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Financing drug policy in Europe in the wake of the economic recession

Abstract: In 2008 and the years that followed, Europe experienced a severe economic crisis, which presented a grave challenge to public finances. This report examines public expenditures on public order and safety, health and social protection, as these are the areas where most drug-related activities and services are provided. It concludes, first, that austerity led to reductions in spending in those categories of government activity that encompass most drug-related initiatives; second, that countries that experienced greater levels of austerity tended to show greater reductions in expenditure; and, third, that bigger cuts in public expenditure were registered in health than in public safety and social protection. The available national estimates of drug-related public expenditure do not reveal the full impact of the 2008–09 economic recession on the public financing of drug policy in Europe. However, it is possible to conclude that the impact of austerity on drug policy was more severe in the countries that were hardest hit by the economic crisis. Nevertheless, in most European countries, recession has led to a reassessment of public financing of specific drug policies and often to their adjustment. Drug budgets became more likely to be subject to revision, often resulting in cuts. In addition, austerity has raised policymakers' awareness of the need for more cost-effective policy measures. In some countries, reorganisation of drug services has been attempted.

Keywords economic recession drug-related public expenditure drug policy

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Introduction

In 2008 and the years that followed, Europe experienced a severe economic crisis, which presented a grave challenge to public finances. Many governments reacted by implementing stringent fiscal consolidation plans, frequently based on the reduction of government spending. This report examines the evidence to see how economic recession may have affected the financing of drug policy in Europe.

Consideration of public expenditure provides an understanding of the size and composition of the spending on the public programmes and interventions that frame drug policy and may be devoted to tackling drugs. Since the implementation of drug policy is funded mainly from the public purse, the restructuring or resizing of public budgets is likely to affect the quality and level of services provided. Analysing the evolution of public expenditure after 2008 allows a better understanding of how the changing economic circumstances may have affected the financing of drug-related initiatives. In recognition that risks to public health may emerge from the combination of economic contraction and public austerity (see the box 'How economic crises may impact on drug use and interventions'), which may particularly affect vulnerable groups such as drug users, governments may prioritise actions to mitigate the impact of economic crises and seek to maintain broad coverage, accessibility and quality of essential services, despite overall budgetary constraints.

This report is unique in bringing together in one place the available data on the impact of the recession on the financing of drug initiatives in Europe. Hence, it is a valuable resource for all those who want to have a better understanding of the impact of this exceptional economic situation on the financing of interventions in the drugs field, for those involved in developing drug policy and responding to the drug situation in Europe and those involved in analysis and research. By highlighting where problems might arise as a result of changes in financing or service provision, the report may also help policymakers and practitioners to minimise some of the negative consequences of the recession.

The report starts by outlining its methods and approach. It then goes on to describe the effects that the world 2008–09 economic contraction had on key economic and social variables that may affect the drug phenomenon in Europe, such as economic growth, unemployment and public expenditure. In the following section, it describes how the financing of national policies for health, social protection and public order and safety have evolved, as these areas encompass most drug policy spending. Assaying the available national data, the paper then looks at the effects of the crisis on drug-related public expenditure overall and by sector of drug policy. The final section brings together the main findings of the study and highlights the policy-relevant conclusions.

The analysis presented in this report is limited for a number of reasons: there are few available estimates of drug-related public expenditure, these are rarely comparable and they may be incomplete. As a result, this study cannot provide an overall estimate for European drug-related public expenditure or fully compare national estimates. Instead, the analysis attempts to draw a picture based on the information provided by EU Member States and augmented with information available from other sources.

It should be stressed that the levels of public spending in any area of policy are the result of interactions between several factors and not only of government decisions. The most important factors are the level of demand for services, the level of public service provision decided by the government and the way that public services are organised, funded and delivered.

How economic crises may impact on drug use and interventions

The effect of an economic crisis on the drug phenomenon may become evident through deteriorating social conditions leading to changes in patterns of drug use within the population or through changes in service provision resulting from cuts in public expenditure. Fiscal austerity may be used as an argument to support the reorganisation of service provision to improve efficiency, but often the resultant changes are more piecemeal and may have a negative impact on service provision. Because of the multi-sectoral nature of drug interventions, the impact will depend on how changes in the total public finances have been implemented across the different sectors of public service provision.

Impact on drug use

There are few analyses that focus on the impact of economic recession on substance use, however the available evidence suggests that the impact of recession on alcohol consumption differs according to the pattern of alcohol use considered: the number of moderate and heavy drinkers tends to rise, while the number of light drinkers declines (Bor et al., 2013; Harhay et al., 2013; Latif, 2014; Richman et al., 2012). Studies have also found that adverse effects can be partly mitigated by providing job reintegration programmes and support to families during economic instability, as well as maintaining regulation of the alcohol industry (Mladovsky et al., 2012; Stuckler et al., 2009a; Stuckler et al., 2010; Suhrcke et al., 2011). For drug use, the limited evidence is ambiguous (Bretteville-Jensen, 2011). On the one hand, additional stress due to a less favourable economic environment, the threat of deteriorating labour market conditions and more unemployment, especially within the youth population, may push more people towards drug use (Arkes, 2011). On the other hand, a reduction in disposable income, or even the expectation of one, may lead to reduced spending on drug consumption (Costa Storti et al., 2011). Last but not the least, more inequality in income distribution and growing poverty may lead to increases in certain high-risk patterns of drug use, such as injection (Friedman et al., 2009; Latif, 2014).

Mental ill-health is strongly associated with the prevalence of substance use disorders (Lev-Ran et al., 2013; Nehlin et al., 2013; Swendsen et al., 2010). The impact of economic contraction on mental health has been analysed by many researchers (Economou et al., 2013; Gili et al., 2013; Katikireddi et al., 2012; Kim et al., 2003; Lee et al., 2010; Madianos et al., 2011; Vandoros et al., 2013; Wang et al., 2010; World Health Organization, 2011). The comparison between pre-recession periods with the period that followed consistently shows increases in symptoms of psychological distress, including depression and anxiety disorders. According to the World Health Organization (2011), the 2008–09 economic contraction led to a deterioration in some of the factors protective of mental health (such as social capital, welfare protection and healthy workplaces), while increasing certain risk factors (poverty, poor education, deprivation, high debt, unemployment, job insecurity and stress).

Impact on health services

Whereas the evidence of the impact of recession on drug service provision is limited, there is a body of literature examining the way the health sector has been affected — and this is the sector where most demand reduction responses to drug problems in Europe are located (World Health Organization, 2014). Evidence from past economic recessions occurred during the 1980s and late 1990s shows that attempts by governments to maintain overall levels of health spending have tended to be unsuccessful, and governments have often failed to protect access to quality health services, especially for the poor (World Bank, 2009). Indeed, in countries where public financing accounted for the bulk of overall health expenditure, public expenditure on health tended to be cut severely during economic recessions and for two or three years after (OECD, 2010b). Evidence also suggests that cuts disproportionally affect the more marginalised members of the population (Suhrcke et al., 2009; World Health Organization, 2013).

Although strong social protection mechanisms can mitigate some of the most negative effects of recessions, austerity measures such as cost-cutting or increasing cost-sharing in health care may exacerbate the impact of economic crises on public health (Karanikolos et al., 2013a; Mladovsky et al., 2012). The overall risk to public health may increase when economic shocks are combined with fiscal austerity and weak social protection.

Methods and analytical approaches

The objectives of this study are to increase the understanding of how European countries have changed their overall patterns of public expenditure after the 2008 economic recession and to describe trends in the components of public expenditure most associated with the financing of drug-related initiatives as well as trends in drug-related expenditure in Europe.

With this aim, this paper incorporates a range of analyses and data sources (see the box 'Data and data sources used in the report'). It begins with a short review of the impact of the 2008 economic recession on key relevant economic variables and on public expenditure at the European level. To describe the economic recession in the European Union, this report considers its effect on a number of economic indicators: gross domestic product (GDP), which provides information about a country's overall economic activity, measuring the total value, at constant prices, of final goods and services produced during one year; the unemployment rate, which is the proportion of individuals in the labour force who could not find a job in a certain year; and, the overall public expenditure, which shows the value of government acquisitions of goods and services within a year.

Then, to interpret the diversity of experiences across Europe, principal component analysis (PCA) is used to summarise the variability of GDP growth, level of unemployment and growth of total public expenditures in 2011 (see the box 'Measuring the scale of the economic recession'). Based on these variables, countries were ranked and, subsequently, divided into four groups containing an identical number of countries.

Public expenditure on public order and safety, health and social protection are examined here, as these are the areas where most drug-related activities and services are provided. In the absence of comprehensive and comparable time series of estimates for drug-related public expenditure, such an analysis may provide some insight into the likely trends in drug-related expenditure in different countries. The findings from this approach, however, must be viewed with caution, as the proportion of drug-related expenditure in each of these categories is quite small. In 2005, for example, drug-related initiatives accounted for between 2 % and 12 % of public expenditure on public order and safety and not more than 1 % of public expenditure on health and social protection (EMCDDA, 2008). Therefore, the possibility must be considered that drug-related expenditure has been affected by austerity in a different way to the overall pattern, either being relatively protected or harder hit.

Nevertheless, changes in expenditure within these broad categories are likely to impact on the provision of drug-related services. For example, when a hospital allocates or uses more funds for treating mental health, drug users will probably benefit (EMCDDA, 2014c; European AIDS Treatment Group, 2014a; Kentikelenis et al., 2014). Similarly, when social protection policies receive more funds, governments may increase capacity to engage with socially excluded populations, including high-risk drug users ([1]). By the same token, financing law enforcement efforts against organised crime will have an impact on drug-law enforcement and supply reduction efforts (EMCDDA, 2013).

To analyse the types of public expenditure, the European database on public expenditure developed by Eurostat has been used (Eurostat, 2014). One of the strengths of this database is that it provides annual data on public expenditure disaggregated into 10 different policy areas, according to the purpose of the spending. Expenditure is broken down by the main economic functions of government. In addition, the data collection is mandatory and subject to systematic control and validation procedures. The database is not without limitations. Classifying expenditure according to one out of the 10 single purposes can be interpreted differently by different data providers. And, there is still room for further harmonisation of definitions and accountancy practices.

The final part of this paper reviews what is known about trends in drug-related expenditure. Although there has been an increase in the number of estimates for drug-related expenditure during the last decade, the quantity and quality of information available in Europe remain limited. When funds allocated by governments for expenditure on tasks related to drugs are identified as such in the budget they are called labelled expenditure. These funds can be traced back by a detailed review of budgetary documents, fiscal year-end accountancy reports, or both. In general, however, the bulk of drug-related expenditure is unlabelled: it is not identified but is embedded in broader categories of public accounts and must be estimated by modelling approaches. The total drug-related expenditure is the sum of labelled and unlabelled expenditures (EMCDDA, 2008). Labelled expenditure is frequently spread across different ministries and is found at many different levels of government, which may make the collection of data difficult. In addition, developing estimates for unlabelled expenditure requires considerable expertise and resources. As a result, the number of estimates available for total drug-related public expenditure at national level is relatively low. The amount and quality of estimates also vary greatly from country to country; they cover different years and use a range of different methodologies for estimating the same type of intervention in different countries. Although the shortage of data and inconsistencies in documentation limit

([1]) Studies suggest that economic downturns pose clear risks to health due to suicides and alcohol-related deaths (Stuckler et al., 2009b; Stuckler et al., 2010; Suhrcke et al., 2011). Policies for providing job reintegration programmes and support to families may partially overcome the impact of recession, however.

Data and data sources used in the report

This analysis of the economic recession and its impact on drug policy draws on three main types of data.

The information on drug-related public expenditure used in this report is based on quantitative and qualitative data provided by the Reitox national focal points between 2006 to 2013, except where stated otherwise when reliable estimates are available from other sources. The EMCDDA collects data from the 28 Member States of the European Union as well as from Norway and Turkey, primarily through annual national reports on the drug situation. For this report, additional information was collected in a targeted data collection undertaken in 2011/12 (Reitox national focal points, 2013). The analysis presented here refers to the 27 EU Member States as of 2012 (EU27).

This paper also draws on a study commissioned by the EMCCDA ([1]), which explores the potential impact of the recession by reviewing Eurostat data on overall public expenditure. Based on the international Classification of the Functions of Government (COFOG) (Eurostat, 2014), this study analysed the three primary sectors where drug-related activities and services are provided (EMCDDA, 2008). These sectors are public order and safety, which includes expenditure on police services, law courts and prisons; health, which contains, for instance, expenditure on medical products, outpatient services and hospital services; and social protection, which includes expenditure in areas such as sickness and disability, unemployment and social exclusion.

In addition, whenever possible, the analysis is complemented with literature available, as well as relevant analysis made by other international organisations.

([1]) This report is based on the results of a study undertaken for the EMCDDA by Olivera (2013).

the scope for cross-country comparisons, they do not prohibit an analysis of time trends in drug-related expenditure in individual countries.

It is important to note that estimates of public expenditure can reveal only the amount of monetary resources allocated to a policy area. Expenditure estimates provide no information about any of the aspects of service provision, such as quality or coverage. In this report, therefore, questions about the impact of austerity on the cost-effectiveness of services are not addressed.

