TRANSFORM
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A Comparison of the Cost-effectiveness of Prohibition and Regulation of Drugs

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Edited by **Stephen Rolles**

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TRANSFORM
DRUG POLICY FOUNDATION

Mission

Transform's vision is a world in which the War on Drugs is over, and effective and humane systems of drug regulation have been established.

Activities

* Carrying out research, policy analysis and innovative policy development
* Challenging government to demonstrate rational, fact-based evidence to support its policies and expenditure
* Promoting alternative, evidence-based policies to parliamentarians, government and government agencies
* Advising non-governmental organisations whose work is affected by drugs in developing drug policies appropriate to their own mission and objectives
* Providing an informed, rational and clear voice in the public and media debate on UK and international drug policy

Vision

* Social justice: restoration of human rights and dignity to the marginalised and disadvantaged, and regeneration of deprived neighbourhoods
* Reduced social costs: an end to the largest cause of acquisitive crime and street prostitution, and consequent falls in the non-violent prison population
* Reduced serious crime: dramatic curtailment of opportunities and incentives for organised and violent crime
* Public finances: the financial benefits of discontinued drug enforcement expenditure and the taxation of regulated drugs
* Public health: creation of an environment in which drug use can be managed and drug users can lead healthier lives
* Ethics: adherence to ethical standards and principles, including fair trade, in the manufacture, supply and distribution of drugs
* Reduced war and conflict: an end to the illegal drug trade's contribution to conflict and political instability in producer and transit countries

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Executive summary

"The benefits of... [legalisation/regulation]—such as taxation, quality control and a reduction in the pressures on the criminal justice system—are far outweighed by the costs and for this reason, it is one that this Government will not pursue either domestically or internationally."

Home Office Briefing, 2008[1]

* Despite the billions spent each year on proactive and reactive drug law enforcement, the punitive prohibitionist approach has consistently delivered the opposite of its stated goals. The Government's own data clearly demonstrates drug supply and availability increasing; use of drugs that cause the most harm increasing; health harms increasing; massive levels of crime created at all scales leading to a crisis in the criminal justice system; and illicit drug profits enriching criminals, fuelling conflict and destabilising producer and transit countries from Mexico to Afghanistan. This is an expensive policy that, in the words of the UN Office on Drugs and Crime, has also created a raft of negative 'unintended consequences'.

* The UK Government specifically claims the benefits of any move away from prohibition towards legal regulation of drug markets would be outweighed by the costs. No such cost-benefit analysis, or even a proper Impact Assessment of existing enforcement policy and legislation has ever been carried out here or anywhere else in the world. Yet there are clear Government guidelines that an Impact Assessment should be triggered by amongst other things, a policy going out to public consultation or when 'unintended consequences' are identified, both of which have happened with drug policy in recent years.

* Alternative approaches—involving established regulatory models of controlling drug production, supply and use—have not been considered or costed. The limited cost effectiveness analysis of current policy that has been undertaken has frequently been suppressed. In terms of scrutinizing major public policy and spending initiatives, current drug policy is unique in this regard.

* The generalisations being used to defend continuation of an expensive and systematically failing policy of drugs prohibition, and close down a mature and rational exploration of alternative approaches, are demonstrably based on un-evidenced assumptions.

* This paper is an attempt to begin to redress these failings by comparing the costs and benefits of the current policy of drug prohibition, with those of a proposed model for the legal regulation of drugs in the UK. We also identify areas of further research, and steps to ensure future drugs policy is genuinely based on evidence of what works.

* This initial analysis demonstrates that a move to legally regulated drug supply would deliver substantial benefits to the Treasury and wider community, even in the highly unlikely event of a substantial increase in use.

1 2008, Home Office briefing on responding to media enquiries about 'legalisation and regulation'. See: **http://transform-drugs.blogspot.com/2008/02/home-office-spin-guide-for-new-drug.html**.

Research aims and parameters

The Government has made clear and repeated commitments to evidence based and cost-effective policy making. The Treasury states that:

> *"...no policy, programme or project is adopted without first having the answer to these questions:*
> 1 *Are there better ways to achieve this objective?*
> 2 *Are there better uses for these resources?"*

These principles provide the rationale and starting point for this paper which is an attempt to compare the high level costs related to drug use under prohibition (specifically heroin and cocaine), and compare them to costs under a speculative, legally regulated model. This exercise is methodologically complex and there are significant gaps in the available data and analysis that require exclusions and assumptions to be made. These shortcomings are acknowledged and we emphasise that this paper is a discussion document, intended to move the debate forward on a more rational and pragmatic footing, help develop a credible methodology for future analysis, and stimulate more work in this area—particularly by the Government agencies responsible for ensuring policy is cost-effective.

Benefits of prohibition vs. regulation

The key benefit cited by supporters of prohibition is that it reduces levels of drug use by restricting drug availability, and through the deterrent effect of punitive enforcement. As a result there are understandable concerns that a move to legal regulation would see an increase in health costs if availability and use increased (frequently based on misunderstandings about how legal regulation would operate). The deterrent effects of prohibition are poorly supported by the evidence. The response of Government to questioning on these claimed benefits has been to restate a 'belief' in such effects rather than to produce any evidence to support them. No research in this area has been commissioned or published by Government despite its centrality to the entire prohibitionist paradigm, and public commitments to do so.

The limited research that has been done does not demonstrate any significant regional or national correlation between the intensity of enforcement and levels of use or misuse, suggesting any deterrence effect is marginal, especially for key populations responsible for causing most harms. A similar conclusion can be formed regards the impact of prohibition on reducing availability which is a central goal of enforcement policy, and was a UK drug strategy target in 1998, and 2002 before disappearing in 2008. Despite steadily increasing enforcement spending, the price of both heroin and cocaine has fallen consistently, yet no measure of availability has been defined and no data is published by Government.

There is much speculation about how legal regulation would operate in practice, but whilst some pressures towards increased use may occur under a regulatory model, these would be moderated by effective controls on availability, price, and marketing. Opposing or compensatory pressures that would reduce use, harms and social costs could also emerge, including the potential for the substantial redirection of enforcement spending into public health programs; treatment, prevention, education and harm reduction.

The differential application of regulatory controls also has the potential to encourage a shift from more to less dangerous drugs, preparations of drugs, modes of administration and behaviours. These potential benefits of regulation have not been calculated or included in this report.

Potential taxation revenue is assumed to be fairly small (for the non-prescribed opiate and cocaine market), in the region of tens of millions, once the inflationary pressures of prohibition are removed. These figures have not been calculated or included.

We have deliberately been conservative in our assumptions regarding the benefits of moving to legal regulation of drugs, and the costs of prohibition. Substantial and acknowledged costs of the current system of prohibition, prominently including international drug enforcement and the illicit trade's impact on destabilisation of producer and transit countries (conflict, corruption, terrorism in Afghanistan for example), are not included due to a lack of available data/analysis.

Costs of a regulated system

The most striking conclusion from the analysis of current costs is that prohibition of drugs is the root cause of almost all drug-related acquisitive crime, and that this crime constitutes the majority of drug-related harms and costs to society.

It is a relatively small subset of the using population, made up of marginalised low income dependent users offending to fund their drug use, who are disproportionately responsible for creating the secondary £13.9 billion in acquisitive crime costs from the £3.7 billion turnover of the illicit market for heroin and cocaine. That the heroin and cocaine market, freed of the distorting influence of criminal market economic pressures, would likely be worth around one tenth of the £3.7 billion figure highlights this particular negative impact of prohibition economics even more starkly. Below is a breakdown of how costs under the current system would change under a legal regulatory model:

- **Crime costs:** Over half of all UK property crime is to fund drug misuse, primarily heroin and cocaine. It is assumed that the drugs-crime dynamic would change dramatically under a regulated scenario. If drugs were available on prescription or at affordable prices comparable to those paid by dependent drinkers, it is assumed that levels of acquisitive crime related to fundraising would be negligible. Intoxication-related offences would be unchanged (at a given level of use). Using this analysis, it is assumed that these crime costs (including reactive CJS expenditure) would contract by 75%.
- **Health and social care costs:** It is argued that significant health harms stem from use of illicitly supplied drugs in hazardous environments, and that these would be dramatically reduced under a regulated system. However, for this paper we assume that health and social care costs per user remain the same in a regulated system.
- **Drug-related death:** As a substantial proportion of the drug death risk factors stem directly from the behaviours, environments and products associated with illicit drug culture, particularly around injecting, we assume that the drug-related death rate would be reduced by 50% for each scenario modelled.
- **Young recreational and older regular users:** costs are assumed to remain unchanged. Drug strategy costs: We have recalculated strategy costs under the regulatory model for each scenario modelled.
- **Prescription costs:** it is assumed that around 10% of the most high harm causing problematic users would have heroin and/or cocaine available on prescription in some form, so we calculate total costs of prescribing diamorphine and cocaine for each scenario modelled.
- **New regulatory infrastructure and administration:** estimated cost £150 million per annum.

Research conclusions

Due to limitations in available data we have restricted this analysis to heroin and cocaine use (the drugs identified by Government as causing the most harm) in England and Wales. We estimate the total crime, health and other social costs of Class A drug use[2] (heroin and cocaine only) in England and Wales in 2003/04 was £16.785 billion under the current prohibitionist regime.

Whilst arguing that the impacts of enforcement policy on levels of use are marginal, we have modeled four scenarios to explore whether a significant increase in use would change the overall outcome of the CBA.

The net annual benefit of a move from prohibition to legal state regulation and control of drug markets[3] would be:

- Scenario A: 50% fall in use, net benefit = £13.943 billion
- Scenario B: No change in use, net benefit = £10.834 billion
- Scenario C: 50% increase in use, net benefit = £7.724 billion
- Scenario D: 100% increase in use, net benefit = £4.616 billion

So even in the highly unlikely event of heroin and cocaine use increasing 100%, the net benefit of a move to regulation and control remains substantial. The economic benefits of regulation identified are also of a magnitude to suggest that even with significant margins of error we can assume that legally regulated markets would deliver substantial net savings to the Treasury and wider society.

Annual costs (£millions) for heroin and cocaine use 2003/04 figures

	Current prohibition costs	**Costs under legual regulation**			
		50% fall in use	no change in use	50% increase in use	100% increase in use
Crime costs	13,900	1,738	3,475	5,213	5,950
Health and social care costs	567	278.5	557	835.50	1,114
Young recreational and older regular use	61.30	30.65	61.30	91.95	122.60
Drug strategy costs	1,344	500	1,000	1,400	1,800
Prescription costs	-	122.85	245.70	368.55	491.40
Regulatory infrastructure and administration	-	150	150	150	150
Total costs	**16,785**	**3,151**	**5,951**	**8,752**	**11,551**
Net annual benefit of move to regulation	**-**	**13,943**	**10,834**	**7,724**	**4,616**

Recommendations

* Analysis of the *status quo* alone clearly demonstrates the need for the cost- effectiveness of current enforcement policy/expenditure to be subject to far more rigorous scrutiny. Such analysis should be urgently commissioned from an independent academic body and/or similar analysis should be undertaken by the National Audit Office and subject to scrutiny by the Public Accounts Select Committee. All commissioned work should be published in full.

2 Based on original costing analysis (of the *status quo*) published by the Home Office (2001, 2006) and Number 10 strategy unit (2003) and on a nominal one year time span rather than longer term analysis.

3 Based on models of legal regulation proposed by Transform Drug Policy Foundation.

* The Misuse of Drugs Act 1971 and the UK drug strategy should be subject to a full Impact Assessment in line with Government guidelines. This should include evaluation of regulatory alternatives to prohibition.

