	1,270,316	10.33 %	1,056,256	9.26 %
Total	12,294,733	100 %	11,412,257	100 %

#### Treatment

A small increase is observed for the pillar treatment, an analysis of the different competence levels can provide more information. At federal level changes are noticed for the organisations with a RIZIV-convention, namely an increase of approximately 37% in comparison with 2004. Secondly, the number of hospitalization days in 2008 slightly declined in comparison with 2004. On the other hand, the increase of expenditures for hospitalization is due to increasing hospitalisation costs per day.

<sup>&</sup>lt;sup>3</sup> The Flemish expenditure for the program 'needle exchange' is not listed anymore as prevention, it is adjusted as the minimum expenditure for harm reduction.

<sup>&</sup>lt;sup>4</sup> The global budget of CoCoF for the 14 organisations is increased, otherwise in 2004 went 36.6 % to prevention and in 2008 is this 27.3%.

	2004		200	)8	
Federal government	120,004,951	91.67 %	123,119,383	92.18 %	
Flemish government	5,312,146	4.06 %	4,615,193	3.46 %	
Wallonia	2,189,531	1.67 %	1,604,195	1.20 %	
Brussels				2 17 0/	
Capital-region	2,546,546	1.95 %	2,894,997	2.17%	
Provinces	303,558	0.23 %	430,745	0.32 %	
Towns and municipalities	552,861	0.42 %	893,345	0.67 %	
Total	130,909,594	100 %	133,557,858	100 %	

Table 5: Expenditures treatment (illegal drugs), Belgium, 2004 versus 2008

Flanders and Wallonia have both spent less on drug treatment in 2008. The Walloon region allocated less subsidies to mental health care centres. The Flemish government has increased expenditures for the mental health care centres (CGG), social service centres (CAW) and the helpline (tele onthaal)<sup>5</sup>, however the expenditure for the treatment center 'De Sleutel' declined.

We observe an increase of provincial and local expenditures. On the one hand a methodological shift is responsible for this increase, on the other hand large cities invest more in drug treatment.

#### Harm reduction

Harm reduction was not considered as a separate pillar in the 2004 study, it belonged to the pillars prevention and treatment. It is not possible to determine the exact amount of the harm reduction expenditures in 2004. Despite this, the evolution of the Flemish program 'needle exchange' could be studied. In 2004 is the expenditure for this program 305,990 Euros and it rises in 2008 to 461,203 Euros<sup>6</sup>.

#### Law enforcement

Table 4: Expenditures law enforcement (illegal drugs), Belgium, 2004 versus 2008

	2004		200	8
Detection	152,318,468	81.87 %	168,989,940	69.54 %
Prosecution	3,832,648	2.06 %	6,799,870	2.80 %
Sentencing	3,883,307 2.09 %		6,229,902	2.56 %
Sentence execution	21,836,579	11.74 %	57,430,379 <sup>7</sup>	23.63 %
Indefinable level of the criminal justice system	4,167,335	167,335 2.24 % 3,550,		1.46 %
Total	186,038,337	100 %	243,000,490	100 %

Increasing expenditures are observed for each level of the criminal justice system. Two factors have influenced this evolution, namely the general budget on each level has increased (more than one would expect on the basis of inflation) and an upward trend in the number of recorded drug crimes is noticed. The latter is described below.

<sup>&</sup>lt;sup>5</sup> An increase of the global budget and activities 'drugs' are responsible for these increases.

<sup>&</sup>lt;sup>6</sup> If inflation is taken in account, it still increases with approximately 120.000 Euros

<sup>&</sup>lt;sup>7</sup> The methodology of 2004 could not be implemented for penitentiary, because we did not had the data for the proration technique. Otherwise, we did take into account the minimum estimate like in Drugs in figures II.

Firstly, on the level of detection, the general national database (ANG) of the police registered 20.64% more drug crimes. Further analysis indicates whether an increased attention occurred for the supply or demand side. Table 7 demonstrates that the biggest increases are noticed for the drug crimes fabrication and import-export.