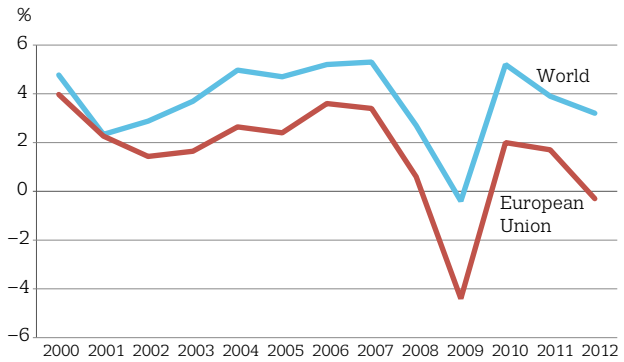
Impact on public spending

According to the US government's Financial Crisis Inquiry Commission, in September 2007, the collapse of the US housing bubble — fuelled by low interest rates, easy and available credit, scant regulation and toxic mortgages — initiated a string of events which led to a full-blown crisis in the autumn of 2008. Vast sums of money in risky mortgages had become embedded throughout the financial system, as mortgage-related securities were packaged and repackaged and sold around the world. When this bubble burst, vast losses hit markets and financial institutions around the world. This crisis reached systemic proportions in 2008, jeopardising the world financial system (Financial Crisis Inquiry Commission, 2011).

The financial crisis soon led to a broader economic crisis. According to the European Commission (2013a), the financial crisis that hit the global economy in the summer of 2007 has no precedent in post-war economic history. It differed from other economic fluctuations in its magnitude and the degree to which it was synchronous around the world. In 2009, the world economy contracted, having an overall GDP growth rate of –0.4 %, while the EU27 rate was –4.3 % (Figure 1). In 2012, the EU27 registered another, less pronounced, recession, but emerging data indicate that the economic outlook for the European Union has strengthened since 2013 (European Commission, 2014).

FIGURE 1

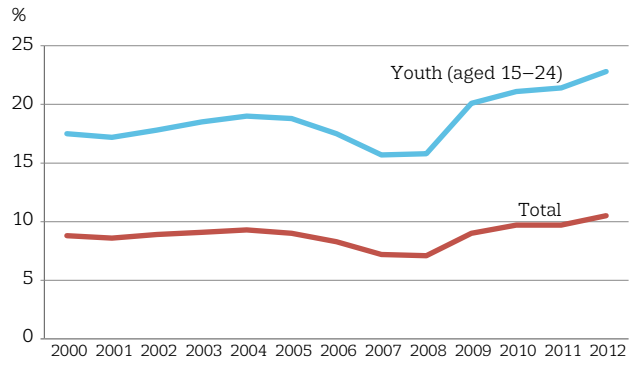
Real GDP growth rate in the world and the EU27, 2000–2012



Source: (International Monetary Fund, 2013b)

FIGURE 2

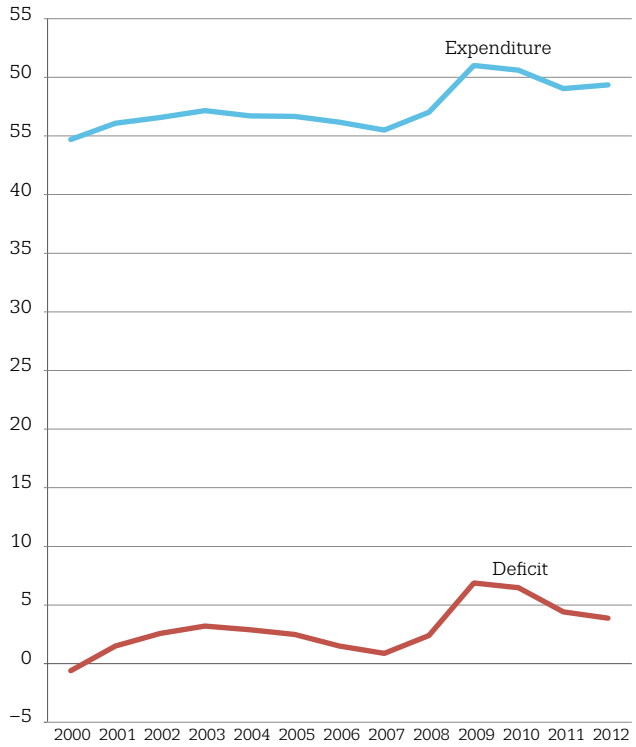
Unemployment rate in the EU27, 2000–12



Source: (European Commission, 2013a)

FIGURE 3

Public deficit and public expenditure in the EU27 as a percentage of GDP, 2000–12



Source: (European Commission, 2013a)

During the crisis, the fortunes of countries were heterogeneous. Olivera (2013) analysed the impact of the crisis in the EU27 and Norway. The Baltic States were the countries most severely hit by the crisis in 2009, with GDP contracting by between 14.1 % and 17.7 %. Other countries badly affected were Hungary, Romania, Slovenia and Finland, where the decline in GDP ranged from 6.6 % to 8.5 %. In Bulgaria, the Czech Republic, Denmark, Germany, Ireland, Italy, Slovakia and Sweden, GDP fell by between 4.5 % and 5.7 % (Table A1).

This economic crisis had severe social consequences. Unemployment increased substantially (Figure 2), rising from 7.1 % of the EU27 labour force in 2008 to 10.5 % in 2012. According to the International Monetary Fund (2011), the recession will have lasting consequences in the labour markets, even in those countries with government-supported work programmes or in countries with strong social safety nets cushioning the blow to households. Youth unemployment registered an exceptional increase during the crisis, rising to over one-fifth of the young working population, and continued to grow in the years that followed (Figure 2). Again, the impact of the crisis varied markedly between countries (Olivera, 2013).

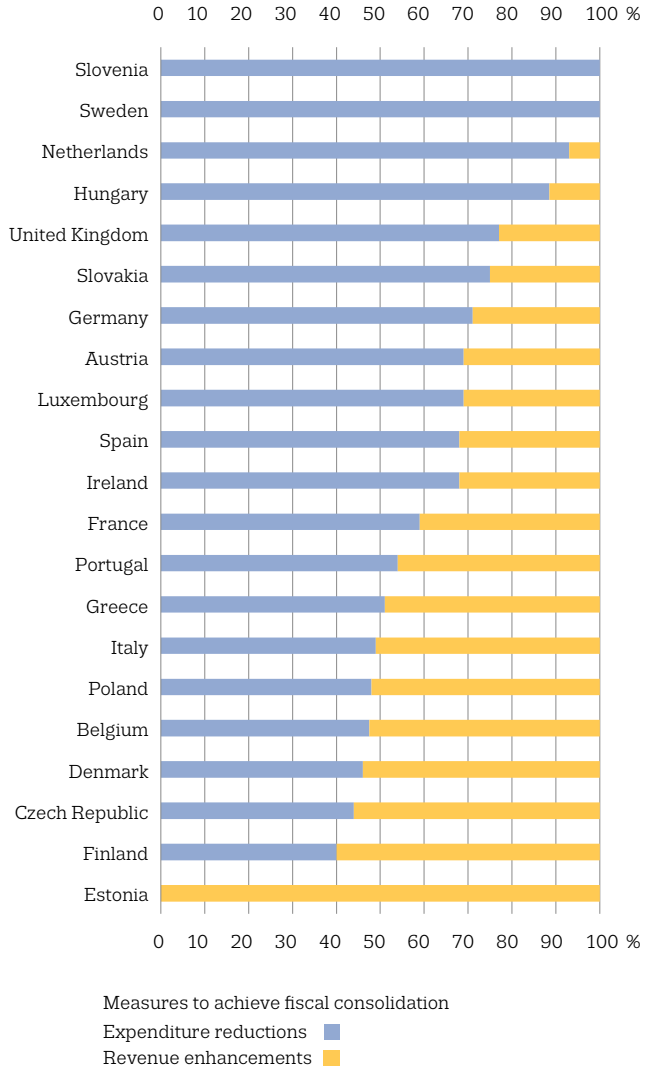
Another legacy of the recession was the increasing public deficits in many European countries, raising the public deficit from 0.9 % of EU27 GDP in 2007 to a peak of 6.9 % in 2009 (Figure 3). This occurred, first, because the contraction in domestic demand reduced tax revenues and, secondly, because governments supported the financial sector and sometimes parts of the non-financial corporate sector. Government expenditure increased also, for instance, due to the payment of unemployment benefits, which is accounted as public expenditure on social protection. As a consequence, European countries like Ireland, Greece, Cyprus, Latvia, Hungary, Portugal and Romania required financial assistance from the European Union. Countries like Belgium, Czech Republic, Italy, Poland, Slovenia, Slovakia and the United Kingdom also introduced large fiscal consolidation plans (OECD, 2012c). These fiscal consolidation programmes — specific policies aimed at reducing government deficits and debt accumulation — had a concrete impact, with EU27 budget deficits shrinking markedly between 2009 and 2012. As can be seen in Figure 4, fiscal consolidation has been primarily pursued by reducing expenditure rather than increasing revenue, although the balance varies considerably between countries.

Although estimates for 2014 show that many European countries intended to reduce their budget deficit, there is a debate within the countries about the best way to respond to the changing economic circumstances. Concerns have been raised that further fiscal consolidation amid weak growth prospects may have detrimental effects on growth in the short term (European Commission, 2012). Nevertheless, this seems likely to continue to be the dominant approach (European Commission, 2013b).

In 2008 and 2009, public expenditure as a percentage of GDP increased sharply, but temporarily, in the EU27 (Figure 3). Part of the increase is explained by the fall of GDP and part by the increase of public expenditure aimed at strengthening the financial system, stimulating the economy and in responses to the crisis, such as increases in unemployment benefits (OECD, 2011). After 2009, total public expenditure started to decline. The evolution of public expenditure varied markedly from country to country (see Tables A3 and A4).

FIGURE 4

Expenditure-based versus revenue-based measures in fiscal consolidation plans (2009–15)



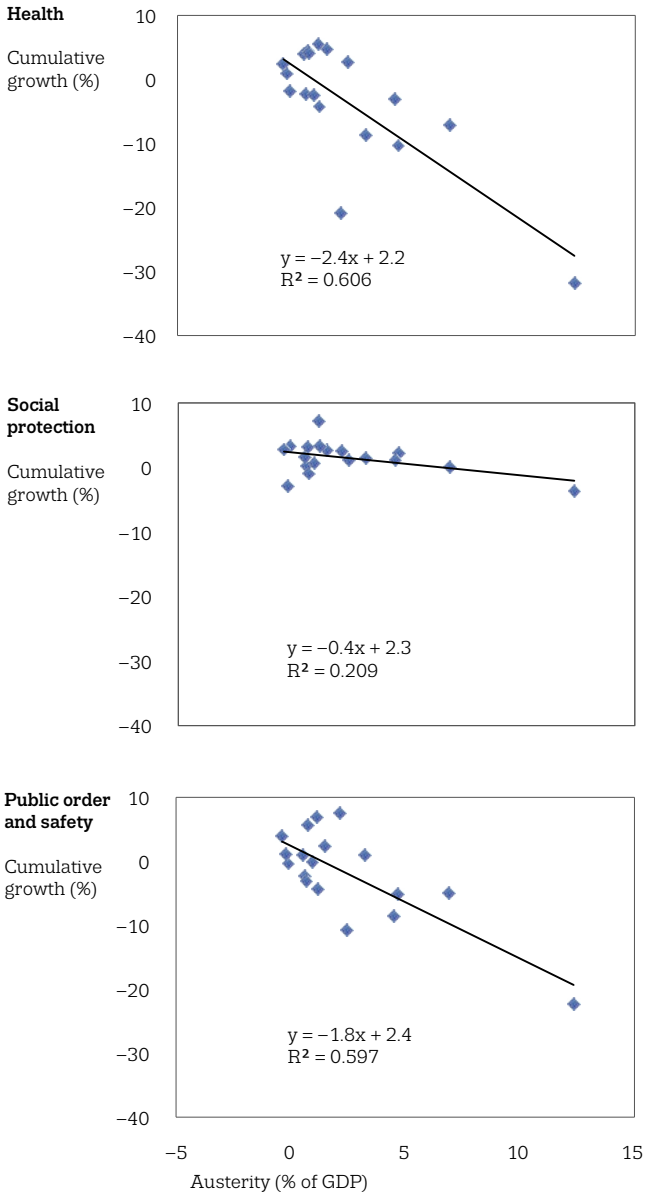
Notes: Contribution to consolidation from expenditure and revenue measures, weighted by the incremental volume of consolidation across each year reported.
Source: (OECD, 2012c)

Impact on overall expenditure covering drug-related activities

Public expenditure on those areas encompassing most drug-related initiatives has been affected by the changing economic circumstances, but this impact has differed both across countries and across sectors. After 2008/09, expenditure on public order and safety, health and social protection, as reported in the IMF Fiscal Monitor Database, have all changed, but to different extents (Figure 5). The level of public austerity ([2]) is a measure of the reduction in public expenditure as a percentage of the GDP, in accumulated terms, between 2009 and 2011. During that period, the countries that experienced greater levels of austerity tended to show greater reductions in expenditure in the three sectors that cover most drug-related activities. However, the effects of austerity on the areas of public spending were more marked on health and public order and safety and less so on social protection (Figure 5).

FIGURE 5

Linear relationship between the cumulative growth of public expenditure in real terms, by function, and austerity



Source: IMF, Fiscal monitor database, April 2013, Statistical Table-T2

([2]) The IMF uses the change in the general government cyclically adjusted balance, as a percentage of the potential GDP, to measure national public austerity (International Monetary Fund, 2013a). The IMF provides information for 17 EU countries (Belgium, Czech Republic, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Netherlands, Austria, Portugal, Slovenia, Slovakia, Sweden, Finland, United Kingdom) and Norway. In this analysis, the level of public austerity is measured by the accumulated increase of the cyclically adjusted public deficit (or negative balance) in the period between 2009 and 2011. The higher the increase in this budget deficit, the higher the level of austerity implemented in a country.