* A more comprehensive cost-benefit analysis should be commissioned and undertaken by the relevant agencies or independent academic body, comparing the costs and benefits of current policy with a range of alternative approaches—including models of legal regulation outlined.

* A program of research should be commissioned by Government in line with the substantial gaps in research and analysis identified.

Discussion: The benefits of evidence-based drugs policy

Serious policy decisions by the Government are being based on data that has never been collected (for example regarding availability), analysis that has demonstrably not been done (for example with regards to deterrence effects), and with specific reference to cost-benefit studies that do not exist. The untenable nature of the *status quo* is more acute given that even a cursory reading of the Government's own publications demonstrates that current policy is both expensive and delivering outcomes that are clearly the opposite of its stated goals. This situation is clearly at odds with the Government's commitment to evidence based policy and cost effective spending.

Current approaches ignore the basic finding that the policy of prohibition itself is the direct source of much of what is perceived as 'the drug problem'—specifically the vast majority of drug-related crime—rather than drug use per se. The Government has also repeatedly failed to acknowledge that prohibition is a policy choice, not a fixed feature of the policy landscape that must be worked within, or around.

The political context of these analytical shortcomings cannot be ignored. Whether it is an ideological commitment to prohibition, investment in populist drug war posturing, or fear of the domestic and international political implications of questioning the *status quo*, there are clearly substantial obstacles to mainstream policy makers moving forward on this issue that have nothing to do with rational policy analysis and debate.

Evidence-based regulation is the rational policy response to managing any potentially harmful commercial activity present in society, and is the norm in almost every other such policy arena.

We would argue that the impact of drug policy (as conventionally understood) on levels of use and misuse, has probably been dramatically overstated. It seems likely that levels of enforcement, choices of legal approaches and even investment in treatment, education and prevention have effects that are marginal relative to the impacts of wider social, economic and cultural variables. But even if the UK drug strategy may be marginal in determining overall levels of use and misuse; the analysis in this paper demonstrates that it is far from irrelevant with regards to determining levels of secondary drug-related harms and their associated costs to society.

It is also clear that even without taking into account the potential huge reductions in crime costs, comparing drug use under prohibition and under a future regulated model is not comparing like with

like. Through a combination of evidence-led deployment of public health-based regulatory tools and increased choice we can reasonably speculate that social norms about more responsible drug use could be fostered, and that use would migrate over time from more to less harmful drugs, preparations, modes of administration, and behaviours. In reality it is possible, and we would suggest likely, that drug-related health risks/harms/costs per user, under a regulated model, would decrease to a degree that would more than compensate for marginal prevalence increases, should they occur. This would, of course tilt any cost-benefit analysis even further in favour of regulation.

Finally we acknowledge that there is something rather coldly utilitarian about cost- benefit analysis such as this and many will find the process of ascribing monetary values to what is the very real human suffering of dependency, death and crime victimhood somewhat distasteful. Whilst sharing that distaste we must also acknowledge that such analysis has its place; in provoking discussion, and in rationalising the debate for policy makers who, for better or worse, have to make rather cold utilitarian policy decisions on a daily basis. They are spending our money on policies that have direct costs and benefits for us. And even if this analysis seems distant from the human face of every day experience, its conclusions point to the fact that there is a far higher human cost under the current policy of criminally controlled drug markets than would occur under policy alternatives involving state control and regulation. And that ultimately, is the crux of this debate.

1 Introduction

There are two legal/policy approaches to drugs that have operated in parallel during the past century: regulation and prohibition. Some drugs, including caffeine and nicotine, can be legally produced, distributed and consumed in all countries with alcohol similarly legal in the vast majority. In almost all countries however, almost all other drugs (notably including opiates, cocaine and cannabis) are now subject to blanket punitive prohibitions on non-medical use (although many were once legally produced[4] and consumed). This prohibition of certain drugs has operated under a global legal framework for over half a century, as determined by the UN single convention on drugs 1961 (augmented with additional conventions in 1971 and 1988), and domestically in the UK with the Misuse of Drugs Act 1971[5]. This modern prohibitionist framework was established with the clear aim of reducing drug supply and use, but has achieved the exact opposite on a consistent basis. Despite these evident failings the UK government has never conducted a cost-benefit analysis of drug prohibition's enforcement, commissioned an independent audit of enforcement spending, undertaken an impact assessment of the primary legislation, nor explored alternative regulation based policy approaches[6].

The distinct designations (legally regulated or subject to absolutist punitive prohibitions) are demonstrably not based on the degree of harm associated with the use of a given drug, but are rather an artefact of (predominantly) Western cultural and political history over the past century. Illustrating the point, a recent comparative study of 20 widely used psychoactive drugs published in The Lancet (2007)[7]concluded that alcohol was the fifth most harmful, and tobacco ninth, both ranked above cannabis, ecstasy and LSD. The authors noted that *"the exclusion of alcohol and tobacco from the Misuse of Drugs Act is, from a scientific perspective, arbitrary"*[8] (and by inference also discriminatory).

Globally, the vast majority of markets for goods and services are legal and are regulated by Governments—with a range of regulatory mechanisms and related enforcement/oversight agencies controlling producers, suppliers, purchasers and products—to various extents. The rational and widely accepted policy norm is that levels of regulation generally increase with the level of risk or harm associated with the goods or services in question; thus casinos are more strictly regulated than scratch cards, spirits are subject to different regulations than beers and so on. The decision to completely prohibit a good or service that is in demand (by consenting adults) is generally justified in economic terms only if the net cost of doing so will be less than alternative regulatory policy options[9].

4 Mike Jay (2002), '*Legalisation: The First Hundred Years. What happened when drugs were legal and why they were prohibited*' **http://www.tdpf.org.uk/Policy_General_thefirsthundredyears.htm**

5 See 'History of prohibition time line' (Transform Drug policy Foundation 2006) for a more detailed account of the emergence of prohibition legislation **http://www.tdpf.org.uk/Policy_Timeline.htm**

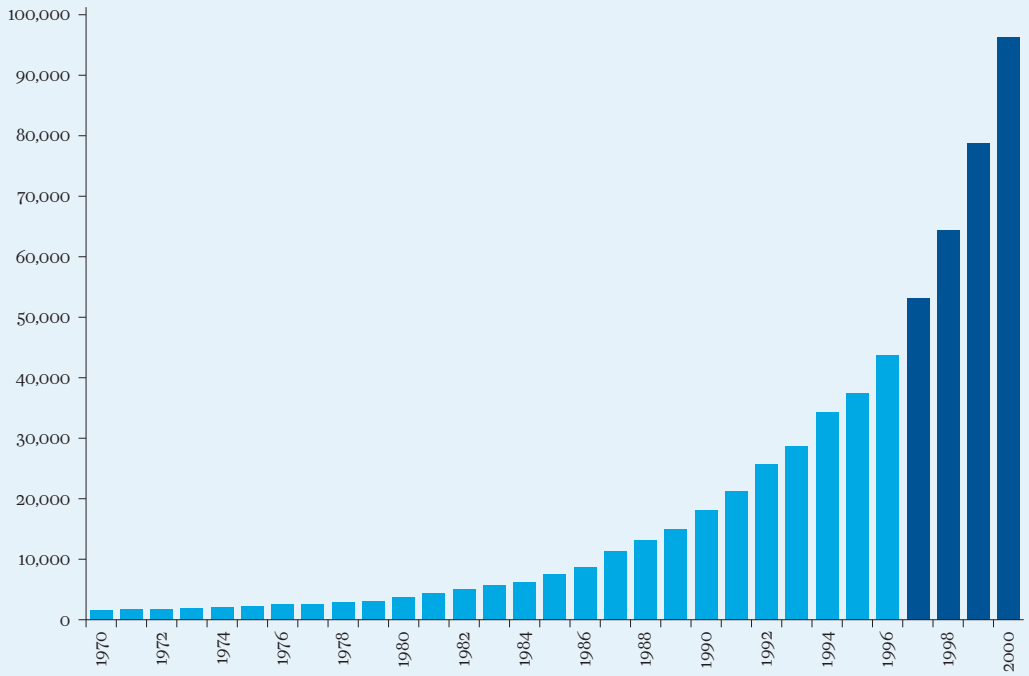
6 The Home Affairs Select Committee (that included David Cameron), in the 2001 report '*UK drug policy, is it working?*' made the recommendation that 'the Government initiates a discussion within the Commission on Narcotic Drugs of alternative ways—including the possibility of legalisation and regulation—to tackle the global drugs dilemma' **http://www.tdpf.org.uk/Parliament_KeyReports.htm#hasc**

7 Nutt *et. al.*, the Lancet, 2007, *'Development of a rational scale to assess the harm of drugs of potential misuse'*. Available in full here: **http://www.mapinc.org/drugnews/v07/n366/a01.html**

8 This analysis has recently been supported by the Government's Advisory Council for the Misuse of Drugs—responsible for evaluating drug harms and advising government on policy changes—that concluded (in the 2006 *'Pathways to Problems'* report) that "their [tobacco and alcohol] actions are similar and their harmfulness to individuals and society is no less that that of other psychoactive drugs".

9 This is not to say that prohibitions can never be effective, but history suggests that they have only ever been successful when they manage to interfere significantly with supply *before* demand is established; this is a rare occurrence, with the Japanese success in curtailing amphetamine use in the 1950s arguably being one. Once demand takes hold, the profits from supplying the

Reducing the harms associated with drugs is a priority for governments worldwide and is currently one of the UK Government's top 30 priorities[10] (although it is notably absent from a Government list of top achievements since the 1997 election—which makes no mention of drug policy[11]). The justification for this priority is clear; the economic and social costs associated with Class A drugs alone were estimated to be £15.4 billion[12] in 2003/04 in England and Wales and there is no evidence that these costs are diminishing. Analysis by the Prime Minister's Strategy Unit in 2003[13] demonstrates clearly how these social and economic costs associated with drugs have steadily risen on a consistent basis during the life time of the very legislation designed to reduce them, the Misuse of Drugs Act (MDA) 1971:



Dependent opiate and cocaine users, known to services, by year, 1970-2000[14]

1.1 Disaggregating drug use harms and drug policy harms

There is a growing understanding and acceptance within the drugs field that a significant proportion of what are broadly termed 'drug-related harms' stems directly from the policy of prohibition and the illicit markets it has inadvertently fostered. The Director of the UNODC, in a 2008 paper, acknowledged the 'unintended consequences' of prohibition's enforcement, including the creation of *'a huge criminal black market that thrives in order to get prohibited substances from producers to consumers'* along

drug are so great that they incentivise supply despite the risk from law enforcement, which is merely factored into increased price.

10 All 30 Public Service Agreements can be found here: **http://www.hm- treasury.gov.uk/pbr_csr07_public_service_agreements.htm**

11 Link to the archived page (now offline): **http://web.archive.org/web/20080502155506/http://www.labour.org.uk/top_50_achievements**

12 Lorna Gordon *et. al.* 2006 *'Measuring different aspects of problem drug use: methodological developments (2006)'*, pp.46-85, Home Office Online Report 16/06. London: Home Office **http://www.homeoffice.gov.uk/rds/pdfs06/rdsolr1606.pdf**

13 PM's Strategy Unit Drugs Report: Phase 1—Understanding the Issues (2003) **http://www.cabinetoffice.gov.uk/media/cabinetoffice/strategy/assets/drugs_report.pdf**

14 This graph is reproduced from the 2003 No 10 Strategy Unit Report phase 1 page 38. The light blue columns are addicts notified to the Home Office, and the dark blue column from 1997 when the HO notification system was shelved, are numbers in treatment. These figures are generally thought to underestimate the total using population by a factor of three.

with *'what one might call policy displacement. Public health, which is clearly the first principle of drug control… was displaced into the background'*. A similar analysis was also clearly spelt out to ministers in the Prime Minister's Strategy Unit drug report in 2003. These costs may have been unintended but they can no longer be seen as unanticipated.