	2004		2008	
Possession	23,655	67%	26,651	66%
Trade	5,528	16%	5,846	14%
Fabrication	537	2%	827	2%
Import/export	5,439	15%	7,345	18%
Total	35,159	100%	40,669	100%

Table 5<sup>8</sup>: Number of drug crimes registered by local and federal police: 2004 versus 2008

Secondly, the expenditures for prosecution and sentencing are increased. In comparison with 2004, the number of drug records increased on the level of the public prosecutor with 18.84%, furthermore 26.03% more drug convictions are registered.

The evolution on the fourth level of the criminal justice system, sentence execution, is studied by looking at the houses of justice and penitentiary. In the houses of justice the new mandates 'drugs' increased from 2,988 to 5,119 and the population in the penitentiary for a drug offence increased with 9.78% (minimum estimate) and with 15.45% in the case of drug offences in combination with other offences (maximum estimate).

### Other

The expenditures in the pillar 'other' did not change on the local level. However, the federal expenditures are increased due to methodological changes: a bigger part of the strategic security and prevention plans (SVPP) is considered as 'other' because the expenditures could not be assigned to one of the four pillars of drug policy.

	2004	2008
Federal government	927,875	1,588,563
Flemish government	-	38,250
Towns and municipalities	262,452	264,000
Total	1,190,329	1,890,813

Table 6: Expenditures other (illegal drugs), Belgium, 2004 versus 2008

#### 4.4. CROSS-COUNTRY COMPARISON

A comparison with other public expenditure studies is only possible for illegal drugs, because legal drugs are not analysed in the other public expenditure studies. The following indicators are examined: proportion of gross domestic product (GDP) and the expenditures per capita. Belgium's public expenditure on drug policy (illegal drugs) for the year 2008 amounted to 296 million Euros. On the 1<sup>st</sup> of January 2008, Belgium's population stood at 10,666,866 inhabitants and Belgium's GDP was 344.7 billion Euros. This means that public expenditure on drug policy represented 27.78 Euros per inhabitant or 0.09 % of the GDP.

<sup>&</sup>lt;sup>8</sup> This is the number of drug crimes registered by the central office drugs (not the registration of the general national database (ANG)).

Country	Voor	Expenditure	Proportion of	Per capita
country	rear	(million Euros)	GDP(%)	(Euros)
The Netherlands	2003	1721 <sup>9</sup>	0.36	106.07
(Rigter, 2006)				
Germany	2006	5144 - 6024	0.22 - 0.26	62.45 - 73.13
(Mostardt, 2010)				
Sweden	2002	502 <sup>10</sup>	0.19	56.25
(Ramstedt, 2006)				
Australia <sup>11</sup>	2002 - 2003	770	0.17	39.20
(Moore, 2008)				
Luxembourg	1999	22 <sup>13</sup>	0.11	51.54
(Origer, 2002 & 2010 <sup>12</sup> )	2009	38 <sup>14</sup>	0.1	77
Belgium	2008	296	0.09	27.78
France	2003	907	0.06	15.04
(Kopp & Fenoglio, 2006)				

Table 7: Cross-country comparison (illegal drugs)

Table 9 shows that the public expenditure in Belgium and France is far from the level of expenditure in the Netherlands and (less) than half of the expenditures in Sweden and Germany. A possible explanation lies in the history of the countries' drug policy. The countries with high drug-related public expenditures have a longer history in drug policy. For example, the Dutch drug policy, regarded as liberal and tolerant, has its foundations in the early involvement of the Netherlands in the legal trade of coca and opium (Chatwin, 2003). Germany's drug policy also has a long standing history, and it is also progressive in comparison with other countries (Schroth, Helfer & Gonshorek, 2011). Sweden transformed to a clear law-enforcement approach already at the end of the 1960s (Lenke & Olsson, 1996). On the other hand, the Belgian government started to develop a drug policy at the beginning of the 1990s and its first drug policy note was written in the year 2001. The combination of the cross country comparison results and the drug policy history provides support for the following conjecture: the late development of the Belgian drug policy may have delayed the growth in the financial investments in drug policy.