Health spending

The public sector is the main source of financing for health care in Europe. This is the area where governments pay, for example, for medicine for drug-treatment, outpatient drug treatment or hospital services provided to drug users. Overall, health insurance coverage is universal or almost universal in all EU Member States through compulsory health insurance or national or local health service provision (European Commission and Economic Policy Committee, 2010). The contribution of public expenditure to total health expenditure was 77 % in the EU27 in 2008 (OECD, 2010a). In general, private health insurance accounts for a small but growing proportion of total health expenditure, while the proportion of total health expenditure financed by out-of-pocket payments has been relatively low in the EU27 (14 % in 2008) (OECD, 2010a). However, the economic recession has affected this picture.

In the years leading up to the financial crisis, health spending accounted for a significant and growing proportion of the GDP and public expenditure of the EU27 (Figure 6), and the health sector grew at a faster rate than other areas of the economy. This was driven by factors such as changing demographics, in particular an ageing population, in addition to sometimes costly technological developments. In some countries, new requirements for increased accountability among medical staff may also have resulted in doctors using expensive so-called 'defensive medicine' (Oliveira Martins and Maisonneuve, 2006; World Health Organization, 2014). However, in 2010, notwithstanding these structural factors, the consequences of the economic recession were that public expenditure on health started declining (Figure 6; Table A5).

Between 2000 and 2008, average public expenditure on health increased annually by 3.4 % in the EU27, after discounting for inflation. In 2009, the year of acute economic contraction, this expenditure increased by 5.0 %. However, after that it declined (by 0.1 % and 1.0 %, in 2010 and 2011, respectively).

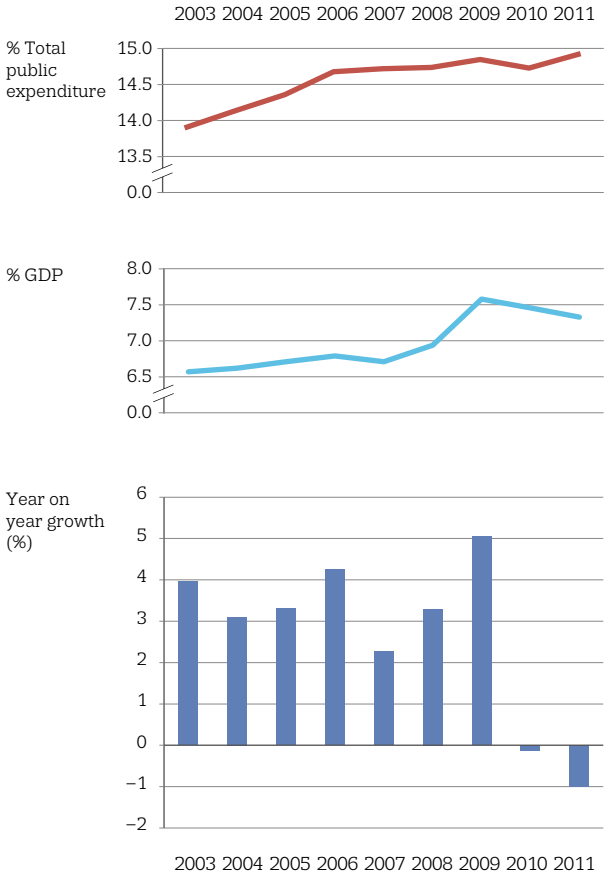
The economic crisis has also affected the mix of public and private health financing in Europe. Between 2008 and 2010, the public-sector share of total health expenditure declined from 77 % to 73 % (OECD, 2010a). Public spending on health has been cut for certain goods and services, often combined with increases in the share of direct payments by households.

The increase in private contributions has been substantial in countries such as Bulgaria, Ireland and Slovakia. In other countries, it has been less marked (OECD, 2012b). For instance, in 2011, 13 countries showed a reduction in public health expenditure, in real terms. Only nine countries recorded real growth in public health expenditure in each of the three years from 2009 to 2011 — Belgium, the Czech Republic, Germany, France, Cyprus, Netherlands, Finland, Sweden and Norway — but in general, this was at a markedly lower rate than in previous years.

FIGURE 6

Public expenditure on health in the EU27

top: as a share of total public expenditure; centre: as a share of GDP and; bottom: annual real growth rate



Source: Table A5

Social protection spending

Public expenditure funds a system of welfare payments that offer social protection against a set of defined needs and risks such as illness and disability, old age, family and children, unemployment, housing and social exclusion. This is the area where governments may provide cash benefits or benefits in kind to citizens who are socially excluded, including those with drug and alcohol problems.

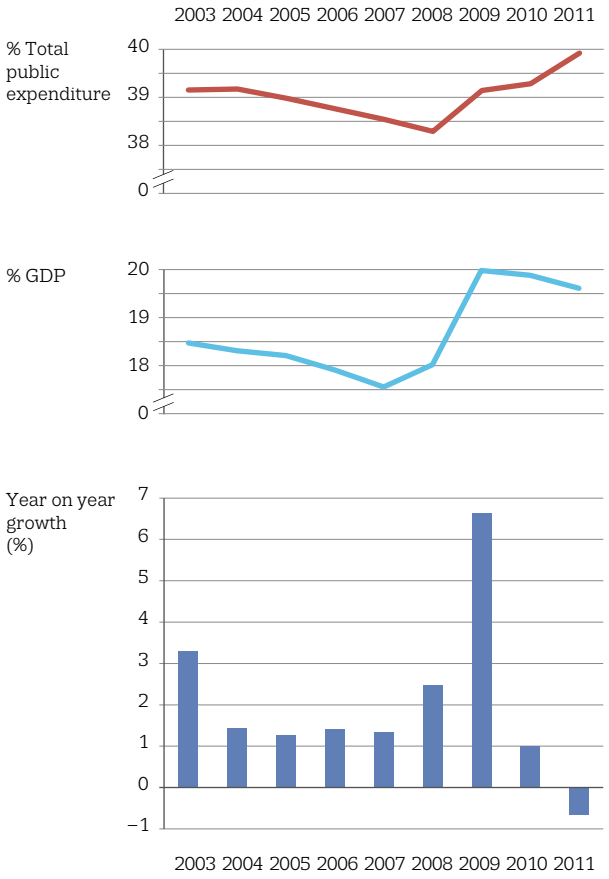
In the early 2000s, expenditure on social protection accounted for almost 18 % of EU27 GDP. In 2009, public expenditure in this area increased as a proportion of GDP, partly because expenditure grew in real terms and partly because GDP fell (Table A1 and Table A6). The increase also reflected the greater need for social support, namely for unemployment benefits. However, this trend reversed after 2009. In 2010, the increase in expenditure on social protection was very modest, despite the continued growth observed in unemployment. The higher expenses caused by the greater number receiving unemployment benefits were partially compensated for by a decline in the average benefits for the unemployed. Additionally, public expenditure on sickness and disability, old age, family and social exclusion and housing declined markedly (European Commission, 2013c; OECD, 2012d). In 2011, the decline continued and affected most EU27 countries, leading to a decline in expenditure in real terms. In the EU27, social protection expenditure grew by 6.7 % in 2009, 1.0 % in 2010 and fell by 0.7 % in 2011 (Table A6). The European Commission concluded that, until 2009, social spending played a prominent role in compensating households' income losses and helping to stabilise the economy. However, this has been weakening since 2010 (European Commission, 2013c).

The reduction in social spending seen in 2011 has been much stronger than in past periods of below-par economic performance, partly reflecting the exceptional need for fiscal consolidation in the context of the euro crisis (European Commission, 2013b). Social protection policies impacted differently on high and low income households, depending on the design of measures and, in some countries, the poorest were the most affected (European Commission, 2013c).

FIGURE 7

Public expenditure on social protection in the EU27

top: as a share of total public expenditure; centre: as a share of GDP and; bottom: annual real growth rate



Source: Table A6

Countries have dealt with the trade-off between their need for additional social protection in periods of economic crisis and their need for public austerity in different ways. For instance, in 2009, only 1 out of 28 countries — EU27 and Norway — reduced expenditure on social protection in real terms; 7 countries did so in 2010, and 17 in 2011 (Table A6). However, 11 countries demonstrated some level of real growth in expenditure in each of the three years (Belgium, Czech Republic, Ireland, France, Cyprus, Luxembourg, Malta, Netherlands, Slovenia, Finland and Norway), although generally at declining levels in 2010 and 2011.

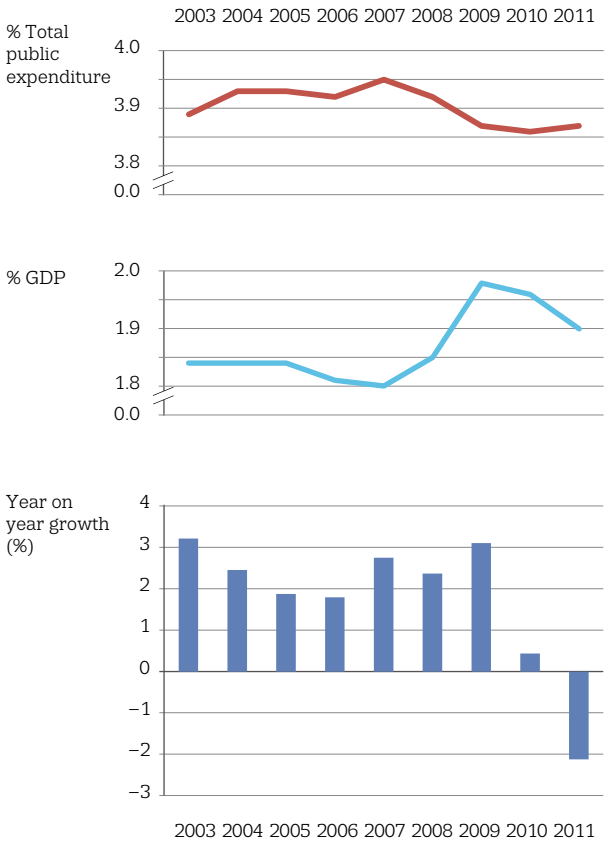
Spending on public order and safety

Expenditure on public order and safety encompasses the financing of most drug supply reduction initiatives, including most drug-related interventions performed by police, law courts and prison services. These services are mainly provided by the public sector in Europe, and on average, this expenditure represented only between 1.8 % and 2.0 % of EU27 GDP between 2002 and 2011. However, within this period there was positive yearly real growth until 2009, after which growth decelerated in 2010 and became negative in 2011. Again, the impact of recession differed markedly across countries. In 2009, out of 28 countries, only 6 showed a real decrease in expenditure on public order and safety. In 2010, 13 countries experienced a fall in this expenditure in real terms. In 2011, 17 countries experienced a decline and the real decrease in public order and safety expenditure was most marked in Greece (12.7 %), Czech Republic (9.7 %), Slovenia (7.6 %), Romania (6.3 %) and Cyprus (6 %), while the Baltic States, which had reduced expenditure dramatically in 2009 (by between 17.9 % and 27.4 %), stabilised spending. Only five countries — Germany, France, Luxembourg, Sweden and Norway — increased spending on public order and safety in real terms in all three years from 2009 to 2011, although often only by small amounts (Table A7).

FIGURE 8

Public expenditure on order and safety in the EU27

top: as a share of total public expenditure; centre: as a share of GDP and; bottom: annual real growth rate



Source: Table A7

Measuring the impact of the economic recession

The impact of the economic recession registered in each country was ordered based on principal component analysis (PCA) (see Hatcher, 1994; Olivera, 2013). This method takes into account a selected set of information and summarises it in an index ([1]). In this case, the index aims to order countries according to the severity of the impact of the economic recession. To categorise the impact of national economic recessions, three types of variables were used in the PCA:

- real growth of GDP, to measure the overall economic performance of a country;
- total unemployment and unemployment of young people as indicators of the social impact of the crisis; and
- real growth of total public expenditure as an indicator of austerity in the public sector.

First, the variance of these variables is calculated for each country, which subsequently allows the countries to be ranked in an index, according to the impact of the economic recession: from the country least affected to the country most affected by the economic recession.

As a final step, countries are divided into four groups with an identical number of countries per group.

The grouping of countries (see the table) can be roughly described as follows:

Group 1. Low impact. These countries had, on average, the highest GDP per capita (at constant prices) in 2011 and suffered the least in this economic recession, generally maintaining relatively stable growth in public expenditure and comparatively low rates of unemployment, while GDP growth dipped only briefly before bouncing back.

Group 2. Moderate impact, early recovery. This group had, on average, the second highest level of GDP per capita in 2011, although there was marked variability in per capita GDP between the countries in the group. Nevertheless, they appear to have reacted similarly to the crisis. Recession hit Group 2 markedly in 2009 but recovery was already apparent in 2010. Governments introduced austerity early and, in 2010, total public spending diminished in real terms, which was immediately reversed in 2011, resulting in positive growth of total public expenditure in 2011.

Group 3. Moderate, more sustained impact. Generally, this group has slightly less favourable economic indicators than the previous group, in particular higher unemployment rates.

Group 4. High impact. This group includes those countries most severely hit by the 2008 economic recession in 2011. In 2009, on average, the GDP of these countries fell by close to 7 % (real terms) and, in the two years that followed, recovery was the weakest of all the groups. In particular, unemployment grew rapidly and by 2011 was at extremely high levels: youth unemployment was on average 35.2 %, while total unemployment was 16 %. Overall, public expenditure also decreased dramatically in 2011.