Yet despite these issues being apparently understood and frequently acknowledged at the highest level, in the majority of political, media and public discourses no such distinction is made between the harms that result from drug use per se and those that are either entirely or partially the result of policy, specifically the overarching policy paradigm of prohibition. The result is that both sets of harms are conflated and then simplistically blamed on *drugs* or, by default, *drug users*. The failure to disaggregate drug use harms from drug policy harms or, specifically, prohibition harms, is a major obstacle to meaningful evaluation of existing policy and consequently, to the rational development of potentially more effective policy responses.

This conceptual blind spot has been evident even at the more sophisticated end of drug policy thinking in the UK, notably the Government's drug harm index[15] (now retired) which conflated a broad range of health, social and criminal harm measures into a single-figure time-series index to satisfy a similarly flawed Public Service Agreement (PSA) target to *'reduce the harm caused by illegal drugs'*[16].

The same problem is evident in the highly influential Nutt et al (2007) Lancet paper on drug harms. To illustrate this shortcoming (and indeed one of the key conceptual shortcomings of the drug classification system it informs) consider the placing of heroin at number one in the Nutt et al harm ranking which, like the drug harm index, conflates a series of health and social harms into a single-figure index. Any rational evaluation of non-medical opiate policy options requires that we disaggregate the health and social harms that result from use of the heroin per se, and the health and social harms exacerbated or created specifically by the heroin's use within an illegal market context and the underground drug culture it inevitably creates. These *'prohibition harms'* include:

* **Destabilisation of producer and transit countries** (e.g. corruption and violence in Afghanistan)
* **Organised crime, from local street dealing** (including drug-gang violence and turf wars) to **international criminal networks** (links to money laundering, conflict and terrorism)
* **Fuelling large volumes of low-level acquisitive property crime and street sex work** (low income dependent users fundraising to support a habit)
* **Dirty/shared needles** (Hep C / HIV risks/harms)
* **Contaminated product of unknown strength/purity** (poisonings, infection, overdose risks/harms)
* **Drug litter** (e.g. needles in public places)

Clearly illegal street heroin is associated with all of the above harms (on top of the harms of actually using the drug itself) whereas prescribed pharmaceutical heroin used in a supervised clinical setting, such as the 'Swiss model', is associated with *none* of the above harms (whilst more conventionally

15 The Home Office 2005, 'measuring the harm from illegal drugs using the drug harm index:' **http://www.homeoffice.gov.uk/rds/pdfs05/rdsolr2405.pdf**

16 Home Office 2004 'SR PSA targets technical notes': **http://www.homeoffice.gov.uk/documents/psa-tech-note-sr04-drugs-jul-042835.pdf?view=Binary**

prescribed heroin, the 'British model', is associated with few of the above problems), and would presumably be ranked considerably lower accordingly. Nutt et al's failure to include a harm ranking for both illicit street and prescribed heroin (which would have been possible as the two exist in parallel in the UK) perpetuated this conceptual error of conflating drug use and policy-related harms, and missed a valuable opportunity to expand the debate in a way that has potentially huge implications for the future of the dominant criminal justice paradigm.

This conceptual problem has also had direct political consequences. Logical fallacies flow from this error, such as the inclusion of the epidemic of HIV/AIDS amongst injecting drug users as an example of *'drug harms'* to defend the prohibitionist *status quo*[17]. In this case a specific drug-related harm that is almost exclusively the result of the high- risk behaviours, rituals, products and environments that stem directly from prohibition and the default underground drug cultures it creates, is perversely being used both to justify the continuation of the very policy that has fostered it in the first instance, and also to argue against the policy that would largely eliminate it[18].

Some efforts to untangle drug use harms from drug policy harms have been made, although this is an area that warrants more detailed consideration and analysis. Transform's 2004 publication '*After the war on drugs, options for control*'[19] describes six key harms created by prohibition (each then broken down into sub-categories): creation of crime; a crisis in the criminal justice system and prisons; billions in wasted expenditure and lost tax revenue; undermining public health and maximising [health] harms; destabilising producer countries; and undermining human rights (the heroin example above illustrating many of these). Correspondingly, the Transform report then makes a distinction between the aims of the drug policy reform movement—to reduce or eliminate the harms specifically created or exacerbated by prohibition and illicit markets—and the more conventional aims of an effective drug policy—to reduce or eliminate the range of direct and indirect harms associated with drug use and misuse.

A more comprehensive *'taxonomy of drug-related harms'* has been constructed by Reuter and MacCoun (2001)[20]who break down forty six identified drug-related harms into four general categories: health, social and economic functioning, safety and public order, and criminal justice. In tabular form they then identify six population group headings (users, dealers, intimates, employers, neighbourhood and society) and note which of these *'bears the harm/risk'* for each of the harms listed. Crucially, in a separate column they also identify what they term the *'primary source of harm'* for each of the populations, from three options; use, illegal status and enforcement (illegal status being identified for 36 of the list).

17 A 2008 Home Office briefing on the dugs debate gave a set prepared answers to the question *'what's the point maintaining the pretence that prohibition works?'* that included highlighting drug harms including the '*enormous social harms and economic costs associated with.... the spread of HIV/AIDS and Hepatitis B and C through injecting drug use*'. See here for the complete document: **http://transform- drugs.blogspot.com/2008/02/home-office-spin-guide-for-new-drug.html** . Similar arguments have been made by Joseph Califano in the BMJ (**http://www.bmj.com/cgi/content/full/335/7627/967**) and the Financial Times (**http://www.ft.com/cms/s/0/6190a922-4b91-11dc-861a- 0000779fd2ac.html?nclick_check=1**).

18 There are a number risk factors for needle sharing that are arguably not directly prohibition related including sharing between sex partners and power relationships within peer groups. Other risk factors are directly related however, including increased levels of sharing in outdoor or marginal environments, where there is a greater police presence or where possession of needles is an offence. Notably, HIV transmission related to injecting does not occur in supervised injecting scenarios, whether or not prescription heroin is provided.

19 Transform 2004 (updated reprint 2006) '*After the war on drugs, options for control*' p.9 **http://tdpf.org.uk/Transform_After_the_War_on_Drugs.pdf** drug harms are identified separately

20 Reuter and MacCoun 2001 'Drug War Heresies' p.112

The authors note that:

> *'…the harms are highly variegated and that variety is part of the policy problem, since it prevents effective aggregation and thus straight forward comparison of different regimes. For many reasons there are not even approximate numbers on most of the harms under the current regime, let alone for any hypothetical regime that is substantially different. Again, that uncertainty is itself an important aspect of the legalization debate; it biases the decision against unpredictable change.' (page 102)*

Whilst acknowledging these and other problems that such analysis entails, the failure of the current policy approaches demonstrates, at the very least, that they need to be carefully re-examined and attempts made to develop credible methodologies for developing, modelling and assessing alternative approaches. There is an urgent need to investigate and identify more cost-effective frameworks to manage and control drug use and drug markets in order to reduce the very real and substantial economic and social harms associated with drug misuse and current drug policy responses to it.

1.2 The context

Despite being such an important issue, there has never been a cost-benefit analysis at the level of sophistication required, either of prohibition (its legislative instruments and their enforcement) or of policy alternatives, carried out anywhere in the world and certainly not for the UK[21]. Furthermore, and disappointingly, the comparatively scant relevant research that has been undertaken by Government departments has frequently been suppressed[22]. The political context of this cannot be ignored; when Bob Ainsworth MP (then minister and Government drugs spokesperson) was asked in 2002 whether he supported Transform's call for an independent audit of the effectiveness of drug law enforcement spending, he answered:

> *'Why would we want to do that unless we were going to legalise drugs?'*

A Home Office briefing to the Prime Minister and Home Secretary (unpublished but leaked to the Independent[23]) reveals that Home Office officials were suggesting and discussing prohibition's futility and the possibilities for legally regulated drug supply at the highest levels of Government in 2005:

21 Transform have undertaken a literature review of existing literature—due for publication (2009)

22 Four recent examples include:

- A 2001 Home Office / Treasury 'Stock take of Anti-Drugs Interventions and Cost-Effectiveness' was unpublished until released in 2008 following a freedom of information (FOI) request by Transform. It reviews the outcomes for each respective element of the 1998 ten-year drug strategy up to 2003 and their Comprehensive Spending Review targets in relation to money spent. Available online here: **http://www.tdpf.org.uk/Policy_KeyReports.htm#evbase**. FOI requests by Transform for the more up to date equivalent cost effectiveness reviews have so far been declined (appeals pending).
- The 2003 Prime Minister's Strategy Unit drugs project Phase 1 and 2 reports ('Understanding the Issues' and 'Diagnoses and Recommendations') were not initially released despite FOI requests, were then partially released in 2005 with substantial options withheld, and only fully entered the public domain when they were leaked to the Guardian newspaper in 2005.
- Most significantly perhaps, at least two 'value for money' studies were commissioned by the Home Office as part of the 2007 internal drug strategy review process (Christine Godfrey from York University, who also authored the papers on the social and economic costs of class A drug use that are central to the analysis in this paper, was an adviser on one). These were not made publicly available to inform the public drug strategy consultation and review process, nor have they been subsequently released despite FOI requests from Transform (appeals pending), and requests from MPs to the Home Secretary

It can reasonably be surmised that this is further evidence of the weakness of the Government's confidence in its own policy and/or its own analysis and evidential basis.

23 **http://news.independent.co.uk/uk/politics/article2303024.ece**

"There is mounting evidence of the impossibility of winning the war against drugs supply."

"There is a strong argument that prohibition has caused or created many of the problems associated with the use or misuse of drugs. One option for the future would be to regulate drugs differently, through either over-the-counter sales, licensed sales or doctor's prescription."

Whilst the UK Government willingly concedes that legally regulating the supply of drugs would provide benefits, they specifically maintain that such an approach would have a greater net cost than the current regime. The Government argues this primarily on the basis that there would be increased health costs as a result of rising prevalence (the assumed result of an assumed increase in availability under a legally regulated market model—although how regulation might operate is not explored). The Home Office for example, in one of a number of similar statements, in 2008 claimed that:

'The benefits of such as system [legalisation/regulation]—such as taxation, quality control and a reduction on the pressures on the criminal justice system—are far outweighed by the costs and for this reason, it is one that this Government will not pursue either domestically or internationally"[24]

They have similarly asserted in correspondence[25] that;

"...it is likely that there would be a reduction in acquisitive crime, if drugs were legalised..."

"The Government is aware of the arguments for legalising controlled drugs in a regulated way and has concluded that the disadvantages would outweigh the benefits".

Antonio Costa, Executive Director of the UN Office on Drugs and Crime, makes the same argument[26]:

"I know your argument on this last point. Prohibition causes violence and crime by creating a lucrative black market for drugs: so, legalize drugs to defeat organized crime. Thus far, as an economist, I agree with you. But this is not only an economic argument. Legalization may reduce the profits to organized crime, but it will also increase the damage done to the health of individuals and society. Evidence shows a strong correlation between drug availability and drug abuse. Let us therefore reduce the availability of drugs—through tackling supply and demand—and thereby reduce the risks to health and security"

The crucial point to note here is that sweeping conclusions are being drawn about a cost-benefit analysis that has apparently not been done, and certainly not published. Government and UNODC are making substantial and seemingly authoritative claims—justifying the continuation of an expensive and evidently failing policy over proposed alternatives—on the basis of no published evidence and analysis whatsoever.