A second way to conduct a cross-country comparison is by studying the drug expenditure mixes of different countries. For the comparison, the countries that used the same policy categories (prevention, treatment, law

<sup>&</sup>lt;sup>9</sup> Original expenditures: 2185 million Euros. Expenditures for drug related crime (462 million Euros) and treatment of people with infectious diseases arising from drug use (2,8 million Euros) are subtracted (appendix).

<sup>&</sup>lt;sup>10</sup> Original expenditures: 737 million Euros. Expenditures for drug related crime (235 million Euros) are subtracted (appendix).

<sup>&</sup>lt;sup>11</sup> The proactive government expenditures of Australia are taken into account. The amount of 1875 million \$ reactive expenditures is excluded.

<sup>&</sup>lt;sup>12</sup> An update of the study Origer (2002) is conducted for the year 2009. Information available in the 2010 national drug report "Grand Duchy of Luxembourg" from Origer (2010).

<sup>&</sup>lt;sup>13</sup> The original expenditures were 23 million Euros. Expenditures for HIV/AIDS treatment provided to patients infected via intravenous drug use (1,3 million Euros) are subtracted.

<sup>&</sup>lt;sup>14</sup> The cost for HIV/AIDS treatment provided to patients infected via intravenous drug use cannot be subtracted, because the precise amount is not reported. The total expenditure of 38 million Euros is consequently an overestimation.

enforcement and harm reduction) are included. The drug expenditure mixes of the four countries are presented in two separate tables. The policy mixes of the Netherlands and Australia are presented separately because it is not correct, from a methodological point of view, to compare them with the figures of Belgium or Sweden.

Country	Year	Prevention	Treatment	Harm	Enforcement	Other
				reduction		
Sweden <sup>15</sup>	2002	1,6 %	35,5 %	0,2 %	62,7 %	/
(Ramstedt, 2006)						
Belgium	2008	3,9 %	49,1 %	0,8 %	45,1 %	1,1 %

Table 8: Cross-country comparison (illegal drugs) for Sweden and Belgium

Table 9: Cross-country comparison (illegal drugs) for the Netherlands and Australia

Country	Year	Prevention	Treatment	Harm	Enforcement	Other
				reduction		
the Netherlands <sup>16</sup>	2003	2,4 %	20,2 %	4,3 %	68,8 %	4,2 %
(Rigter, 2006)						
Australia (Moore, 2008)	2002 -2003	23 %	17 %	3 %	55 %	1 %

It is hard to draw any conclusions in a cross country comparison. First, the different welfare security systems complicate a comparison of countries' public expenditures. Social expenditures' proportion of GDP is for example much lower for Australia (16% in 2007) than for Belgium (27.3% in 2007). Secondly, the public expenditure studies use a different concept of 'public expenditure'<sup>17</sup> or another methodology. We tried to eliminate the conceptual differences in table 9-11, although methodological differences still obstruct the cross country-comparison. For example, the Dutch study used the share (13%) of Opium Act offences in the total number of cases leading to detention verdicts in courts. A test is conducted where this Dutch proration technique is applied to Belgium. The Belgian share of drug offences in the total number of cases leading to imprisonment is 15.29 %. If this share is applied to the police budget, than the Belgian policy mix changes to: 79.18% enforcement, 18.64% treatment, 1.46% prevention, 0.30% harm reduction and 0.43% others.

The above-mentioned description confirms that a cross-country comparison should be analysed with caution. The Belgian study and the other studies differ too much to draw clear conclusions. However, the Swedish and Belgian study have many points in common. From this point of view, follows the conclusion that the repressive approach of Sweden resulted in higher enforcement expenditures. The Belgian drug policy developed a better balance between the pillars treatment and law enforcement.

<sup>&</sup>lt;sup>15</sup> Original division: 24 % treatment, 75 % enforcement, 1 % prevention and 0,1 % harm reduction (Ramstedt, 2006).

<sup>&</sup>lt;sup>16</sup> Original division: 13 % treatment, 75 % enforcement, 2 % prevention and 10 % harm reduction (Rigter, 2006).

<sup>&</sup>lt;sup>17</sup> For example, Drugs in figures III only measures proactive expenditures, but the Dutch and Swedish study measure certain reactive expenditures (for example expenditures for drug-related crime).