European countries grouped according to impact of the recession

Group		GDP growth rate (constant prices, %) 2011	Public expenditure growth (constant prices, %) 2011	Total unemployment rate 2011	Youth unemployment rate 2011	GDP per capita (constant prices) 2011 EU(27)=100
1	Germany, Luxembourg, Malta, Netherlands, Austria, Sweden, Norway	2.1	0.1	5.3	12.3	178.2
2	Belgium, Czech Republic, Denmark, Estonia, Romania, Slovenia, Finland	2.7	0.5	8.2	18.9	92.4
3	Bulgaria, France, Italy, Cyprus, Hungary, Poland, United Kingdom	1.7	–1.0	9.4	24.6	74.2
4	Ireland, Greece, Spain, Latvia, Lithuania, Portugal, Slovakia	1.1	–7.7	16.0	35.2	71.0
Total	**EU27 and Norway**	**1.9**	**–0.8**	**9.7**	**22.8**	

NB: Based on a PCA of selected indicators.
Source: Olivera (2013) and Eurostat

([1]) For example, it is common practice to use the PCA to create an index of living standards with the information of different variables available in a household survey. PCA enables different information from individuals (countries in this case) to be aggregated into a summary measure, which can explain the maximum amount of observed variability. For more information, see Olivera (2013) and Hatcher (1994).

Variation in impact between countries and sectors

As described above, the extent of the recession, the response to it and the timing of these varied markedly between countries in the EU ([3]). To understand these different experiences, Olivera (2013) used a statistical technique called principal component analysis (PCA) to group countries into four equally sized groups based on their level of GDP growth, overall unemployment rate, youth unemployment rate and growth in public expenditure in 2011 (see the box 'Measuring the scale of the economic recession'). While the decision to form four equal groupings is arbitrary, and a PCA using different years or different variables would group countries differently, comparison between these groups provides an illustration of the range of experiences within Europe.

Although there are limited data available to assess the impact of recession and associated austerity on drug policy, some indication can be obtained by considering changes in public expenditure in those sectors that include most drug-related activities and by looking at the reported experiences of those countries that have provided more detailed information. Patterns of growth in public expenditure differed between the four country groups (Table 1).

TABLE 1

Average growth (%) of public expenditure (constant prices) for health, social protection and public order and safety across the four country groups before and after the recession

	Group 1	Group 2	Group 3	Group 4	EU27 and Norway
Health					
2000–2007	4.0	4.8	4.5	8.0	**5.6**
2010	1.7	–0.9	1.1	–7.0	**–1.4**
2011	1.6	0.3	–0.3	–4.6	**–0.8**
Social protection					
2000–2007	2.2	3.7	3.7	3.9	**3.9**
2010	1.7	0.3	2.1	–1.1	**0.7**
2011	0.7	–0.6	–0.2	–2.3	**–0.6**
Public order and safety					
2000–2007	2.4	5.1	4.4	6.7	**4.7**
2010	1.8	2.4	0.5	0.4	**1.3**
2011	1.4	–2.5	–1.8	–3.3	**–1.5**

Note: Group 1: Germany, Luxembourg, Malta, Netherlands, Austria, Sweden, Norway. Group 2: Belgium, Czech Republic, Denmark, Estonia, Romania, Slovenia, Finland. Group 3: Bulgaria, France, Italy, Cyprus, Hungary, Poland, United Kingdom. Group 4: Ireland, Greece, Spain, Latvia, Lithuania, Portugal, Slovakia.

([3]) Country data used for the analysis are presented in the Appendix.

Variation in public expenditure growth

Before the recession, the components of public expenditure that encompass most drug-related activities were, on average, increasing in each of the four country groups, but less so in the group least affected by the downturn (Group 1). After 2008–09, when austerity programmes were implemented across Europe, these expenditures continued to grow in Group 1 countries, but at a slower pace than before. This contrasts with what is observed in the other three groups, where expenditure frequently declined after 2009.

In the countries most affected by recession (Group 4), the pattern of growth of public expenditure that encompasses most drug-related activities changed markedly. Between 2000 and 2007, expenditure grew faster on average in Group 4 than in the other groups, but following the recession, the biggest falls in expenditure occurred in this group. Health expenditure was particularly hit, declining in real terms by 7.0 % in 2010 and 4.6 % in 2011, on average. Expenditure on social protection also fell markedly, especially taking into account the increase observed in unemployment. Public order and safety expenditure managed to maintain a very modest real growth rate (0.4 %) in 2010, which was not sustained in 2011 (–3.3 %).

The literature provides a variety of explanations for the vulnerability of health financing to cuts (Mladovsky et al., 2012). For instance, the increasing costs of public health systems occurred in the previous decade have exposed this sector to a negative public opinion; the reports of inefficiencies of health systems may have made it politically difficult to argue for maintaining previous levels of spending; health spending may be easier to cut than other areas, such as social protection, which would be normally pushed upwards by unemployment subsidies paid as a consequence of rising unemployment levels; and because health benefits are less clearly defined and less obvious to the public than social protection benefits. The need to be aware of the potential impact of such cuts to health sector spending have been highlighted in an OECD (2012b) analysis which concludes that, '*some measures may have an impact on the fundamental goals of the health systems. Continuous monitoring of data and indicators on health and health systems is therefore important; it provides indications of the potential short and longer-term impact of the changing economic circumstances and health policies on health care access, quality and health outcomes*.'

Before 2007, European countries showed strong positive growth in their annual expenditure on social protection; the situation changed after the crisis. Table 1 shows that while in 2010, only high impact countries (Group 4) showed real cuts in their annual financing of social protection, in 2011, when unemployment escalated in most European countries, real

cuts in expenditure on social protection were experienced in other two country groups. From an analysis of public expenditure on social protection, the European Commission (2013c) concludes that, '*while social spending played a prominent role in compensating households' income losses in the early phase of the crisis (until 2009), and helped stabilise the economy, this impact has been weakening since 2010. After an initial increase in the first year of the crisis, social expenditure levelled off in 2010 and declined in 2011 and 2012, sometimes in countries where unemployment kept rising. This reduction of social spending was much stronger than in past periods of below-par performance partly reflecting the exceptional need for fiscal consolidation in the context of the euro crisis. It neutralised the economic stabilisation function of social protection systems in many Member States.*'

Expenditure on public order and safety was also affected by the recession, although to a lesser extent and slightly later than occurred for health expenditure. After 2008, expenditure on public order and safety maintained relatively stable growth rates only in those countries where recession had a low impact (Group 1). Otherwise, after some moderation in 2010, 2011 was a year when most countries registered cuts in real spending.

Impact on drug-related public expenditure

National information for total drug-related public expenditure covering the period before and after the economic recession is limited in Europe, and most of the countries provide estimates until 2011 only, when the impact of austerity was still not complete. Furthermore, the number of countries with estimates of trends is small. Therefore, this report will only present some preliminary indicative findings. Further data would be necessary to confirm these and to analyse how the provision of drug services has been affected.

Bearing in mind these limitations, this section will analyse, first, the existing information for recent changes in total drug-related expenditure. Secondly, it will focus on the sectors most affected by the changing economic environment. Finally, it will present the protective strategies used by some countries in their efforts to minimise the potential negative impact of austerity.

Estimates for trends in total drug-related public expenditure, covering the period before and after 2008, are available for six countries only. Partial information exists for a further six countries. It is not possible to compare estimates between countries, as different estimation methods are used and estimates cover different proportions of the total drug policy budgets. As the available information does not allow a complete picture for Europe to be drawn, the focus here will be on examples of what was observed in some countries and in some sectors of drug policy.

Overall trends in drug-related expenditure

The available quantitative and qualitative data on drug-related expenditure suggest that drug-related spending in many countries has either stagnated or declined following the economic crisis of 2008. However, the extent of the moderation in spending differed substantially from country to country, as has been described above in relation to overall public expenditure on those areas encompassing most drug-related initiatives. The available information seems to suggest that the greater the impact of the recession on a country's economic variables, the more severe was the impact of austerity on the financing of drug-related initiatives.

Even in the countries where the impact of the crisis was low (Group 1), there are indications that drug policy may have been affected by austerity ([4]). In Luxembourg, for example, a cut in total drug-related expenditure, implemented in 2009, mainly affected unlabelled expenditure. Nevertheless, estimates for labelled drug-related expenditure show that the funding of some drug initiatives (such as types of health interventions) was either spared or even increased, after discounting for inflation. Data for the years after 2009 suggest that drug-related expenditure has started to increase again. Thus, the impact of recession on drug-related expenditure was visible in Luxembourg, but seems to have been circumscribed in time and affected some sectors only. Information about German drug-related expenditure also seems to show a limited impact. In Germany, partial data for treatment seem to indicate that some drug initiatives were subject to capped budgets as a consequence of some austerity.

Countries in Groups 2 and 3 ([5]) are analysed together because their trends in drug-related expenditure cannot be clearly distinguished. Bearing in mind the limited data, the available information seems to suggest that drug-related expenditure either stagnated or diminished in real terms in many of these countries.

([4]) Four out of the seven countries in this group have provided data on total annual drug-related public expenditure at least once in the last decade. A complete analysis of the recent evolution of total drug-related public expenditure exists only for one country, and a sectoral analysis was made for another one. Bearing in mind the data limitations, total drug-related public expenditure is estimated to have represented between 0.1 % and 0.5 % of GDP in these countries.

([5]) In these groups, three countries have provided regular estimates for total drug-related public expenditure covering the period before and after 2008, and three others estimate labelled expenditure regularly. Taking note of the lack of comparability across countries, total drug-related expenditure represented between 0.03 % and 0.11 % of national GDP in Group 2 countries; and between 0.08 % and 0.48 % of national GDP in Group 3 countries.

Overview of drug-related public expenditure data in Europe

In the last decade, 16 European countries have provided comprehensive estimates of drug-related public expenditure ([1]). These countries report expenditure estimates ranging from 0.01 % to 0.5 % of GDP (see EMCDDA, 2014b). Reports have also estimated the allocation of funds for different types of drug-related initiatives, but special caution is required when making comparisons between countries, as studies may not apply the same classification of expenditure or the same methods to make estimates. The two major types of drug-related initiatives are supply reduction and demand reduction interventions. Financing of some transversal initiatives is also reported, but these normally involve a small proportion of the total and cover coordination, education and research.

The limited data available suggest that drug supply reduction activities account for the largest share of drug-related public expenditure in most countries. Public expenditure on supply reduction initiatives would include drug-related expenditure on police services, law courts and prisons, and this activity would all be classified within the Classification of the Functions of Government (COFOG) category public order and safety. Out of the 16 countries presenting complete estimates of drug-related public expenditure, only four countries spent less than 50 % of their total drug-related expenditure on supply reduction, while five countries spent 70 % or more. The other countries spent between 50 % and 70 % of drug-related expenditure on supply reduction (EMCDDA, 2014c). Nevertheless, funds allocated to drug-related initiatives account for only a small proportion of the overall public expenditure on public order and safety. In this group of 16 countries, drug supply reduction represented between 1 % and 20 % of the expenditure on public order and safety, whereas an earlier study by the EMCDDA (2008) estimated that, in 2005, such supply reduction expenditure represented between 2 % and 12 % of total public expenditure on public order and safety.

([1]) Belgium, Czech Republic, Germany, France, Croatia, Italy, Cyprus, Latvia, Luxembourg, Hungary, Netherlands, Portugal, Slovakia, Finland, Sweden and United kingdom. Additional information about drug-related expenditure for each country is available at http://www.emcdda.europa.eu/topics/drug-related-public-expenditure.

Attempts to estimate public expenditure on demand reduction initiatives alone have been more frequent, but the sub-categories used to classify activities varied considerably in Europe. Some researchers utilise the sub-categories of prevention, treatment and harm reduction, while others categorise most activities in these areas under the broad heading of health. Some researchers identify expenditure on social protection or reintegration initiatives. Whereas health accounts for about 30 % or more of the total drug-related expenditure reported for Belgium, France and Luxembourg, spending on social protection was reported by six countries (Croatia, Latvia, Luxembourg, Slovenia, Finland, United Kingdom), where it represented between 0.8 % and 22.5 % of total drug-related expenditure. The EMCDDA (2008) estimated that, in 2005, drug-related health and social protection interventions accounted for less than 1 % of the public expenditure on health and social protection in Europe.

One of the possible explanations for a higher frequency of estimates for public expenditure on demand reduction initiatives (especially on health) than for supply reduction is related to accountancy practices and the way governments elaborate drug-related health budgets. Drug-related health expenditure, such as that for drug treatment services, is often identified as such in the budget — it is 'labelled'. In contrast, most supply reduction activity is conducted as part of routine police, court or prison service activity, and the expenditure related to these activities is not separately identified. Since drug-related health expenditures are often better identified in public accountancy, they may be easier to spot and, therefore, to incorporate in estimates for drug-related expenditure. In a study by the EMCDDA (2008), 67 % of the labelled drug-related expenditure identified was spent on health and 22 % on public order and safety. The remaining labelled expenditure was classed as general public services, defence, economic affairs, housing and community amenities, education, and social protection. Hence, although drug-related public order and safety makes up a higher proportion of overall drug-related public expenditure estimates than health functions, drug-related health expenditure is more often identified as such in accountancy documents.

The Czech Republic is an example of a country where the growth of total drug-related expenditure seems to have decelerated temporarily after 2008, and may have fallen in 2011. In 2008, when the crisis had still not fully impacted in the Czech Republic, total drug-related public expenditure increased by 14.4 %, in real terms. In 2009, growth in expenditure slowed markedly but increased again in 2010 (1.9 % and 6.7 %, respectively). Partial information for 2011 suggests that drug-related expenditure fell, reflecting the national concerns with fiscal austerity ([6]). In France, a similar deceleration of drug-related public expenditure was visible, but not until after 2009. In 2009, total drug-related public expenditure grew by 14 %, but in 2010, it decelerated to 1 %, in real terms. In Finland, between 2006 and 2008, total drug-related public expenditure grew steadily, at close to 4.5 % a year, in real terms. In 2009, it declined by 0.4 % only ([7]).