24 2008 Home Office briefing on responding to media enquiries about 'legalisation and regulation'—see **http://transform-drugs.blogspot.com/2008/02/home-office-spin-guide-for-new-drug.html**. Similar statements have been made in published correspondence (see **http://www.tdpf.org.uk/Parliament_Letters.htm**) and written submissions to Select Committees (**http://www.tdpf.org.uk/Parliament_HASCreport_submissions.htm**).

25 Correspondence with John Marks, September 2007

26 *'Free drugs or drug free'* speech by Antonio Costa to the Drug Policy Alliance conference in New Orleans 2007 **http://www.unodc.org/unodc/en/frontpage/free-drugs-or-drugs-free.html**

It is in response to the absence of the necessary evidence and analysis that this paper aims to make a preliminary attempt to quantify the economic and social costs and benefits of drug prohibition and compare them to a speculative regime of legally regulated and controlled drugs markets (see *Definitions* below).

This paper is both speculative and a first attempt to engage with an arena of policy analysis that is complex and methodologically problematic. We acknowledge that such analysis is bound to be imperfect, and have tried to both recognise shortcomings where identified and be conservative in our assumptions to avoid the perception of bias. It is hoped that critical analysis of this paper will help to stimulate debate about how to improve such investigations, and that it will help to move the debate on future policy developments forward by provoking discussion. Furthermore it is hoped that the general conclusions that emerge from this analysis will be useful in themselves as well as providing a starting point and practical framework for future work in this area that will, in the longer term, lead to more cost-effective policy approaches to reducing drug use and drug policy related harms.

1.3 Aims of this paper

The UK Government, in the Treasury's Green Book[27] has pledged to apply the principles of efficiency and economic prudence with regards to government spending, and has sought to ensure that government policy is designed to achieve its stated aims as cost-effectively as possible. Particularly in cases where the government is spending considerable public money[28] to pursue a certain policy aim, a cost-effectiveness analysis should be conducted to compare the costs and benefits of that policy option and its alternatives.

Specifically the Green Book is designed to ensure that:

> *"...no policy, programme or project is adopted without first having the answer to these questions: (1) Are there better ways to achieve this objective? (2) Are there better uses for these resources?"*

The National Audit Office similarly states, in its 2001 publication *'Modern policy making: Ensuring policies deliver value for money'*, that;

> *"...they (government departments) need to review policies, for example to determine when the time is right to modify a policy in response to changing circumstances so that it remains relevant and cost effective; and departments may need to terminate policies if they are no longer cost effective or they are not delivering the policy outcomes intended."*

These principles provide the rationale and starting point for this paper, which seeks to examine drug policy in the UK from the perspective of cost-effectiveness. This paper assumes that it is in the public interest for the Government to adopt policy that seeks to maximise value for money and minimise the economic and social costs associated with drugs, while maximising the health and well-being of the wider community, including those who use drugs.

27 Online here: **http://www.hm-treasury.gov.uk/d/green_book_complete.pdf**

28 In this case many billions of pounds each year; see: **http://www.tdpf.org.uk/MediaNews_FactResearchGuide_EnforcementExpenditure.htm**

The Government does have a policy of conducting Impact Assessments (IA) (until recently called Regulatory Impact Assessments) to assess the impact, in terms of costs, benefits and risks, of any proposed regulation that could affect businesses, charities or the voluntary sector[29]. These I.A.s include a speculative assessment of alternative policy options, for example in the case of fresh magic mushrooms (being brought within Class A of the Misuse of Drugs Act as part of the 2005 Drugs Act) this included an assessment, albeit a limited and inadequate one[30], of legally licensed vendors. A more recent example was an IA of reclassification of cannabis from class C back to class B[31], which identified a number of costs and benefits of the move, but limited its analysis to the B and C options, without considering legal regulatory options. However, this is a relatively new requirement and no such Impact Assessment, even a limited one, has ever been conducted on any part of the Misuse of Drugs Act 1971—let alone a more comprehensive cost-benefit analysis.

There has similarly been no IA equivalent undertaken regarding the three UN drug conventions (or relevant agencies and spending), which are still not even subject to meaningful independent evaluation and review[32]. The Department for Business Enterprise and Regulatory Reform, in its guidance notes for Impact Assessments, answers the question '*What is an Impact Assessment?*'[33] thus:

"1. *Impact Assessment is both:*
   * *a continuous process to help the policy-maker fully think through and understand the consequences of possible and actual Government interventions in the public, private and third sectors; and*
   * *a tool to enable the Government to weigh and present the relevant evidence on the positive and negative effects of such interventions, including by reviewing the impact of policies after they have been implemented.*

"2. *Impact Assessments are generally applicable to all Government interventions affecting the private sector, the third sector and public services, regardless of source: domestic or international. Their preparation and publication ensure that those with an interest understand and can challenge*
   * *why the Government is proposing to intervene;*
   * *how and to what extent new policies may impact on them;*
   * *and the estimated costs and benefits of proposed and actual measures.*

   They also give affected parties an opportunity to identify potential unintended consequences.

"3. *As the Government aims to intervene only when necessary and since most policy objectives can be achieved through a range of options, the Government's aim is to identify proposals that best achieve its objectives while minimising costs and burdens*".

29 The latest IA guidance from the Cabinet Office is available here: **http://www.cabinetoffice.gov.uk/secretariats/economic_and_domestic/legislative_programme/guide_html/impact_assessment.aspx** and best Practice IA guide from the Audit office is available here: **http://www.nao.org.uk/publications/0809/high_quality_impact_assessment.aspx**

30 A more detailed commentary is available in the Transform briefing on the Drugs Bill 2005 here: **http://www.tdpf.org.uk/TransformresponseDrugsBill2.pdf**

31 Home Office 2008 **http://www.homeoffice.gov.uk/documents/ia-cannabis-reclassification?view=Binary**

32 For more discussion see 'the UNGASS evaluation process evaluated" **http://www.internationaldrugpolicy.net/reports/Ungass_evaluation.pdf**

33 **http://www.berr.gov.uk/files/file44544.pdf**

In answer to the question 'When and how often should an Impact Assessment be prepared and published?' the BERR guidance states:

> *"9. Impact Assessment is a continuous process to help the policy-maker fully think through and understand the consequences of possible and actual Government interventions: from the early stages of identifying a policy challenge, through the development of policy options, public consultation and final decision-making, and on to the review of implementation. When review leads to the identification of new policy challenges (perhaps arising from unintended consequences of the intervention itself), the process begins again."*

And:

> *"11. There are certain points in this process in which an Impact Assessment must be published or republished. With certain exceptions, as set out in the Impact Assessment Toolkit, these are:*
> * *when a policy proposal is taken out to public consultation; etc"*

The 2008 10-year drug strategy review and consultation process did not include any form of (published) impact assessment. The issue of unintended consequences is dealt with in detail elsewhere in this report, but drug law enforcement very clearly meets this criteria.

There is much debate about how the goal of minimising drug-related harms is best achieved, and there is considerable controversy in discussing, researching, or proffering policy alternatives to the overarching punitive prohibitionist paradigm. Defenders of the *status quo* often adopt dogmatic and entrenched moral positions, portraying regulatory legal alternatives as immoral, extreme, 'pro-drug'[34], radical (even heretical), implying that debating them is a political and intellectual "no-go" zone and ensuring that when such debates do occur they are commonly polarised, emotive and unhelpful. This paper does not purport to examine these debates, but rather attempts to move the discourse forward on a more objective and evidence-based footing by establishing some parameters for a cost-effectiveness analysis of a prohibitionist versus a non- prohibitionist regulatory model for managing and controlling drug use and drug markets so as to minimise drug-related harms.

While falling short of a full Impact Assessment, this paper aims, for the first time, to provisionally assess the high level costs and benefits of both prohibition and the legal regulation of the drugs market and to compare the two.

* *Section 2* sets out the costs and benefits of prohibition.

* *Section 3* sets out the costs and benefits of the legal regulation of the drugs market based on the models set out in the Transform Drug Policy Foundation's forthcoming publication *"After the War on Drugs: Blueprint for a Regulated Market"*[35].

34 UNODC executive director Antonio Costa has frequently used the term to describe advocates of legalisation/regulation

35 **http://www.tdpf.org.uk/Transform_Drugs_Blueprint.pdf**

* *Section 4* concludes with a comparison of the cost-effectiveness of the two options, shedding light on which option provides the best value for money.

1.4 Parameters of this paper

This paper has been designed and drafted as a preliminary comparative cost-benefit analysis and discussion document, and is therefore limited in its scope and depth. It will only set out the high level costs and benefits, and highlight a number of key issues requiring further research and analysis. Due to research data limitations it will also limit its analysis to England and Wales, and significantly does not examine the costs and benefits of prohibition globally and its alternatives.

The regulatory frameworks posited in this paper as the alternative policy option are, whilst necessarily speculative, broadly based on existing controls for currently legal drugs and actual government policy examples, where such examples exist (see *Definitions* below). The models are similarly limited in their detail and scope not only by the brevity of this paper, but also by the general lack of research in this area. It is hoped that this paper can also provide some useful direction for further research on regulatory models.

Although the majority of the costs and benefits have been highlighted, at the end of each section a list of costs and benefits that have been excluded is outlined. Costs and benefits have been excluded because they are controversial, poorly evidenced, impossible to meaningfully measure, marginal in relative scale, or because the Government did not include them in their own research. Suggestions for further research and analysis have also been provided, and feedback and suggestions for how the analysis can be refined are welcomed.

This paper has limited its analysis to Class A drugs, specifically heroin and cocaine, due to the non-availability of adequate data on other prohibited drugs. These drugs are also identified in most Government comment and analysis as being the cause of most drug- related harms/costs to society.

This paper is also limited in that a full cost-benefit analysis should look at the costs and benefits in the long-term over ten to twenty years; due to resource limits this paper has only been able to look at a notional one year time frame. In reality the policy shifts in the proposed alternative scenarios would be phased over a number of years along various policy vectors, with implementation and policy development closely monitored, involving carefully evaluated pilot projects and research to determine the optimum regulatory models (for given drugs in given locations) so as to minimise risks of adverse unintended consequences. This is a precautionary and evidence-based approach that, it should be noted, did not happen during the implementation of prohibition.

1.5 Definitions

A ***cost-benefit analysis*** is a form of analysis commonly used by governments and businesses to help appraise or assess the case for a project or proposal. The process involves weighing the total expected costs against the total expected benefits of one or more actions in order to choose the optimum or most profitable option i.e. the option with the smallest net cost or the greatest net benefit.

Cost-effectiveness analysis is a form of economic analysis that compares the relative expenditure (costs) and outcomes (effects or benefits) of two or more courses of action[36]. Both approaches are useful because they can enable comparisons of complex economic and social policies using money as a unit of account and standard of value.

'Prohibition' is used in this paper to refer to the set of policies that formally prohibit—through the application of legal sanctions—all production, distribution and possession of specific psychoactive drugs for non-medical use, as defined under the UN drug conventions and the Misuse of Drugs Act 1971[37]. Reduction in use, specifically the aim of a 'drug free' society, is often given as the primary goal.

'Decriminalisation', which is often confused with legalisation/regulation, is the reduction or abolition (actual or *de facto*) of criminal penalties in relation to certain acts. While decriminalised acts are no longer crimes, they may still be the subject of regulation; for example, a civil or administrative penalty (commonly a fine) in place of a criminal charge for the possession of a decriminalised drug for personal use.

'Legalisation', in contrast to decriminalisation, is the process of removing a legal prohibition against something which is currently illegal. 'Legalisation' describes a process or shift in legal status, rather than describing a policy position or form of legal regulation.

It is important to note that this paper does not define prohibition as one particular form of legal sanction. The enforcement of prohibitionist policies across the globe encompasses a wide spectrum of methods and sanctions, administrative, civil and criminal. Levels of enforcement and related penalties differ both within and between countries, and range from administrative penalties (including warnings and fines) to arrests, cautions, community penalties, imprisonment and, at the extreme, the death penalty[38] for the possession, production, or distribution of certain drugs.

'Regulation'. There is also not one type of *legally regulated market*, but a range of potentially different regulatory options for each drug (as well as different preparations of a given drug). This paper defines *regulation* as a set of legal rules and enforcement infrastructure designed to control or govern certain types of conduct. Activities that take place beyond the parameters of a given regulatory framework remain prohibited and subject to legal sanctions. This paper sets out five basic regulatory models for drugs, all of which already function in the UK in various forms (for non-medical, quasi-medical and medical uses) for currently legal drugs:

(i) **Medical prescription** (e.g. heroin or amphetamine prescribing)
(ii) **Pharmacy model** (trained/licensed pharmacist, behind the counter sales, e.g. stronger pain control medicines)
(iii) **Licensed sales** (e.g. alcohol off licence)

36 See HM Treasury's Green Book for a Government guide to cost-benefit analysis. **http://www.hm-treasury.gov.uk/d/green_book_complete.pdf**

37 The term 'prohibition' is used by the Home Office to describe the existing approach to illicit drug policy, notably in the 2002 Updated Drug Strategy in describing UK drug strategy.

38 IHRA 2007: 'The Death Penalty for Drug Offences: A Violation of International Human Rights Law' **http://www.ihra.net/Assets/489/1/DeathPenaltyforDrugOffences.pdf**

(iv) **Licensed premises for sale and consumption** (e.g. public houses, cannabis coffee shops)
(v) **Unlicensed sales** (e.g. caffeine/coffee)

These basic models can then have a series of additional controls and licensing conditions applied as deemed appropriate to the drug or particular environment. Again these are mostly familiar mechanisms in use for currently legal drugs such as alcohol and tobacco, various pharmaceuticals, or other products and services such as various forms of gambling.

Controls over supplier

* Hours of opening
* Location/appearance of outlet, number of outlets
* Licensing/training of vendors/staff
* Controls over marketing/advertising

Controls over purchaser

* Age controls (minimum age, ID / proof of age required for purchase)
* Restriction of sale if purchaser is intoxicated
* Volume rationing
* Purchase tracking
* Licensing of purchaser
* Delay between order and pick up
* Required membership of group or union for purchase
* Consumption on licensed premises only

Controls over product

* Packaging (plain packaging, tamper proofing, health and safety warnings, etc.)
* Preparation, dosage, quantity
* Coded for individual licensed purchaser

1.6 Methodology

The basic methodology is straightforward: the economic and social costs and benefits of prohibition have been calculated and compared against the speculative economic and social costs and benefits of a proposed legally regulated market alternative.

Section 2, on the costs of prohibition, depends heavily on the Home Office research paper '*Measuring different aspects of problem drug use: methodological developments*' (2006)[12], although this only covers the economic and social costs of Class A drug use. It also relies on the Prime Minister's Strategy Unit Drugs Reports: Phase I and II (2003)[39].

39 Prime Minister's Strategy Unit Drugs Reports: Phase I and II
http://www.tdpf.org.uk/Policy_General_Strategy_Unit_Drugs_Report_phase_1.htm

The benefits of prohibition are estimated.

The costs and benefits of legal regulation are also estimated and draw heavily on previous work by Transform Drug Policy Foundation including *"After the War on Drugs, Tools for the Debate"* (2007) and "*After the War on Drugs, Options for Control"* (2005) reports[40].

This paper will focus on the economic and social costs of prohibition and legal regulation of Class A drugs, specifically heroin and cocaine, although we have suggested future analysis should include, at the very least, the six most commonly used Class A drugs in England and Wales for the year 2003/04: heroin, crack cocaine, cocaine, ecstasy, amphetamines (if prepared for injection); and Class B drugs: amphetamines and cannabis.

40 Tools for the Debate and Options for Control reports: **http://www.tdpf.org.uk/AboutUs_Publications.htm**

2 An analysis of the costs and benefits of drug prohibition

2.1 Costs of drug prohibition

A reasonable amount is known about Class A drug-related economic and social costs under the current policy from the, albeit limited, research the Government has undertaken. However, as already noted, efforts have been made to suppress key documents and other important research remains unpublished[22], an unacceptable situation that urgently needs to be remedied. The work the Government has published is useful, but it is also far from comprehensive.

The most credible and complete piece of work in the public domain was published by the Home Office in 2002[41], updated in 2006, and estimated the economic and social costs of Class A drug use to be £15.4 billion[42] in 2003/04. Heroin and/or crack use accounted for 99% or £15.3 billion of the total costs; the costs of drug-related crime were 90% of this total. However, no research has been found on the economic and social costs of Class B and C drugs such as amphetamines or cannabis.

Crime costs

One of the impacts of prohibition is that it significantly inflates the price of drugs, as the risks to suppliers created by enforcement are incorporated into costs (combined with unregulated illicit profiteering)[43]. The market value of illegal drugs increases greatly as they travel along the various links in the supply chain as illustrated below in the graphic from a recent report published by the Beckley Foundation[44] (see Fig. 2 below). This is what has been described as the 'alchemy of prohibition', turning low value processed agricultural products into commodities worth literally more than their weight in gold.[45]

41 Godfrey *et. al.*, 2000 'The economic and social costs of Class A drug use in England and Wales, 2000' **http://www.homeoffice.gov.uk/rds/pdfs2/hors249.pdf**

42 The associated confidence range is between £15.3 billion and £16.1 billion.

43 This often creates some confusion as it is also the case that drug prices (heroin and cocaine) have been falling consistently for some years, often used as an argument for the ineffectiveness of supply controls/interdiction. These price falls are relative ones, compared to a very high starting point, and even the lower figures remain substantially inflated over what would be the comparative legal market costs.

44 Wilson, L. and Stevens, A. (2008) Understanding Drug Markets and How to Influence Them. Report 14. Oxford: The Beckley Foundation.

45 Sanho Tree 2003: **http://www.commondreams.org/views03/0429-09.htm**

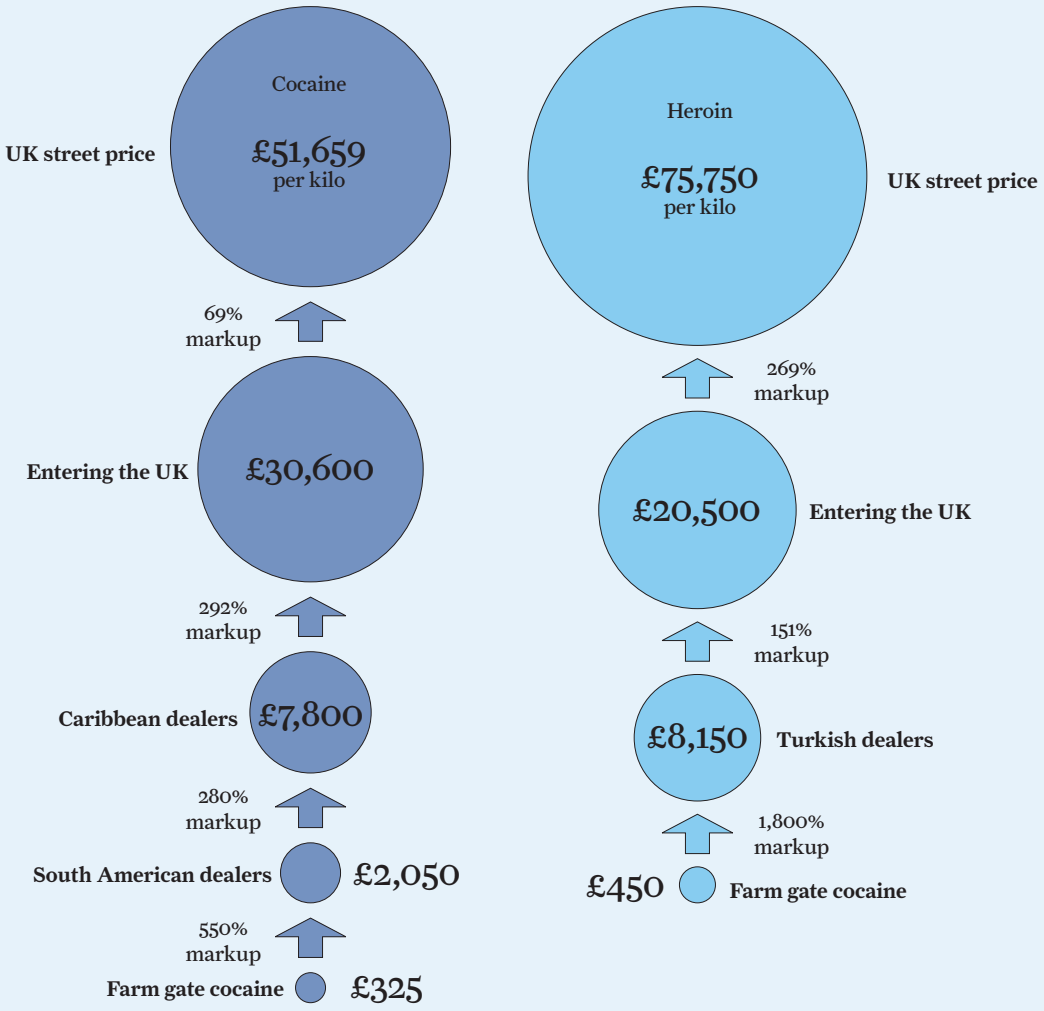


Figure 2. Supply chains and subsequent mark-ups for cocaine and heroin in the UK.

There are several estimates for the size of the illicit drugs trade in the UK ranging from £2.1–£6.6 billion[46]. The Home Office estimated that the total market size for crack cocaine, heroin, cannabis, powder cocaine, amphetamines and ecstasy was £4.6 billion[47] in England and Wales in 2003/04[48] (note these figures represent UK market turnover rather than international trade or criminal profit). This expenditure is distributed across markets for:

* Crack cocaine (28%)—£1.484 billion
* Heroin (23%)—£1.219 billion
* Cannabis (20%)—£1.06 billion
* Powder cocaine (18%)[49]—£0.954 billion
* Amphetamines (6%)—£0.318 billion
* Ecstasy (5%)—£0.265 billion

46 See http://www.tdpf.org.uk/MediaNews_FactResearchGuide_SizeOfTheDrugMarket.htm for further details.

47 With a margin for error from £3.5—£5.8 billion.

48 Pudney, S., Badillo, C., Bryan, M., Burton, J., Conti, G. and Iacovou, M. (2006) 'Estimating the size of the UK illicit drug market', In N. Singleton, R. Murray and L. Tinsley, eds., Measuring different aspects of problem drug use: methodological developments, 46-85, Home Office Online Report 16/06. London: Home Office.

49 Some of which may presumably be made into crack cocaine.

From these figures the size of the market for heroin and cocaine is £3.657 billion.

The global trade in illicit drugs is estimated to be worth anywhere from $45—$400 billion[50], estimated by the UN to be the second largest income generator for organised crime internationally, after counter-feiting/piracy, and roughly 16% of the global organised crime income[51].