In Slovenia, comparable data show that drug-related public expenditure grew in 2008 (4.6 %), declined in 2010 (6.3 %), and recovered strongly in 2011 (12.6 %) in real terms. In Estonia, estimates seem to show that real cuts were made in total funds allocated to drug-related initiatives in 2009 and 2010, which contrast with the growth estimated for 2007, 2008 and 2011. Data for the United Kingdom are partial, as trend data cover labelled expenditure only for the period 2005–10. However, the available data suggest that labelled expenditure was stable between 2005 and 2007, but declined in 2010 as a percentage of GDP — the last year with estimates.

In Group 4, those countries worst hit by the recession, data for trends in drug-related expenditure are particularly limited ([8]). Trend analysis of labelled expenditure is only possible for one country. In Ireland, labelled expenditure increased between 2005 and 2008. However, the trend reversed after 2008, probably as a result of the public austerity measures that followed the economic recession. In 2009, the need to achieve a 'prudent fiscal outturn' led to an attempt to cut labelled drug-related expenditure across all government bodies, and in 2010 and 2011, labelled drug-related public expenditure diminished by 1.8 % and 7.8 %, respectively. In 2012, some additional cuts were observed.

In other countries from Group 4, information is partial and concerns mostly health expenditure. However, the available information suggests that most of these countries observed cuts in expenditure in several drug-related initiatives in the years that followed 2008. These are discussed below.

A different type of impact that can be identified after 2008, which was common to many countries in all groups, was that the amount of funds policymakers and public managers could expect to have available became more difficult to forecast. Alongside this, the funds effectively available varied substantially from one year to the next, as the volatility of public funds available for drug initiatives increased after 2008. As a result, it became more difficult to organise and plan drug initiatives. The negative consequences of this for the health sector were highlighted by the World Health Organization (2013), which stressed the need to guarantee that health systems can plan their future funds, because sudden interruptions to public funding streams may hamper the maintenance of necessary levels of health care.

Impact on different sectors of drug policy

As described earlier, the data on trends in public expenditure in those sectors that cover most drug-related initiatives suggested that the impact of the 2008 recession differed between sectors and that the impact of austerity on expenditure in the health sector was greatest.

Demand reduction expenditure

Overall, the available information suggests that the impact of the 2008 recession on the financing of drug-related health interventions varied markedly from country to country. Many countries mentioned that spending on drug-related treatment and social rehabilitation was negatively affected by the economic crisis. The impact of austerity appears to have been more marked in those countries where the crisis hit more severely, as would be expected. In addition, a number of countries report having made adjustments in the financing of different types of drug treatment, particularly with respect to the balance between more expensive residential and cheaper outpatient treatment, as well as some other effects of expenditure cuts.

Luxembourg and Germany provide examples of the impact in the group of countries (Group 1) identified as least affected by the recession. In Luxembourg, between 2009 and 2011, labelled drug-related expenditure on health increased by 10 %, in real terms, and expenditure was directed to the following areas or aims: primary prevention, low-threshold services, increased coverage of post-therapeutic services, further decentralisation of ambulatory treatment, and improved technical control of substitution treatment. Conversely, in Germany, although drug treatment data suggest that treatment

([6]) In 2011, estimates concern drug-related labelled expenditure only, as compared to the total (labelled and unlabelled expenditure) available for the previous years. Information reported by the national focal point was complemented by data provided by Valprovil and Rossi (2013).

([7]) Data for total expenditure in 2010 is not fully comparable with 2009, due to a change in estimation method.

([8]) In Group 4, two countries provided estimates for total drug-related public expenditure and three others provided estimates for labelled expenditure. Taking note of the lack of comparable estimates, the latest estimates may suggest that total drug-related expenditure represented approximately between 0.03 % and 0.05 % of national GDP and estimates for countries with labelled expenditure vary between 0.02 % and 0.16 % of GDP. However, relatively complete trends are available for one country and for labelled expenditure only.

provision did not decline after 2008, concerns have been voiced about the financing of rehabilitation programmes, with suggestions that capped budgets were limiting programme availability and leading to reductions in lengths of stay.

In the countries where the recession had a moderate impact (Groups 2 and 3), the picture appears more diverse. While some countries introduced cuts in the financing of drug-related health interventions after 2008, others continued increasing the funds available for some types of drug treatment. It appears that in most cases where cuts occurred, a return to growth in expenditure was quite rapid.

For instance, in Estonia, between 2009 and 2010, the government set the protection of funding for drug treatment and rehabilitation as a priority during the economic downturn. Indeed, funds available for opioid substitution therapy continued growing as did those for treating the new population of amphetamine users. Nevertheless, the funding of primary prevention and harm reduction declined, and funds available for syringe exchange programmes, voluntary testing and counselling for HIV and other drug-related infections diminished. In 2011, the mild national economic recovery allowed this trend to reverse, and the financing of syringe exchange programmes started rising again. In Finland, funds for health declined overall in 2010, when a reduction in funds available for specialist medical care more than offset a sharp increase in primary health care funding. In 2011, drug-related expenditure on health resumed increasing, surpassing the growth rate observed for overall spending on health. In Slovenia, in the context of efforts to rationalise overall health care, the number of acute drug-related cases admitted to hospital declined in 2010, leading to savings and partially explaining the cut in drug-related health expenditure observed in 2010 and the following year. In 2012, this funding increased again. In the United Kingdom, the information available is partial and concerns only labelled expenditure. Data suggest that, in 2010, less funding was allocated to drug-related health budgets, when compared to the previous year (down by 4 % in 2010, in real terms). More recently, from April 2013, the previously ring-fenced drug-related treatment budget in England has been subsumed into a wider public health grant allocation to local areas. As a range of services are funded through the public health grant, there are concerns by some that funds previously spent on drug treatment might be diverted to address other public health needs. Local authorities have been required to report their annual global forecasted and actual expenditure on drug treatment. However, as the data collection is a new exercise and there are currently no requirements to report a more detailed breakdown of expenditure, a comprehensive analysis of drug treatment costs becomes difficult at this time. France is an exception to the general picture, since total public expenditure on health and on drug-related health initiatives continued to grow, although at a more moderate pace than before.

Many high-impact countries (Group 4) reported that austerity hit their health services. In Greece, in 2010 and 2011, notwithstanding the government's vigorous reaction to an HIV outbreak, which probably prevented further cuts in some drug-related health initiatives, the available evidence suggests that there was a marked decline in overall funding of drug-related programmes (Karanikolos et al., 2013b; Kentikelenis et al., 2014; Malliori et al., 2013; Reitox national focal points, 2013). Indeed, despite the Greek government increasing the number of opioid substitution treatment units after 2010, this was attained at the expenses of cuts in the wages of civil servants, among other measures. Those budgets of the main institutions providing drug treatment show marked declines, and most drug-related initiatives, such as syringe and condom provision, had less domestic funding available, which was only partly compensated by more international funding to harm-reduction initiatives ([9]).

In Latvia, budgets for inpatient drug treatment were reallocated in order to privilege outpatient and day care treatment. All in all, the total budget allocated to both inpatient and outpatient drug-treatment was massively reduced between 2008 and 2010. Since 2008, the government has also increased the patient co-payment for drug treatment. Furthermore, the capacity of the national rehabilitation programme has also been reduced. Up to 2011, with the help of international support, the government scaled up harm reduction and methadone treatment. However, the cessation of international support to these projects, in 2011, has raised doubts about the country's capacity to maintain them at previous levels. The limited and diminishing coverage of harm-reduction services has been indicated as a risk factor (EMCDDA, 2014a).

In Ireland, funds labelled to finance drug-related policies for health have registered marked falls since 2008 (by 12 % in 2009, 1 % in 2010 and 13 % in 2011, in real terms). In 2012, there were expectations that funding for some drug-related initiatives would be reduced further.

In a number of countries where quantitative information is limited or unavailable, there are some reports describing changes to services arising from austerity measures. In Slovakia, in 2012, the lack of competitive salaries paid to doctors in the drugs field has been suggested to have led to a decrease in the supply and coverage of residential treatment. In Spain, recent reports suggest that public austerity is impacting on the provision of health care across many Spanish regions. Examples are given of cuts in funding to and the reorganisation of HIV/AIDS prevention and treatment services, which may jeopardise effectiveness (European AIDS Treatment Group, 2014b). In Portugal, austerity has also been a priority for the government. In 2011–12, without changing the types of

([9]) The European Union increased the transfers of funds to Greek harm-reduction initiatives, within the framework of the European Funds for Cohesion Policy.

drug-related interventions provided, the government reorganised the system of drug-related health, and preliminary information suggests that expenditure may have been reduced in some areas, including the national programme addressing HIV transmission. Difficulties in gaining access to drug-related prevention and treatment were reported, such as temporary shortages of medication or syringes (European AIDS Treatment Group, 2014a). In Romania, it has been reported that reductions in funding might be associated with an outbreak of HIV observed in 2010. Failure to provide national funding for prevention programmes previously financed by international donors resulted in a temporary, substantial reduction of funds and, consequently, reduced the coverage of HIV prevention services; this coincided with an HIV outbreak. The numbers of syringes given out dropped from 1.7 million in 2009 to under one million in 2010 and 2011, although additional funds were raised to increase syringe provision in 2012 to above one million. More recently, the main harm-reduction service provider (ARAS) has had to halve service provision since July 2013 (EMCDDA, 2014a).

In the area of drug-use prevention, some country reports suggest that reduced funding may have led to a decrease in interventions and human resources. There are, however, few estimates of cuts to expenditure and no cost-effectiveness analysis has been performed. In Portugal, there are some preliminary indications that labelled expenditure for the prevention and harm-reduction systems decreased in 2011 and 2012. Similarly, in Latvia, Hungary, Austria and Slovakia, budget cuts were indicated as being one of the obstacles to the expansion of selective and indicated prevention interventions, which involve direct contact with vulnerable groups. In the Czech Republic, primary prevention was identified as the sector most affected by cuts.

Supply reduction expenditure

Only eight countries have provided information for the trends in expenditure on supply reduction initiatives, probably because most of this expenditure is embedded in broader and more general programmes against crime, being therefore more difficult to estimate (see the box 'Overview of drug-related public expenditure data in Europe'). In six of these countries, expenditure on drug supply reduction followed approximately the overall trend in expenditure on public order and safety. This may reflect the fact that drug supply reduction initiatives are not isolated from the broader and more general set of programmes and actions against crime. Furthermore, supply reduction activity is frequently financed or provided by central government, with the result that spending on these sub-sectors (police, courts and prisons) may be more readily controlled than in sectors where service provision is more likely to be distributed across different levels of government. Last but not least, since in many countries supply reduction represents a significant percentage of public order and safety expenditure (about 10 %), the budgetary objectives of supply reduction may be more closely integrated into the spending strategy defined for the overall budgets of police, law courts and prisons and, therefore, more aligned with the overall objectives defined for public policy in comparison with the objectives defined for demand reduction initiatives.

Expenditure on research

Research is one sector of drug-related activity that has been reported as being particularly affected by lack of funds. However, the timing of the impact of the recession on research has been delayed compared to that on other sectors, with many countries indicating 2012 as the year the effect was first felt on research. For 2009 and 2010, only Cyprus, mentioned funding cuts for research, which led to the postponement of planned studies of alcohol strategies and policies for drug prescription in 2010. The situation changed in 2012, with 12 national reports mentioning problems in research funding. Croatia and Poland mentioned an insufficiency of funds for analysis of new psychoactive substances and research on drug markets and drug monitoring. Specific budget cuts were mentioned by Greece, by Germany regarding the funding of research networks and by Cyprus and Romania as a reason to postpone or suspend research on mortality and risk reduction. The Czech Republic and Finland reported that budget cuts primarily affected research projects or the allocation of research subvention schemes. From a different perspective, Ireland mentioned that one study was carried out in anticipation of a decline in funding, to evaluate the effectiveness and efficiency of 30 projects funded by a regional drug task force.

In contrast, two countries reported new financial resources: Slovakia, for the implementation of research services; and Sweden, for compiling research and evaluation of interventions on the use of drugs, particularly cannabis.

Strategies to limit the impact of recession on the drug situation

After the 2008 recession, some governments adopted specific policy strategies either to limit the potential damage of austerity or to take advantage of the adverse period to improve efficiency. However, in most cases, it is not yet possible to assess the effectiveness of these attempts, because policy changes require time to provide results.

In response to the recession, some countries announced an intention to ring-fence expenditure on specific sectors, such as health or social protection, aiming to limit the potential negative impact of austerity on these areas (Mladovsky et al., 2012; OECD, 2012a; OECD, 2012c; OECD, 2012d). The Czech

government made this concern explicit when they announced the intention to ring-fence expenditure on health and social protection. This overall goal seems to have been achieved, as there was positive growth in expenditure in 2010 and 2011 in both sectors. However, despite this, drug-related health expenditure, both labelled and unlabelled, fell in 2009 and in 2011. In 2010, attempts to ring-fence treatment funds were relatively successful, but priorities were changed: in order to make programmes provided by governmental organisations (as distinct from those provided by non-governmental organisations) more likely to be eligible for funding; to reduce the financing of international cooperation; and to drastically reduce funding of research projects.

In Estonia, the government ring-fenced the funding of drug-treatment and rehabilitation in 2009 and 2010; estimates suggest that, in those years, the funding of opioid substitution treatment and amphetamine therapies continued to grow. However, the funding of other harm-reduction initiatives such as syringe exchange programmes, voluntary testing and counselling for HIV and other infections fell until 2011, when this trend started to turn. In the United Kingdom, the government sought to protect public spending on health. Data available for estimated labelled drug-related public expenditure, which made up 13 % of estimated total drug-related expenditure but 74 % of drug-related health expenditure in 2010, show that funding for some areas of drug-related budgets (such as the pooled treatment budget in England and the budget for drug treatment in prisons) remained constant in nominal terms. However, in the United Kingdom, the total estimated labelled funding allocated to drug-related initiatives in the health sector fell by 4 % in 2010, in real terms, compared to 2009.

Instead of, or alongside, ring-fencing, tighter resources have led some countries to strive for more quality control and evidence-based funding. In Ireland, the government sought to better apply quality standards to prevention programmes and to focus resources on at-risk populations, with targeted interventions. The Czech Republic changed its grant system for prevention initiatives, merging it into a single grant scheme, where the Ministry of Education is the sole donor. This, in turn, allowed the introduction of the first certification system in the European Union, in which only certified programmes can apply for these funds. An additional certification of professionals improves the likelihood of prevention programmes being delivered with better quality and public funds being spent more efficiently, avoiding the drainage of funds by interventions with no or poor evidence of effectiveness. Partly in line with the same trend, over one-third of European countries have now reduced or abandoned mass media drug prevention campaigns ([10]).

([10]) Belgium, Estonia, Cyprus, Luxembourg, Hungary, Malta, Netherlands, Austria, Portugal, Slovakia, Norway.

Public austerity and limited resources have also contributed to debates on the quality of the overall health provision systems and about cost-effectiveness in health provision in some countries. For instance, in Ireland, the government undertook a needs-assessment programme to improve the cost-effectiveness of services. As a consequence and in order to improve cost-effectiveness for drug treatment, the government set a roadmap proposing some main targets. First, to increase the coverage of the opioid substitution treatment programmes to a rate close to 100 %; second, to introduce local service provision at standards comparable to those in Dublin; and third, to increase the availability of mental health services to drug users. For rehabilitation programmes, the government recommended a more efficient administrative system for clients. In the United Kingdom, specific tools are available to allow local authority drug treatment commissioners to estimate and improve the social return on investment of drug treatment provision in their area. For example, English local authorities have had at their disposal for some years a 'value for money tool', but perhaps it has increased utility in the climate of austerity.

Conclusion

The 2008 world economic recession had a major impact on many European countries, pushing up unemployment rates to unusually high levels and forcing governments to consolidate public accounts. This fiscal consolidation was mostly achieved at the expense of public expenditure, with total European public spending declining in 2011 and 2012, in real terms, in contrast to the annual growth rates of close to 2 % registered in the previous decade.

Austerity led to reductions in spending in those categories of government activity that encompass most drug-related initiatives, namely health, social protection and public order and safety. As drug-related expenditure represents a small proportion of these aggregates, it cannot be directly inferred that public spending on drug initiatives necessarily behaved similarly. Reductions in funding for these areas of activity, however, may have an indirect impact on drug-related initiatives.

The level of austerity has differed considerably across countries and sectors in Europe. Between 2009 and 2011, the countries that experienced greater levels of austerity tended to show greater reductions in expenditure in the three sectors that cover most drug-related activities. Public spending on health registered bigger cuts than public safety and social protection. The OECD suggests that although cuts in health may have been unavoidable, some measures may have an impact on the ability of health systems to meet fundamental goals and, therefore, highlights the need to monitor closely

their consequences. The OECD (2014) concluded that, '*It is still too early to quantify the longer-term effects on people's health, but unemployment and economic difficulties are known to contribute to a range of health problems, including mental illness... Short-term savings may translate into much higher costs in the future, and governments should make funding of investment-type programmes a priority. Today's cuts in health spending need to avoid triggering rising health care needs tomorrow... Maintaining and strengthening support for the most vulnerable groups must remain a crucial part of any strategy for an economic and social recovery. Governments need to time and design any fiscal consolidation measures accordingly, as the distributional impact of such measures can vary greatly: for example, the poor may suffer more from spending cuts than from tax increases.*'

The available national estimates of drug-related public expenditure do not reveal the full impact of the 2008–09 economic recession on the public financing of drug policy in Europe. However, one conclusion can safely be drawn: reductions in overall funding for the provision of public services such as public order and safety, health and social protection are likely to impact negatively on the capacity to deliver drug services and drug law enforcement, since these are areas that have synergies with drug-related interventions.

Bearing in mind the limitations of the available data, some tentative conclusions may be drawn. As was the case in other fields of public policy, the impact of austerity on drug policy was more severe in the countries that were hardest hit by the economic crisis. Nevertheless, in most European countries, the public financing of specific drug policies has been reassessed and often adjusted.

One characteristic that seems to be shared by most European countries is that after 2008, policymakers and planners faced more uncertainty concerning future financing. Budgets became more likely to be subject to revision, often resulting in cuts. On the one hand, this introduced additional difficulties because plans were more difficult to make; on the other hand, these difficulties have raised policymakers' awareness of the need for more cost-effective policy measures. In some countries, reorganisation of the sectors of health, social protection, or both, as well as drug services has been attempted.

Many European countries, spanning the full range of impact of the recession, have reassessed the financing of their health sector. While numerous countries mentioned the aim of ring-fencing health expenditure, only a few achieved it. Austerity led to different outcomes in different countries. Among the changes reported by some countries are the following: reorganisation of drug-related treatment and harm-reduction services; changes in co-financing systems; a shift towards outpatient treatment or day-care treatment over inpatient drug treatment; and attempts to increase the cost-effectiveness of health provision through reorganisation. In a few countries, cuts in the international co-financing of drug services have introduced additional difficulties. The impact of all these changes will probably not be unidirectional and will take time before becoming visible.

The effectiveness of drug policy is influenced by social and policy factors, among others, which prevents a clear-cut analysis of the impact of the public austerity. The complexity of this phenomenon can be illustrated in countries such as Greece, where HIV outbreaks have occurred among problem drug user groups. There, although it is likely that the economic recession contributed to the outbreaks, other systemic factors were crucial. Among the relevant factors for a comprehensive understanding of the outbreaks — other than recession — are the epidemiological situation, the level of drug-treatment, the degree of harm-reduction coverage, social integration policies and the level of income inequality within societies.

Drug prevention is reported to be a sector that has been the subject of cuts in financing. On the one hand, reduced funds have led to the downsizing of prevention programmes; on the other hand, the reduction in funds has increased awareness of the need of more quality control and evidence-based funding. All in all, the medium-term impact of austerity is still to be assessed. Drug-related research has also registered cuts in many countries.

In line with the overall trend detected in most countries after the economic recession, drug-related expenditure on social protection has also been reduced in those countries presenting estimates for this component. However, as many countries either present no data or insufficient data, conclusions cannot be drawn about the likely extent of any impact. This is of concern, given the research evidence on the negative impact of recessions on mental health. Tackling the risk factors for mental health problems, such as unemployment and poverty, which may result from the 2008 economic recession, requires an integrated public policy, where employment policies are coordinated with such broad types of interventions as family support or debt relief programmes.

Public expenditure on public order and safety, which finances most supply reduction activities in the drugs field, declined markedly in real terms after 2008, especially in 2011. The number of countries providing estimates for total drug-related expenditure on supply reduction initiatives is especially small, because these expenditures are mostly unlabelled, embedded in broader categories of public spending and therefore difficult to identify. Within the group of countries presenting these estimates, all but one reported either short-term or lasting reductions in the funds allocated.

This report has attempted to provide important insights into the likely impact of the recession on the drug phenomenon in Europe. It notes, nevertheless, that information concerning the full impact of the 2008 recession on funds available for drug-related policies is still not available, partly because the number of countries with data for drug-related public expenditure in 2012 is very small. In addition, according to global economic indicators, 2012 was still a year of cuts in public expenditure in Europe. It should also be noted that the impact of changes in funding arrangements may take time to fully impact on the provision of public services; therefore the full impact is still to come. Furthermore, and by the same token, the most common types of outcomes used for assessing the cost-effectiveness of drug-related health interventions (such as the amounts and types of substance use, treatment retention rates, mental and physical health status as well as quality of life status measured at the end of treatment) will only become visible after some time. Therefore, a full analysis will only be possible after some period of delay. Consequently, the contours of the impact of the 2008 economic recession will take time to be fully known. Improving data available of national drug-related public expenditure would be a valuable and necessary asset for future assessments.

Nevertheless, in a framework where austerity has affected the main sectors covering and financing drug policy, especially in those countries most severely hit by the economic recession, policymakers will wish to focus on policies that have proven to be most effective and to be alert to any emerging problems. This reiterates the importance of having better data available and following the phenomenon closely. The potential negative impact of the 2008 economic recession on the drug phenomenon has been stressed by the international community. In 2014, The Commission on Narcotic Drugs of the United Nations agreed upon a joint resolution highlighting the need to provide sufficient health services to individuals affected by substance disorders during long-term and sustained economic downturns (United Nations, 2014). The United Nations encourages countries to ensure that responses to downturns do not disproportionately affect national drug demand and supply reduction policies. Countries are also encouraged to guarantee adequate provision of related health measures and supply reduction efforts. Finally, countries are invited to continue providing, including in times of downturn, the best attainable coverage, accessibility and quality of health and social services to those who are or may be affected by drug problems.

Glossary

Automatic stabilisers are budgetary measures that dampen fluctuations in real GDP, automatically triggered by the tax code and by spending rules.

Cost-effectiveness analysis involves estimating the ratio of the difference in costs between two alternatives (net costs) divided by the difference of their outcomes (Gold et al., 1996). For instance, Chalk et al. (2013) define the cost-effectiveness of opioid substitution treatment as the incremental price of obtaining a unit health effect (e.g. 10 % reduction in days of opioid use in the past month) from a given health intervention (e.g. counselling and methadone) when compared to an alternative (e.g. counselling alone).

Cyclically adjusted primary budget balance is the cyclically adjusted balance excluding payments of public debt. The cyclically adjusted balance is the difference between the current balance and the automatic stabilisers; equivalently, an estimate of the fiscal balance that would apply under current policies if output were equal to potential. The current balance is the difference between the money received by the government in tax and public expenditure of the value of the goods and services consumed for purposes other than investment.

Economic recession is a period when the economy shrinks. In technical terms, it is usually defined as six months of economic contraction (a fall in the gross domestic product for two consecutive quarters, on a quarter on quarter basis). A recession becomes a depression if it is unusually deep and long-lasting, such as the Great Depression that struck in the 1930s (Keely and Love, 2010).

Fiscal consolidation is defined as concrete policies aimed at reducing government deficits and debt accumulation. During an economic recession, governments may also decide to take special — or 'discretionary' — actions to restore growth or public finances. Virtually every country did so after 2008, although the size and scope of the packages varied greatly. Governments in some countries introduced fiscal packages to stimulate economic growth; others, with more acute fiscal solvency concerns, tightened up their fiscal position by reducing spending (OECD, 2011).

Fiscal policy is a tool that governments typically use to steer economies. In simple terms, fiscal policy refers to government spending and tax collection.

Government deficit (also known as a budget deficit) exists when a government spends more in a year than it earns. Government deficits tend to increase during recessions. First, because governments earn less from tax (for example, people buy fewer goods and, therefore, pay less consumption taxes or falling profits imply less taxes paid by private companies). Second, because of the existence of the social safety net, there is an automatic increase in government spending on items like unemployment benefits, as more people lose their jobs. These factors tend to act without requiring special government intervention.

Government expenditure refers to the expenditure of the total general government: it includes the expenditure of central, regional and local governments as well as social security.

Labelled drug-related expenditure is the ex-ante planned public expenditure made by general government in the budget that reflects the public and voluntary commitment of a country in the field of drugs.

Public expenditure refers to the value of goods and services purchased by the general government of a state in order to perform each of its functions. The functions of governments are, among others, the provision of health care, justice, public order, education and social protection. Public expenditure studies are important because they provide information about the size and the composition of costs of public programmes and interventions.

Total drug-related public expenditure is the sum of the labelled and unlabelled drug-related expenditure.

Unlabelled drug-related expenditure is the non-planned or non-publicly announced ex-post public expenditure incurred by the general government in tackling drugs that is not identified as drug-related in the budget.