It has been estimated by the Prime Minister's Strategy Unit that the cost of dependent use of crack cocaine can cost up to £525 per week and heroin up to £300 per week[13]. As the Government frequently acknowledges, this leads to a significant volumes of drug- related acquisitive crime so that low-income users can support their use.

Drug	Unit of measure	Cost per unit £	Estimated units user per week	Total cost (£ per week)
Crack cocaine	0.2g 'rock'	21	25	525
Cocaine	1g	60	7	420
Heroin	1g	60	5	300
Amphetamines	1g	9	10	90
Cannabis	2g	6	15	89
Methadone	100ml	4	18	67
Ecstasy	tablet	6	10	65
Alcohol	10ml	1	50	65
Tobacco	cigarette	0.2	280	56
LSD	paper square	3	5	15

Table 1. The estimated cost of drug use for a heavy user in 2003/04[13]

Drug-related crime accounts for 90% of the economic and social costs of Class A drug use, or £13.9 billion of the total cost. It is important to note that £4.036 billion of the cost of drug-related crime is the criminal justice costs of arresting, prosecuting and imprisoning drug users. The remainder are 'victim costs' of crime[12].

It is estimated that fraud accounts for more than a third of Class A drug-related crime costs, totalling £4.888 billion. Burglary accounts for more than a quarter of the cost at £4.07 billion followed by robbery at £2.467 billion and shoplifting at £1.917 billion. The cost of drug-related arrests is £535 million.[52]

50 In the 2005 United Nations World Drug Report, the value of the global illicit drug market for the year 2003 was estimated at US$13 billion at the production level, at US$94 billion at the wholesale level, and US$322–$400 billion based on retail prices and taking seizures and other losses into account. For more details on the estimates and debates surrounding them see: **http://www.tdpf.org.uk/MediaNews_FactResearchGuide_SizeOfTheDrugMarket.htm**

51 2007 State of the Future. World Federation of United Nations Associations.

52 These figures, whilst being the best currently available, have been questioned by some authors, the suggestion being that they are an overestimate based on the overrepresentation of drug users in arrest numbers. See *'Weighing up crime, the overestimation of drug related crime'* by Alex Stevens (accepted for publication in Contemporary Drug Problems)

Crime cost	CJS costs	Victims cost
Fraud	£0.877bn	£3.989bn
Burglary	£1,419bn	£2.651bn
Robbery	£0.822bn	£1.585bn
Shoplifting	£0.393bn	£1.533bn
Drug-related arrests	£0.535bn	n/a
Total	**£4.046bn**	**£9.758bn**

Table 2. Summary of estimates of criminal justice costs and victim costs of crime in 2003/04[12]

Legal drugs such as alcohol and tobacco are significantly cheaper, the estimates of the weekly cost for a high end user at £65 and £56 respectively[13]. Consequently, fundraising-related acquisitive crime with regards to alcohol or tobacco, associated with the criminal justice or victim costs, is a marginal issue, and un-quantified by Government. It is also worth noting that even heavy users of amphetamines, cannabis, and ecstasy are highly unlikely to be involved in acquisitive property crime to fund their use (the Government has produced no data on this) on account of the relatively low sums involved, comparable to heavy alcohol or tobacco use.

The contrasting economics between funding of licit and illicit drug dependence (specifically heroin and cocaine) graphically demonstrates how the price inflation created by drug prohibition is the root cause of the vast majority of *'drug-related'* acquisitive crime[53]. It has created a situation in which some of the most marginalised people in society who have become dependent on drugs are committing large volumes of crime to fund their drug use and as a result a market turnover of £4.6 billion for organised crime creates an additional £13.9 billion burden on wider society in terms of acquisitive crime costs. More specifically, with 99% of the total economic and social costs related to heroin and crack users, roughly £3.657billion of heroin and crack expenditure results in £13.9 billion of drug-acquisitive crime costs.

In comparison, £40.3 billion was spent on alcohol in 2004[54] and no alcohol-related acquisitive crime costs were mentioned by the Prime Minister's Strategy Unit, Alcohol Harm Reduction Strategy for England,[55]nor in the Government's new alcohol strategy[56]. Roughly £13.4 billion was spent on tobacco in 2004 and no costs of tobacco-related acquisitive crime have been identified.

There was debate amongst the authors as to whether the value of the heroin and cocaine market, £3.657 billion, should be included as a crime cost of prohibition. On the one hand it represents an illegal trade that results from the policy, and profits criminals; on the other, the figure is turnover, not profit, and what profits are accrued are mostly spent within the legitimate economy even if there is evidence that some is used to fund other criminal enterprises. Arguably it represents an opportunity cost in terms of lost tax revenue, but tax has been included as a benefit of regulation. This discussion remained unre-

53 A recent NTA study demonstrates a dramatic fall in drug related offences for those entering prescription treatment, with acquisitive crimes falling by 57%. **http://www.nta.nhs.uk/publications/documents/nta_changes_in_offending_rb35.pdf**

54 Alcohol: Price, legal availability and expenditure. Institute of Alcohol Studies **http://www.ias.org.uk/resources/factsheets/price_availability.pdf**

55 PM's Strategy Unit Report: Alcohol Harm Reduction Strategy for England (2004) **http://www.cabinetoffice.gov.uk/media/cabinetoffice/strategy/assets/caboffce%20alcoholhar.pdf**

56 Safe. Sensible. Social. The next steps in the national Alcohol Strategy (2007) **http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyandGuidance/DH_075218**

solved and we have therefore defaulted to leaving the figure off the crime costs total. We would welcome any input regarding this discussion.

So the total cost of drug-related crime for heroin and cocaine under prohibition is £13.9 billion.

Health and social care costs

Drug-related health care costs of Class A drug use were estimated to total £488m in 2003/04, or 3% of the total economic and social costs. The majority of this is inpatient health and mental health care. The social care cost of Class A drug use in 2003/04 was estimated to be £69 million[12]. This does not include drug treatment, which is included in the drug strategy section below.

Drug-related deaths

The cost of Class A drug-related deaths in 2003/04 was estimated to be £923 million. These cost estimates were based on those used for valuing traffic accidents[41].

Young recreational and older regular use of Class A drugs

The economic and social costs of Class A drugs use associated with young recreational and older regular use is £51.9m and £9.4m respectively[12].

Drug strategy

The research by the Government into the total economic and social costs of drug use failed to include the cost of the drug strategy itself, which according to the 2002 drug strategy was £1.344 billion in 2003/04. This budget was spent on prevention, enforcement of drugs laws and treatment.

Excluded costs

The Home Office reports neglect to include the potentially significant economic and social costs of the impact of drug use on the estimated 300,000 children living in heroin- and crack-using households. As a result, although these costs should be acknowledged and accounted for in future work, they have not been included in this analysis.

This paper also does not include any of the economic or social costs associated with the British Government's contribution to global prohibition enforcement (for example, the Government has identified that reducing the supply of opium and heroin is one of Britain's aims in the war in Afghanistan). These costs include both direct spending, and the costs, international and domestic, of the unintended consequences of the illicit drug trade on political, social and economic development, human rights and environmental damage. These costs are assumed to be very substantial—potentially eclipsing all combined domestic costs of prohibition by a substantial margin—even though we acknowledge no coherent methodology exists for making meaningful estimates. This is an area of study that requires urgent attention.

The economic and social costs of Class B and Class C drug use are not included as no adequate data is available, and no comparable work has been undertaken by Government.

Also not included are the informal market retail costs to consumers of illegal drugs. Under prohibition, consumer spending in the UK drug market turns over an estimated £4.6 billion each year, a significant proportion of which is assumed to be due to the inflated prices (brought about by prohibition). Even a 25% drop in price could save consumers up to £1.15 billion.

Also not included are additional costs related to housing benefit, income support or other welfare payments that are paid out to current or former illegal drugs users whose unemployment is a direct consequence of prohibitionist policies and criminality rather than addiction and drug misuse per se (e.g. a drug/prohibition related criminal record being an obstacle to employment, housing, travel, personal finance, education). It could also be due to drug-related imprisonment, a community sentence, or poor health that is a related to the consequences of prohibition rather than drug use itself, (for instance blood born viruses relating to unsafe injecting). No figures for these costs exist, and we acknowledge making such estimates would be problematic—but they remain another important potential area for future research.

Also excluded are the economic and social costs of street soliciting and sex work, which is another form of crime closely related to the need for money to purchase illicit drugs, the Home Office estimated in 2004 that 80-95% of street sex workers were involved *'to feed a serious drugs habit'*[57]. We are excluding this cost because it was not included in the Government's economic and social cost estimates[58]. We would strongly recommend that this cost be explored in more detail in any future work.

In addition there are substantial other costs which have been excluded due to the difficulty in costing them. These include the fostering of corruption, money laundering, impact on public confidence in government and police, undermining of police-youth relations, impacts on human rights/personal freedoms, and the more nebulous negative impacts of illicit drug markets on personal and social well-being.

Total cost

So current best estimates suggest that the total cost of Class A drug use (heroin and cocaine) under prohibition in England and Wales in 2003/04 is £16.785 billion.

57 Home Office consultation document on prostitution 'paying the price' (2004) p.12

58 Current political debate suggests that enforcement against street sex work is likely to be toughened, increasing both direct and indirect costs

2.2 Benefits of drug prohibition

Reduced use: the deterrent effect

The key benefit repeatedly cited as the rationale for the policy of prohibition is that a combination of reduced availability (resulting from enforcement) and a deterrent effect (both in terms of fear of punitive sanctions, and the law 'sending a message') results in a lower level of prevalence of drug use than would exist without it[59].

The proposed deterrent effect is poorly supported by empirical research. The Science and Technology Select Committee report in 2006 on the drug classification system *'Drug Classification: Making a Hash of it?'*[60] stated that:

> *"We have found no solid evidence to support the existence of a deterrent effect, despite the fact that it appears to underpin the Government's policy on classification. In view of the importance of drugs policy and the amount spent in enforcing the penalties associated with the classification system, it is highly unsatisfactory that there is so little knowledge about the system's effectiveness".*

The Government rejected this finding and responded with:

> *"The Government fundamentally believes that illegality is an important factor when people are considering engaging in risk-taking behaviour. The exposure to criminal sanction, in particular through sentencing, influences perceptions and behaviours. It believes that the illegality of certain drugs, and by association their classification, will impact on drug use choices, by informing the decisions of dealers and users. Imposing penalties on the offence of possession is intended to deter use, particularly experimentation by young people. Whilst the Government accepts that there is an absence of conclusive evidence in relation to the deterrent effect of the existing classification structure, there is some evidence from the Offending, Crime and Justice Survey that the deterrent effect of harsher sentencing was greater among those admitting to the supply of a Class A drug, compared with other offences. The Government will consider ways in which the evidence base in the context of the deterrent effect can be strengthened."*[61]

However, in the field of evidence-based policy making what the Government *'believes'* is neither here nor there, and there is notably no evidence provided to support the *'belief'* of the system's effectiveness as a deterrent (it was not made clear which evidence from the Offending, Crime and Justice Survey was being referred to). In the absence of this or any other credible evidence, this *'belief'* can only remain an untested assumption.

59 The significant prioritisation of reducing prevalence of use over and above all other policy outcomes is in itself a reflection on the prohibition's historical origins rather than rational pragmatic considerations, and is also one that reflects a failure to make the key distinction between use and misuse.