Appendix – Country data

TABLE A1

Yearly growth of gross domestic product, volume (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU27	3.9	2.1	1.3	1.5	2.5	2.1	3.3	3.2	0.3	−4.3	2.1	1.6	−0.3
Belgium	3.7	0.8	1.4	0.8	3.3	1.8	2.7	2.9	1.0	−2.8	2.4	1.8	−0.3
Bulgaria	5.7	4.2	4.7	5.5	6.7	6.4	6.5	6.4	6.2	−5.5	0.4	1.8	0.8
Czech Republic	4.2	3.1	2.1	3.8	4.7	6.8	7.0	5.7	3.1	−4.5	2.5	1.9	−1.3
Denmark	3.5	0.7	0.5	0.4	2.3	2.4	3.4	1.6	−0.8	−5.7	1.6	1.1	−0.5
Germany	3.1	1.5	0.0	−0.4	1.2	0.7	3.7	3.3	1.1	−5.1	4.2	3.0	0.7
Estonia	9.7	6.3	6.6	7.8	6.3	8.9	10.1	7.5	−4.2	−14.1	3.3	8.3	3.2
Ireland	10.7	5.3	5.6	3.9	4.4	5.9	5.4	5.4	−2.1	−5.5	−0.8	1.4	0.9
Greece	3.5	4.2	3.4	5.9	4.4	2.3	5.5	3.5	−0.2	−3.1	−4.9	−7.1	−6.4
Spain	5.0	3.7	2.7	3.1	3.3	3.6	4.1	3.5	0.9	−3.7	−0.3	0.4	−1.4
France	3.7	1.8	0.9	0.9	2.5	1.8	2.5	2.3	−0.1	−3.1	1.7	2.0	0.0
Croatia	3.8	3.7	4.9	5.4	4.1	4.3	4.9	5.1	2.1	−6.9	−2.3	0.0	−2.0
Italy	3.7	1.9	0.5	0.0	1.7	0.9	2.2	1.7	−1.2	−5.5	1.7	0.4	−2.4
Cyprus	5.0	4.0	2.1	1.9	4.2	3.9	4.1	5.1	3.6	−1.9	1.3	0.5	−2.4
Latvia	5.7	7.3	7.2	7.6	8.9	10.1	11.2	9.6	−3.3	−17.7	−0.9	5.5	5.6
Lithuania	3.6	6.7	6.8	10.3	7.4	7.8	7.8	9.8	2.9	−14.8	1.5	5.9	3.7
Luxembourg	8.4	2.5	4.1	1.7	4.4	5.3	4.9	6.6	−0.7	−4.1	2.9	1.7	0.3
Hungary	4.2	3.7	4.5	3.9	4.8	4.0	3.9	0.1	0.9	−6.8	1.3	1.6	−1.7
Malta		0.0	2.4	0.7	−0.3	3.6	2.6	4.1	3.9	−2.6	2.9	1.7	0.8
Netherlands	3.9	1.9	0.1	0.3	2.2	2.0	3.4	3.9	1.8	−3.7	1.6	1.0	−1.0
Austria	3.7	0.9	1.7	0.9	2.6	2.4	3.7	3.7	1.4	−3.8	2.1	2.7	0.8
Poland	4.3	1.2	1.4	3.9	5.3	3.6	6.2	6.8	5.1	1.6	3.9	4.5	1.9
Portugal	3.9	2.0	0.8	−0.9	1.6	0.8	1.4	2.4	0.0	−2.9	1.9	−1.6	−3.2
Romania	2.4	5.7	5.1	5.2	8.5	4.2	7.9	6.3	7.3	−6.6	−1.1	2.2	0.7
Slovakia	1.4	3.5	4.6	4.8	5.1	6.7	8.3	10.5	5.8	−4.9	4.4	3.2	2.0
Slovenia	4.3	2.9	3.8	2.9	4.4	4.0	5.8	7.0	3.4	−7.8	1.2	0.6	−2.3
Finland	5.3	2.3	1.8	2.0	4.1	2.9	4.4	5.3	0.3	−8.5	3.3	2.8	−0.2
Sweden	4.5	1.3	2.5	2.3	4.2	3.2	4.3	3.3	−0.6	−5.0	6.6	3.7	0.8
United Kingdom	4.2	2.9	2.4	3.8	2.9	2.8	2.6	3.6	−1.0	−4.0	1.8	1.0	0.3
Norway	3.3	2.0	1.5	1.0	4.0	2.6	2.3	2.7	0.1	−1.6	0.5	1.2	3.1

Source: Eurostat

TABLE A2

Net lending (+) or net borrowing (–) of general government as percentage of gross domestic product

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU27	0.6	–1.5	–2.6	–3.2	–2.9	–2.5	–1.5	–0.9	–2.4	–6.9	–6.5	–4.4	–3.9
Belgium	0.0	0.4	–0.1	–0.1	–0.1	–2.5	0.4	–0.1	–1.0	–5.5	–3.8	–3.7	–4.0
Bulgaria	–0.5	1.1	–1.2	–0.4	1.9	1.0	1.9	1.2	1.7	–4.3	–3.1	–2.0	–0.8
Czech Republic	–3.6	–5.6	–6.5	–6.7	–2.8	–3.2	–2.4	–0.7	–2.2	–5.8	–4.8	–3.2	–4.4
Denmark	2.3	1.5	0.4	0.1	2.1	5.2	5.2	4.8	3.2	–2.7	–2.5	–1.8	–4.1
Germany	1.1	–3.1	–3.8	–4.2	–3.8	–3.3	–1.6	0.2	–0.1	–3.1	–4.1	–0.8	0.1
Estonia	–0.2	–0.1	0.3	1.7	1.6	1.6	2.5	2.4	–2.9	–2.0	0.2	1.1	–0.2
Ireland	4.7	0.9	–0.4	0.4	1.4	1.7	2.9	0.1	–7.4	–13.9	–30.9	–13.1	–8.2
Greece	–3.7	–4.5	–4.8	–5.6	–7.5	–5.2	–5.7	–6.5	–9.8	–15.6	–10.7	–9.5	–9.0
Spain	–0.9	–0.5	–0.2	–0.3	–0.1	1.3	2.4	1.9	–4.5	–11.2	–9.7	–9.6	–10.6
France	–1.5	–1.5	–3.1	–4.1	–3.6	–2.9	–2.3	–2.7	–3.3	–7.5	–7.1	–5.3	–4.8
Italy	–0.8	–3.1	–3.1	–3.6	–3.5	–4.4	–3.4	–1.6	–2.7	–5.4	–4.5	–3.8	–3.0
Cyprus	–2.3	–2.2	–4.4	–6.6	–4.1	–2.4	–1.2	3.5	0.9	–6.1	–5.3	–6.3	–6.4
Latvia	–2.8	–2.0	–2.3	–1.6	–1.0	–0.4	–0.5	–0.4	–4.2	–9.8	–8.1	–3.6	–1.3
Lithuania	–3.2	–3.5	–1.9	–1.3	–1.5	–0.5	–0.4	–1.0	–3.3	–9.4	–7.2	–5.5	–3.2
Luxembourg	6.0	6.1	2.1	0.5	–1.1	0.0	1.4	3.7	3.2	–0.8	–0.8	–0.3	–0.6
Hungary	–3.0	–4.1	–9.0	–7.3	–6.5	–7.9	–9.4	–5.1	–3.7	–4.6	–4.4	4.3	2.0
Malta	–5.8	–6.4	–5.8	–9.2	–4.7	–2.9	–2.8	–2.3	–4.6	–3.9	–3.6	–2.7	–3.3
Netherlands	2	–0.2	–2.1	–3.1	–1.7	–0.3	0.5	0.2	0.5	–5.6	–5.1	–4.3	–4.1
Austria	–1.7	0.0	–0.7	–1.5	–4.4	–1.7	–1.5	–0.9	–0.9	–4.1	–4.5	–2.5	–2.5
Poland	–3.0	–5.3	–5.0	–6.2	–5.4	–4.1	–3.6	–1.9	–3.7	–7.4	–7.9	–5.0	–3.9
Portugal	–3.3	–4.8	–3.4	–3.7	–4.0	–6.5	–4.6	–3.1	–3.6	–10.2	–9.8	–4.3	–6.4
Romania	–4.7	–3.5	–2.0	–1.5	–1.2	–1.2	–2.2	–2.9	–5.7	–9.0	–6.8	–5.6	–3.0
Slovakia	–12.3	–6.5	–8.2	–2.8	–2.4	–2.8	–3.2	–1.8	–2.1	–8.0	–7.7	–5.1	–4.5
Slovenia	–3.7	–4.0	–2.4	–2.7	–2.3	–1.5	–1.4	0.0	–1.9	–6.0	–5.7	–6.3	–3.8
Finland	7.0	5.1	4.2	2.6	2.5	2.9	4.2	5.3	4.4	–2.5	–2.5	–0.7	–1.8
Sweden	3.6	1.5	–1.3	–1.0	0.6	2.2	2.3	3.6	2.2	–0.7	0.3	0.2	–0.2
United Kingdom	3.6	0.5	–2.1	–3.4	–3.5	–3.4	–2.7	–2.8	–5.1	–11.5	–10.2	–7.7	–6.1
Norway		13.5	9.3	7.3	11.1	15.1	18.5	17.5	18.8	10.5	11.0	13.3	13.6

Source: Eurostat

TABLE A3

Public expenditure as percentage of gross domestic product

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU27	44.7	46.1	46.6	47.2	46.7	46.7	46.2	45.5	47.0	51.0	50.6	49.1	49.3
Belgium	49.1	49.1	49.8	51.0	49.2	51.9	48.5	48.2	49.8	53.7	52.6	53.5	55.0
Bulgaria	41.3	40.6	39.6	39.1	38.6	37.3	34.4	39.2	38.4	41.4	37.4	35.6	35.9
Czech Republic	41.6	43.9	45.6	50.0	43.3	43.0	42.0	41.0	41.1	44.7	43.7	43.2	44.5
Denmark	53.7	54.2	54.6	55.1	54.6	52.8	51.6	50.8	51.5	58.1	57.7	57.6	59.5
Germany	45.1	47.6	47.9	48.5	47.1	46.9	45.3	43.5	44.1	48.3	47.9	45.2	44.7
Estonia	36.1	34.8	35.8	34.8	34.0	33.6	33.6	34.0	39.7	44.7	40.5	37.5	39.5
Ireland	31.1	33.2	33.5	33.2	33.7	33.9	34.5	36.7	42.8	48.1	65.5	47.1	42.6
Greece	47.2	45.8	45.5	45.1	45.9	44.6	45.3	47.5	50.6	54.0	51.4	52.0	53.6
Spain	39.2	38.7	38.9	38.4	38.9	38.4	38.4	39.2	41.4	46.2	46.3	45.7	47.8
France	51.7	51.7	52.9	53.4	53.3	53.6	53.0	52.6	53.3	56.8	56.6	55.9	56.6
Italy	45.9	47.7	47.1	48.1	47.5	47.9	48.5	47.6	48.6	51.9	50.4	49.8	50.6
Cyprus	37.1	38.0	40.0	44.6	42.4	43.1	42.6	41.3	42.1	46.2	46.2	46.3	46.4
Latvia	37.6	35.0	36.0	34.9	35.9	35.8	38.3	36.0	39.1	43.7	43.4	38.4	36.5
Lithuania	39.8	37.5	35.4	33.8	34.0	34.0	34.2	35.3	37.9	44.9	42.3	38.7	36.1
Luxembourg	37.6	38.1	41.5	41.8	42.6	41.5	38.6	36.3	39.1	45.2	43.5	42.6	44.3
Hungary	47.8	47.8	51.5	49.7	49.1	50.1	52.2	50.7	49.2	51.4	50.0	50.0	48.7
Malta	39.5	41.2	41.7	45.6	43.6	43.6	43.2	41.8	43.2	42.5	41.6	41.7	43.4
Netherlands	44.2	45.4	46.2	47.1	46.1	44.8	45.5	45.3	46.2	51.4	51.3	49.9	50.4
Austria	51.9	51.3	50.7	51.3	53.8	50.0	49.1	48.6	49.3	52.6	52.8	50.8	51.7
Poland	41.1	43.8	44.3	44.7	42.6	43.4	43.9	42.2	43.2	44.6	45.4	43.4	42.2
Portugal	41.6	43.2	43.1	44.7	45.4	46.6	45.2	44.4	44.8	49.8	51.5	49.3	47.4
Romania	38.6	36.2	35.0	33.5	33.6	33.6	35.5	38.2	39.3	41.1	40.1	39.5	36.6
Slovakia	52.1	44.5	45.1	40.1	37.7	38.0	36.5	34.2	34.9	41.6	40.0	38.4	37.8
Slovenia	46.5	47.3	46.2	46.2	45.6	45.1	44.3	42.3	44.1	48.7	49.4	49.9	48.1
Finland	48.3	48.0	49.0	50.3	50.2	50.3	49.2	47.4	49.2	56.1	55.8	55.2	56.6
Sweden	55.1	54.5	55.6	55.7	54.2	53.9	52.7	51.0	51.7	54.9	52.3	51.5	52.0
United Kingdom	36.4	39.8	40.9	41.8	42.7	43.4	43.6	43.3	47.1	50.8	49.9	48.0	47.9
Norway	42.3	44.1	47.1	48.2	45.1	41.8	40.0	40.3	39.8	46.0	44.6	43.7	42.5

Source: Eurostat

TABLE A4

Yearly growth of total public expenditure (%), constant prices

	Average 2000–07	2008	2009	2010	2011	2012
EU27	2.0	3.2	4.3	0.7	–2.2	–0.3
Belgium	1.3	2.8	5.6	0.2	2.0	2.0
Bulgaria	6.6	3.6	4.5	–8.8	–2.2	0.5
Czech Republic	3.8	0.9	4.7	–0.8	–1.1	1.6
Denmark	1.1	1.7	4.4	2.5	–0.3	2.8
Germany	0.0	1.7	4.5	2.3	–3.3	–0.5
Estonia	7.1	8.1	–1.7	–8.4	0.5	9.2
Ireland	6.5	8.2	7.3	35.6	–27.1	–10.3
Greece	4.7	5.8	3.6	–10.0	–6.9	–4.7
Spain	4.0	5.4	7.9	–1.0	–3.1	1.3
France	2.0	1.0	4.0	1.1	0.3	1.3
Italy	1.2	0.2	2.5	–2.1	–1.3	–1.4
Cyprus	5.6	5.6	6.5	1.1	–0.3	–2.8
Latvia	8.0	0.8	–9.3	–1.0	–5.6	1.7
Lithuania	6.7	7.3	–5.4	–4.3	–1.3	–3.2
Luxembourg	4.5	4.1	8.0	4.1	1.6	4.6
Hungary	3.7	–2.2	–1.7	–2.4	1.2	–5.4
Malta	3.1	6.5	–4.1	1.5	2.9	5.2
Netherlands	2.0	4.2	6.7	1.0	–2.0	–0.8
Austria	0.9	2.4	3.1	1.8	–2.2	1.6
Poland	4.6	6.5	6.0	4.4	–1.4	–2.1
Portugal	2.2	0.0	9.9	5.1	–6.9	–7.1
Romania	8.2	13.2	–1.7	–3.1	1.3	–5.8
Slovenia	3.0	6.5	4.0	1.0	0.4	–6.9
Slovakia	1.0	6.2	11.5	0.0	–3.1	–1.8
Finland	1.6	3.0	3.8	1.0	0.9	1.6
Sweden	1.0	0.7	1.3	1.0	0.9	1.1
United Kingdom	4.6	7.1	2.8	–0.4	–3.6	–0.1
Norway	3.2	4.6	4.9	1.6	2.8	2.4

TABLE A5

Yearly growth rate of public expenditure on health (%), constant prices

	Average 2000–08	2009	2010	2011
EU27	3.4	5.0	–0.1	–1.0
Belgium	3.2	5.8	1.3	2.7
Bulgaria	15.0	–9.7	11.9	0.8
Czech Republic	3.6	7.5	2.4	0.4
Denmark	3.5	5.4	–0.6	–1.2
Germany	1.9	5.3	0.7	0.3
Estonia	8.3	–7.0	–3.3	2.2
Ireland	7.5	3.7	–4.1	–6.3
Greece	12.3	1.2	–9.5	–22.3
Spain	5.5	8.6	–3.9	–4.8
France	2.8	3.5	2.4	2.3
Italy	3.5	1.4	0.2	–2.7
Cyprus	4.7	6.6	2.2	2.2
Latvia	10.6	–17.2	–11.4	5.0
Lithuania	8.3	–9.9	0.3	3.9
Luxembourg	5.4	7.4	1.1	–0.4
Hungary	2.8	–2.7	2.4	1.3
Malta	3.9	–0.9	3.7	5.4
Netherlands	7.1	8.8	2.1	2.4
Austria	1.0	2.5	0.8	–3.1
Poland	8.0	4.3	–0.2	–2.3
Portugal	2.1	9.2	–5.5	–1.6
Romania	7.5	11.6	–6.3	–3.4
Slovakia	9.3	5.1	–14.9	–6.0
Slovenia	3.4	6.6	–3.1	–1.1
Finland	4.4	3.3	1.1	1.3
Sweden	3.4	2.6	1.2	3.0
United Kingdom	5.9	6.9	–0.6	–2.5
Norway	3.7	3.0	2.2	3.3

Source: Eurostat.

TABLE A6

Yearly growth rate of public expenditure on social protection (%), constant prices

	Average 2000–08	2009	2010	2011
EU27	1.9	6.7	1.0	–0.7
Belgium	1.9	7.4	0.3	1.4
Bulgaria	5.8	17.8	–0.1	–1.6
Czech Republic	3.6	6.1	0.2	0.9
Denmark	1.5	5.0	3.8	–0.4
Germany	–0.1	5.2	–0.2	–2.6
Estonia	7.0	16.7	–5.3	–4.2
Ireland	7.0	15.4	2.1	0.1
Greece	3.9	5.5	–3.3	–0.4
Spain	4.4	12.4	2.8	–1.3
France	2.3	4.7	1.5	1.2
Italy	1.5	4.8	1.0	–0.3
Cyprus	6.8	8.8	7.7	2.9
Latvia	2.3	19.3	–3.2	–5.9
Lithuania	6.7	9.8	–11.6	–5.7
Luxembourg	4.9	8.9	3.7	1.5
Hungary	4.7	–1.7	–4.1	–1.9
Malta	3.8	3.7	1.0	3.2
Netherlands	1.4	6.8	2.8	0.4
Austria	1.2	5.2	1.7	–1.5
Poland	2.5	8.3	5.0	–2.8
Portugal	4.5	12.4	2.3	–2.2
Romania	9.2	10.5	1.4	–2.2
Slovakia	0.8	13.4	3.4	–0.8
Slovenia	3.1	6.4	2.0	1.3
Finland	1.4	7.1	1.7	1.1
Sweden	0.9	3.5	0.0	–0.9
United Kingdom	3.2	7.5	1.6	–0.5
Norway	3.9	6.3	2.7	4.5

Source: Eurostat.

TABLE A7

Yearly growth rate of public expenditure on public order and safety (%), constant prices

	Average 2000–08	2009	2010	2011
EU27	2.4	3.1	0.4	–2.1
Belgium	3.2	3.6	1.2	–0.2
Bulgaria	10.4	5.0	–10.5	–2.7
Czech Republic	1.9	1.6	–1.0	–9.7
Denmark	3.2	2.1	–1.6	1.2
Germany	0.2	4.5	0.4	0.7
Estonia	6.7	–27.4	–0.7	1.6
Ireland	5.5	–3.0	–2.2	–3.0
Greece	17.4	12.4	–9.7	–12.7
Spain	4.9	1.7	5.1	–4.2
France	3.0	7.0	1.2	1.1
Italy	–0.1	6.0	1.1	–1.3
Cyprus	5.0	4.7	6.3	–6.0
Latvia	7.3	–26.6	–6.8	0.4
Lithuania	5.9	–17.9	3.5	6.8
Luxembourg	5.3	3.8	8.4	5.1
Hungary	4.2	–8.4	–3.7	3.2
Malta	1.7	1.6	–0.5	1.2
Netherlands	4.4	5.1	–2.1	–1.0
Austria	1.2	2.9	–0.9	–1.3
Poland	10.2	3.0	1.2	–2.4
Portugal	2.5	7.4	–0.1	–4.8
Romania	14.2	–9.6	11.1	–6.3
Slovenia	3.0	1.8	3.3	–7.6
Slovakia	2.7	10.6	12.9	–5.4
Finland	1.8	2.8	5.4	–1.4
Sweden	2.2	1.2	4.9	0.7
United Kingdom	5.2	1.8	–3.0	–5.5
Norway	2.3	4.4	2.8	4.2

Source: Eurostat

TABLE A8

Unemployment rate (%), annual average

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU27	8.8	8.6	8.9	9.1	9.3	9.0	8.3	7.2	7.1	9.0	9.7	9.7	10.5
Belgium	6.9	6.6	7.5	8.2	8.4	8.5	8.3	7.5	7.0	7.9	8.3	7.2	7.6
Bulgaria	16.4	19.5	18.2	13.7	12.1	10.1	9.0	6.9	5.6	6.8	10.3	11.3	12.3
Czech Republic	8.8	8.1	7.3	7.8	8.3	7.9	7.1	5.3	4.4	6.7	7.3	6.7	7.0
Denmark	4.3	4.5	4.6	5.4	5.5	4.8	3.9	3.8	3.4	6.0	7.5	7.6	7.5
Germany	8.0	7.9	8.7	9.8	10.5	11.3	10.3	8.7	7.5	7.8	7.1	5.9	5.5
Estonia	13.6	12.6	10.3	10.1	9.7	7.9	5.9	4.6	5.5	13.8	16.9	12.5	10.2
Ireland	4.2	3.9	4.5	4.6	4.5	4.4	4.5	4.7	6.4	12.0	13.9	14.7	14.7
Greece	11.2	10.7	10.3	9.7	10.5	9.9	8.9	8.3	7.7	9.5	12.6	17.7	24.3
Spain	11.7	10.5	11.4	11.4	10.9	9.2	8.5	8.3	11.3	18.0	20.1	21.7	25.0
France	9.0	8.2	8.3	8.9	9.3	9.3	9.2	8.4	7.8	9.5	9.7	9.6	10.2
Italy	10.0	9.0	8.5	8.4	8.0	7.7	6.8	6.1	6.7	7.8	8.4	8.4	10.7
Cyprus	4.8	3.9	3.5	4.1	4.6	5.3	4.6	3.9	3.7	5.4	6.3	7.9	11.9
Latvia	13.7	12.9	12.8	11.3	11.2	9.6	7.3	6.5	8.0	18.2	19.8	16.2	14.9
Lithuania	16.4	17.4	13.8	12.4	11.3	8.0	5.2	3.8	5.3	13.6	18.0	15.3	13.3
Luxembourg	2.2	1.9	2.6	3.8	5.0	4.6	4.6	4.2	4.9	5.1	4.6	4.8	5.1
Hungary	6.3	5.6	5.6	5.8	6.1	7.2	7.5	7.4	7.8	10.0	11.2	10.9	10.9
Malta	6.7	7.6	7.4	7.7	7.2	7.3	6.9	6.5	6.0	6.9	6.9	6.5	6.4
Netherlands	3.1	2.5	3.1	4.2	5.1	5.3	4.4	3.6	3.1	3.7	4.5	4.4	5.3
Austria	3.6	3.6	4.2	4.3	4.9	5.2	4.8	4.4	3.8	4.8	4.4	4.2	4.3
Poland	16.1	18.3	20.0	19.8	19.1	17.9	13.9	9.6	7.1	8.1	9.7	9.7	10.1
Portugal	4.5	4.6	5.7	7.1	7.5	8.6	8.6	8.9	8.5	10.6	12.0	12.9	15.9
Romania	6.8	6.6	7.5	6.8	8.0	7.2	7.3	6.4	5.8	6.9	7.3	7.4	7.0
Slovakia	18.9	19.5	18.8	17.7	18.4	16.4	13.5	11.2	9.6	12.1	14.5	13.6	14.0
Slovenia	6.7	6.2	6.3	6.7	6.3	6.5	6.0	4.9	4.4	5.9	7.3	8.2	8.9
Finland	9.8	9.1	9.1	9.0	8.8	8.4	7.7	6.9	6.4	8.2	8.4	7.8	7.7
Sweden	5.6	5.8	6.0	6.6	7.4	7.7	7.1	6.1	6.2	8.3	8.6	7.8	8.0
United Kingdom	5.4	5.0	5.1	5.0	4.7	4.8	5.4	5.3	5.6	7.6	7.8	8.0	7.9
Norway	3.2	3.4	3.7	4.2	4.3	4.5	3.4	2.5	2.5	3.2	3.6	3.3	3.2

Source: Eurostat

TABLE A9

Unemployment rate among the under-25s (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU27	17.6	17.4	18.0	18.5	18.9	18.8	17.5	15.7	15.8	20.1	21.0	21.4	22.9
Belgium	16.7	16.8	17.7	21.8	21.2	21.5	20.5	18.8	18.0	21.9	22.4	18.7	19.8
Bulgaria	33.7	38.3	35.2	26.6	24.3	21.0	18.3	14.1	11.9	15.1	21.8	25.0	28.1
Czech Republic	17.0	16.6	16.0	17.6	20.4	19.3	17.5	10.7	9.9	16.6	18.3	18.1	19.5
Denmark	6.2	8.3	7.4	9.2	8.2	8.6	7.7	7.5	8.0	11.8	13.9	14.2	14.1
Germany	8.7	8.4	9.9	11.6	13.8	15.6	13.8	11.9	10.6	11.2	9.9	8.6	8.1
Estonia	23.9	22.2	17.9	20.9	23.9	15.1	12.1	10.1	12.0	27.4	32.9	22.4	20.9
Ireland	6.7	7.2	8.4	8.7	8.7	8.6	8.7	9.1	13.3	24.0	27.6	29.1	30.4
Greece	29.1	28.0	26.8	26.8	26.5	25.8	25.0	22.7	21.9	25.7	33.0	44.7	55.3
Spain	23.2	21.1	22.2	22.7	22.0	19.6	17.9	18.1	24.5	37.7	41.5	46.2	52.9
France	20.2	19.0	18.9	18.9	20.5	21.0	22.0	19.5	19.0	23.6	23.3	22.6	24.4
Italy	26.2	23.1	22.0	23.6	23.5	24.0	21.6	20.3	21.3	25.4	27.8	29.1	35.3
Cyprus	9.9	8.2	8.0	8.8	10.2	13.9	10.0	10.2	9.0	13.8	16.6	22.4	27.7
Latvia	22.4	22.7	20.3	19.6	20.0	15.1	13.6	10.6	13.6	33.3	36.2	31.0	28.5
Lithuania	30.0	31.1	23.0	24.8	21.8	15.8	10.0	8.4	13.3	29.6	35.7	32.6	26.7
Luxembourg	6.6	6.2	7.0	11.2	16.4	14.6	15.5	15.6	17.3	16.5	15.8	16.4	18.0
Hungary	11.9	11.0	11.9	13.2	15.5	19.4	19.1	18.1	19.9	26.5	26.6	26.1	28.1
Malta	13.7	18.8	17.1	17.4	16.6	16.1	15.5	13.5	11.7	14.5	13.2	13.3	14.1
Netherlands	6.1	5.0	5.4	7.3	9.0	9.4	7.5	7.0	6.3	7.7	8.7	7.6	9.5
Austria	5.3	5.8	6.7	8.1	9.7	10.3	9.1	8.7	8.0	10.0	8.8	8.3	8.7
Poland	35.1	39.5	42.5	41.9	39.6	36.9	29.8	21.6	17.2	20.6	23.7	25.8	26.5
Portugal	10.6	11.6	14.4	18.0	19.1	20.0	20.4	20.6	20.5	25.1	28.2	30.3	37.9
Romania	17.2	17.6	21.0	19.5	21.0	19.7	21.0	20.1	18.6	20.8	22.1	23.7	22.7
Slovakia	37.3	39.6	38.1	33.8	33.4	30.4	27.0	20.6	19.3	27.6	33.9	33.7	34.0
Slovenia	16.3	17.8	16.5	17.3	16.1	15.9	13.9	10.1	10.4	13.6	14.7	15.7	20.6
Finland	21.4	19.8	21.0	21.8	20.7	20.1	18.7	16.5	16.5	21.5	21.4	20.1	19.0
Sweden	10.5	15.0	16.4	17.4	20.4	22.6	21.5	19.2	20.2	25.0	24.8	22.8	23.7
United Kingdom	12.2	11.7	12.0	12.2	12.1	12.8	14.0	14.3	15.0	19.1	19.6	21.1	21.0
Norway	9.8	10.0	10.8	11.2	11.2	11.4	8.8	7.2	7.3	9.2	9.2	8.7	8.6

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