60 **http://www.publications.parliament.uk/pa/cm200506/cmselect/cmsctech/1031/1031.pdf**

61 The Government Reply to the House of Commons Science and Technology Committee's Report on Drug Classification. **http://drugs.homeoffice.gov.uk/publication-search/drug-strategy/drugclassification**

This is not to suggest that prohibition fails to provide any deterrent, but the little evidence there is suggests that the deterrent effect is relatively small. The Police Foundation Inquiry report Drugs and the Law[62] in 1999 conducted a poll, which found that:

> *"The most frequent reasons given by both children and adults for people not taking drugs were 'health reason' (33% and 51%) and 'just don't want to take drugs' (27% and 56%). By comparison only 19% of children and 30% of adults mentioned 'illegality' and 12% of children and 17% of adults cited 'fear of being caught by the police'."*

The report concluded that:

> *"...such evidence as we have assembled about the current situation and the changes that have taken place in the last 30 years all point to the conclusion that the deterrent effect of the law has been very limited".*

Despite this conclusion, the Police Foundation survey research was the only reference cited by the Home Office in their 2000 submission to the Home Affairs Select Committee Drugs Inquiry in answer to a query about deterrence[63]. The same Home Office submission also noted that illegality could potentially have a perverse effect of adding to the appeal of some drugs for some users (the 'forbidden fruit' effect), although this effect also remains un-quantified. It is theoretically possible to translate the Police Foundation figures into direct cost savings from a deterrent effect/reduced use if a series of hefty assumptions are made (that the deterred group have a similar propensity to use/misuse illicit drugs as the general population and that all such users would consume drugs were it not for the law) but it is far from clear how such survey data translates into real world costing analysis—or whether the results would change if the question were focused on the Class A drugs (responsible for most costs) that are the focus of this paper. Notably the Home Office has made no attempt to engage in any such analysis, nor to replicate or refine the survey data relevant to a deterrent effect in the following six years (up to the Science and Technology Select Committee Classification inquiry in 2006 in which it was again highlighted). Nor have any relevant studies been commissioned or published subsequently despite the pledge made by the Government to 'strengthen' the (currently non-existent) evidence base[64] with regard to the deterrent effect of punitive law enforcement. As the Sci-Tech committee notes, this evidential void is particularly striking given the centrality of the deterrent effect to the entire prohibitionist paradigm.

The relatively small amount of independent research that has been done in this area suggests that the law and enforcement are, at best, marginal factors in drug taking decisions. This especially holds true for the socially excluded groups who are most vulnerable to problematic use, including young people, those with mental health problems, and those from socially deprived communities. Dependent users of heroin and crack in particular, who are both highly likely to have a criminal record already and whose demand is generally resistant to *any* interventions, are also—as discussed above—the population

62 Police Foundation (1999) Drugs and the Law: Report of the Independent Inquiry into the Misuse of Drugs Act 1971: **http://www.druglibrary.org/schaffer/library/studies/runciman**

63 **http://www.parliament.the-stationery-office.co.uk/pa/cm200102/cmselect/cmhaff/318/318m02.htm**

64 *'the Government will consider ways in which the evidence base in the context of the deterrent effect can be strengthened'* is itself a troubling turn of phrase, suggesting that evidence will be sought to back up a pre-established 'belief' as part of a political program, rather than a scientific approach that would involve an independent evaluation of existing data, potentially supported by new un-biased research being undertaken, to objectively establish the extent of such an effect.

creating the vast majority of social and economic costs. Thus the group that creates most of prohibition's costs are also the group least likely to be susceptible to its deterrent effects.

There is no statistically significant correlation internationally between intensity or harshness of enforcement in different countries and their levels of use[65]—a relationship that might support a strong enforcement/deterrence link. Evidence of this marginal role for enforcement levels in drug taking decisions has recently come from an extensive World Health Organisation 2008 study comparing drug use and enforcement regimes across the world[66]. The study's headline conclusion was:

> *"Globally, drug use is not distributed evenly and is not simply related to drug policy, since countries with stringent user-level illegal drug policies did not have lower levels of use than countries with liberal ones."*

Similarly, studies in Australia and the US have compared levels of cannabis use between different states with different enforcement regimes for cannabis offences (from harsh penalties to effective decriminalisation) and found no significant correlation between penalties and incidence of use[67].

It has been argued that illegality assists primary prevention, thus reducing use, by helping young people to *'say no to drugs'*, or by providing a clear message that drug use is socially and morally unacceptable. Such benefits, whilst instinctively believable propositions, are hard to measure beyond anecdote alone, and more generally the evidence base for prevention and drug education programmes is historically very mixed[68] and generally underwhelming. Specifically there is little to suggest such interventions have been more effective with illegal drugs than with alcohol and tobacco, i.e. that illegality/prohibition is a key ingredient of prevention effectiveness.

One solid piece of evidence on the impact of prohibition that is available is the experiment of the prohibition of alcohol in the USA from 1920-1933. Although Prohibition had a significant impact on alcohol consumption when the policy was first implemented, it had little or no impact on alcohol consumption in the long-term.

> Alcohol consumption fell immediately after the enactment of prohibition and rose to 70% of its pre prohibition levels by 1929 (and was still rising when prohibition was repealed in 1933). The implied percentage increase in alcohol price, including the premium for breaking the law, decreased from 318% in 1921 to 171% of the pre Prohibition level in 1929. Simultaneously, enforcement costs rose over 600% from 1921 to 1930.
>
> As the illegal market adjusted to law enforcement practices (by improved technology, innovation and bribery), consumption rose even as enforcement expenditures increased. Therefore,

65 It is easy to cherry pick individual examples that suggest there either is or is not such a link—the obvious examples being Sweden and the Netherlands, both with relatively low levels of use, but with very different approaches to enforcement.

66 Degenhard *et al.*, World Health Organisation, 2008 'Toward a Global View of Alcohol, Tobacco, Cannabis, and Cocaine Use: Findings from the WHO World Mental Health Surveys'
http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0050141

67 Discussed in some detail in the recent Beckley Foundation Cannabis Commission report (2009):
http://www.beckleyfoundation.org/pdf/BF_Cannabis_Commission_Report.pdf

68 'Pathways to Problems' 2006, Advisory Council on the Misuse of Drugs (chapter 5)
http://drugs.homeoffice.gov.uk/publication-search/acmd/pathways-to-problems/Pathwaystoproblems2835.pdf?view=Binary

prohibition had an immediate, but not enduring impact, on the level of alcohol consumption and price".[69]

The effect of enforcement efforts on drug availability and price, and how they impact on levels of drug consumption, also needs to be considered. One of the effects of regulation would be to remove the inflationary price pressures of the illegal market, and we would therefore reasonably expect prices to fall. The precise level of prices, however, would be determined by regulatory policy decisions as the state would be able to intervene on price controls in a manner clearly not possible with unregulated illicit markets. Such interventions would present the challenge of balancing conflicting needs to dissuade use, by keeping price sufficiently high, with not keeping prices so high that undercutting them remained an attractive proposition for illicit supply profiteering. The same challenge is seen with tobacco pricing today.

Basic economic theory suggests that increased price restricts demand, and so a benefit of prohibition may be seen as the deterrent effect related to its impact in artificially increasing prices. Seen thus, higher price effectively restricts availability in terms of affordability (the cost-benefit analysis for the individual consumer), although given that the illicit market is completely unregulated and guided predominantly by the interaction of supply and demand forces and the need to maximise profits, the extent of this effect is hard to determine and probably marginal.

Several factors further cloud this higher price/lower demand general supposition: the negative impact of price on levels of use, whilst demonstrable with some drugs and populations of users (e.g. alcohol and tobacco), does not always hold. Ecstasy prices, for example, have dropped substantially from well over £10 per pill during the emergence of the drug in late 1980s to under £2 pound a pill today, but this drop has not corresponded to a rise in use, indeed use has been falling marginally for the last few years. As the Strategy Unit report noted, patterns of use often rise and fall independently of price. This is especially the case when prices are sufficiently low, and use sufficiently moderate/occasional for total expenditure not to constitute a significant economic burden relative to the total income of the user, or comparable recreational choice/costs, even if prices rise or fall quite dramatically.

Price changes will also have differential effects on different populations. Lower income users will generally be more susceptible to price changes, as they have a proportionally bigger impact on disposable income. Dependent users, conversely, show consumption patterns that are generally more price inelastic. This last point is significant as it is this population that is responsible for the majority of primary and secondary social and economic costs, and it has been noted that in some instances when drug prices rise, rather than reduce use, the result is in fact increased fundraising-related crime. Notably there is also no evidence that when drug of choice opiates are made available on prescription to dependent users (effectively at no cost) that levels of use rise, and there is some evidence that other related factors—de-stigmatisation and increased access to and contact with service providers—means that prescribed users are in fact more likely to utilise services and thus reduce or cease use. Potential impacts of price changes on levels of use and misuse—particularly amongst high harm populations—is another important area for future study, but the price elasticity of demand that does exist appears to

69 See pages 1 and 2. The Economics of Prohibition: Price, Consumption and Enforcement Expenditures during Alcohol Prohibition **http://www.hawaiireporter.com/file.aspx?Guid=cf0541b8-adda-4c54-ab20-f72fe6f9a3aa**

often be a marginal effect, easily overwhelmed by other variables. Trying to reduce use by increasing price through expensive supply side enforcement would appear to be both poorly evidenced and poor value for money even when some effect can be demonstrated. In a Parliamentary Answer (December 18 2008)[70]to a question tabled by Chris Huhne MP, the Home Secretary stated that:

> *"The Department has not commissioned or evaluated research on the relationship between drug dependency, acquisitive crime and the street price of drugs."*

Gauging the impact of prohibition on availability, and thus use, is similarly complex. Falling prices (and by inference increased availability) have certainly characterised recent history under prohibition for the drugs that cause the most harm, as graphically demonstrated in the 2003 Strategy Unit report:

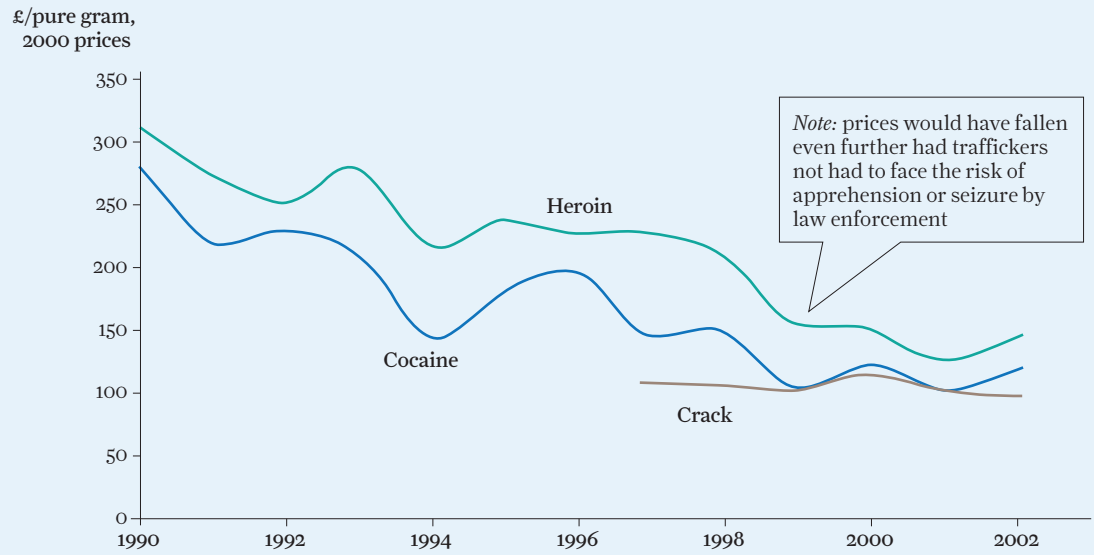


Figure 3: **Real purity adjusted retail prices (cocaine and heroin) UK**[71]

The Phase 2 section of the No.10 Strategy Unit report also notes that:

> *"Supply-side interventions have a limited role to play in reducing harm—initiation into problematic drug use is not driven by changes in availability or price*
>
> * *risk factors—particularly relating to deprivation—are the prime determinant of initiation into problematic drug use; price and availability play a secondary role*
> * *there is no causal relationship between availability and incidence; indeed, prices and incidence often fall or rise at the same time" (p.79)*

> *"There is no causal relationship between drug availability and incidence" (p.81 heading)*

Indeed 'drug availability' is a potentially complex and poorly described variable; it can include geographical availability, short or long-term temporal availability, and price based availability (affordability—see

70 http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm081218/text/81218w0033.htm#0812191006735

71 Real purity adjusted prices show a different trend to nominal unadjusted purity prices. Nominal prices have remained more stable, while purity has risen over time. This leads to falling real purity adjusted prices

above). Remarkably, despite a reduction in drug availability being repeatedly and clearly stated as one of the key priorities for the UK drug strategy in 1998, and 2002, to this day no meaningful data is published on availability, and in more than ten years, no methodology has been developed by the Government for measuring it[72] (likewise the UN drug agencies). Instead a series of meaningless proxy measures have been used that indicate success in reducing availability when there has been a clear understanding that the opposite has occurred. A specific goal to reduce availability has now disappeared from the new 2008 UK drug strategy. Any reference whatsoever to reducing availability has similarly disappeared from the UK's 2008 Drug Strategy work plan, and the 2007 PSA targets.

Whilst it is clear that prohibition impacts on availability, it is also clear that most drugs are available to most people who seek them, most of the time, even if for some, in the short term at least, initially locating a supplier presents some hurdles, inconvenience, and expense. There are, to illustrate the point, an estimated 70–100,000 individuals involved in illicit drug supply in the UK. Under a regulated regime the level of availability would be controllable and consequently the relative change in availability that would follow any transition from criminal to regulated market could be influenced by policy makers, balancing the pros and cons of the various models and levels of restrictions. To suggest that drugs are unavailable now and would suddenly become dramatically more or freely available under a legally regulated regime is to misrepresent both the current situation and the nature of proposed alternatives.

With the existence of such limited empirical evidence, it is difficult to estimate whether prevalence would increase if prohibition were replaced by a legal regulatory model, if so by how much, and what the corresponding costs in terms of problematic use would be. Broad observations about trends in prevalence rates are possible, in the UK for example, cocaine use is rising, heroin use has levelled off, ecstasy and cannabis use are falling. However, it is hard to directly identify these patterns with any particular element of drug policy or other non-policy-related variables. Post-prohibition changes would inevitably be influenced by a range of policy variables, including how effectively drugs are regulated (with regard to price controls, marketing controls, regulatory enforcement—how regulated availability compared to illicit market availability, and so on. See *Definitions 1.3* above), and how effectively other public health elements of policy are developed, implemented and funded, including specific drug-focussed interventions (prevention, treatment, education, harm reduction etc.). Crucially it should be highlighted that wider social policy concerns and variables are likely to have a far more significant role in determining levels of use and misuse that any conventionally understood drug policy interventions. These social determinants include employment and social deprivation, mental health care provision, efficacy of the care system, and health and income inequality (see *Discussion/Conclusions*).

This paper cannot do such an analysis justice, so for practical purposes four different hypothetical scenarios are proposed.

72 The 1998 strategy target was to *'reduce the availability of Class A drugs by 25% by 2005 (and by 50% by 2008)'*. No methodology was established at this point and nor did any baseline data exist from which to make any future comparisons. The revised strategy in 2002 did away with the numeric targets replacing them with a more vague aspiration to: *'reduce the availability of illegal drugs' by an unspecified amount, to be determined by 'increasing the proportion of heroin and cocaine targeted on the UK which is taken out; the disruption/dismantling of those criminal groups responsible for supplying substantial quantities of Class A drugs to the UK market; and the recovery of drug-related criminal assets.'* None of these new indicators are measures of availability—although they were likely to indicate 'availability' success whilst price data suggested the opposite. For more detailed discussion see 'After the War on Drugs, Options For Control' Transform 2005 (p. 24). **http://www.tdpf.org.uk/AboutUs_Publications.htm**

* In scenario 1 the number of users of each drug decreases by 50%.
* In scenario 2 the number of users of each drug stays the same.
* In scenario 3 the number of users of each drug increases by 50%.
* In scenario 4 the number of users of each drug increases by 100%.

The phrase *'it's a bit more complicated than that'* is certainly appropriate at this point. Changes in prevalence will differ between drugs as well as between the various sub- populations of users or potential users. Prevalence would also be likely to change over time as new social norms develop under any new policy framework, or conversely, as older ones are undermined. A key point is that even if there were an increase in prevalence following the move from prohibition to regulated markets, this does not necessarily equate to a rise in prevalence of problematic use or overall harm, and could—as the nature of drug use and socio-cultural environment in which it takes place changed—coincide with a fall in the prevalence of problematic use, overall harm and associated economic and social costs. However, for this paper it is also assumed that the relationship between harm and use remains the same (with the exception of drug deaths) so that a change in use leads to a corresponding change in harm, i.e. so that a 50% increase in use, would equate to a 50% increase in health harms and the related costs.

	Percentage change in drug use			
	-50%	**0%**	**50%**	**100%**
Cannabis	1,016,000	2,032,000	3,048,000	5,046,000
Cocaine	172,000	344,000	516,000	688,000
Ecstasy	140,500	281,000	421,500	562,000
Amphetamine	88,500	177,000	265,500	354,000
Opiates (Heroin and Methadone) and Crack cocaine[73]	163,733	327,466	491,199	654,932

Table 3. **The estimated number of drug users in a regulated drugs market**[74]

The analysis in *Section 4* below posits that drug-related crime (economically motivated) would be negligible under a legally regulated system and drug-related deaths would also sharply decrease. Therefore the key potential economic and social benefit of the deterrent effect is to reduce or prevent an increase in health and social care costs[75].

73 Drug Misuse Declared: Findings from the 2003/04 British Crime Survey (2005)—see table 2.1. To note the BCS figures are acknowledged to be an underestimate, due to reporting bias against incrimination, and also marginal populations the survey misses in which levels of drug use tend to be higher than the rest of the population. **http://www.homeoffice.gov.uk/rds/pdfs05/hosb0405.pdf**. The number of users has been taken from the number of users in the last month, which is being used as a proxy for regular use and is significantly lower than the number of users who have ever used or have used in the last year. The estimates for the number of heroin and crack cocaine users are taken from Measuring different aspects of problem drug use: methodological developments, 2006, 46-85, Home Office Online Report 16/06. London: Home Office **http://www.homeoffice.gov.uk/rds/pdfs06/rdsolr1606.pdf**

74 This figure for the number of opiate and/or crack cocaine users is taken from Measuring different aspects of problem drug use: methodological developments, 2006, 46-85, Home Office Online Report 16/06. London: Home Office. **http://www.homeoffice.gov.uk/rds/pdfs06/rdsolr1606.pdf** The 95% confidence interval range is from 325,945—343,424. This estimate was for 2004/05. The closest and most accurate estimate to the year 2003/04 which we are using for our analysis. We assume that the figure will not have changed significantly between 2003/04 and 2004/05.

75 Some commentators have suggested that use of heroin and cocaine under a legally regulated model could well rise to levels equivalent to current levels of alcohol and tobacco consumption, an increase more in the region of 1000% or more. The suggestion that a large segment of the population would use such drugs if only they were legal lacks credibility in so much as the main reason people choose not to use or experiment with them is lack of interest in drugs that are dramatically qualitatively different and concerns about health impacts. Problematic heroin and cocaine use is quantitatively and qualitatively different to the majority of smoking and drinking. A 2007 Zogby Poll in the US asked 1,028 likely voters, *"If hard drugs such as heroin or cocaine were legalized, would you be likely to use them?"* Ninety-ninety percent of respondents answered, "No." Only 0.6 percent said "Yes." The remaining 0.4 percent weren't sure. Glue and other intoxicating inhalants, for example, are freely available but

The total health and social care costs of Class A drug use was estimated to be £557m in 2003/04 and the cost of Class A drug use associated with young recreational and older regular use was estimated to be £61.3m (see above for excluded costs). It is likely that these total costs would fall even if problematic use were to increase marginally as a significant proportion of these health costs are also associated in some way with prohibition, illegal markets and related high-risk behaviours, unsafe environments and so on (most conspicuously relating to unsafe/high-risk injecting practices). However, this paper cannot do that analysis justice and so for the purposes of this study it is assumed that the average health and social costs per Class A drug user and the economic and social costs of Class A drug use associated with young recreational and older regular use would remain the same.

So for the four different scenarios the following benefits provided by prohibition through the deterrent effect would be as follows:

- In scenario 1 a 50% decrease in opiate and crack cocaine use in a regulated market = £309m cost of prohibition
- In scenario 2 a 0% reduction in opiate and crack cocaine use in a regulated market = £0 benefit of prohibition
- In scenario 3 a 50% increase in opiate and crack cocaine use in a regulated market = £309m benefit of prohibition
- In scenario 4 a 100% increase in opiate and crack cocaine use in a regulated market = £618m benefit of prohibition

Excluded benefits

The health and social costs of use of Class B and C drugs have not been calculated by Government and so we have left them out of this analysis. They are assumed to be important[76], but also substantially less than that of Class A drugs both in per user and total terms. This is another important area for future study.

It is reasonable to speculate that a general population has an overall demand or appetite for intoxication (reflecting wider social economic and cultural variables) that is largely independent of drug policy and will be met from legal and/or illegal drugs, and that there is a degree of exchange/flexibility between drugs to meet this overall demand. Increased use of some currently illicit drugs under a regulated system would potentially correspond with a reduction in alcohol, an effect, for example, witnessed on a small scale amongst the club/rave scene in the late 1980s with the growing popularity of ecstasy.

their misuse is contained to a small population. Similarly, levels of cannabis use in Holland where supply and use is *de facto* legal, are no higher (in some cases lower) than their neighbouring countries with relatively punitive prohibitions enforced. That said, it would be relatively easy to re-calculate using the analysis framework in this paper for any imagined scenario, however improbable.

76 There has, for example, been a significant amount of attention on cannabis and mental health recently and given the large population of users, even if the % affected is small, could still constitute a significant health cost that should be factored into calculations. A Lancet paper from July 2007, for example, suggested that if the UK's 6.2 million people who had smoked cannabis had never done so, 800 cases of schizophrenia might have been avoided. Potential deterrent effects of prohibition and economic calculations could presumably be made on this basis, if the full range of cannabis harms were subject to the same sort of scrutiny. It is complicated by the unresolved debates and controversy over causality in many of these health issues (see for example this recent systematic review in the British Journal of Psychiatry on the psychotic effects of cannabis use **http://bjp.rcpsych.org/cgi/content/abstract/193/5/357?ct**), and the fact that enforcement impacts on use are not easily demonstrated; cannabis use has been falling for the last 6 or 7 years after decades of steady increase, despite, if anything a relaxation in enforcement.

These effects are poorly researched and clearly other dynamics may complicate this picture, such as the increase in cocaine use, which may be associated with and increase the concurrent use of alcohol. For the purposes of this paper it will be assumed that there are no changes in alcohol and tobacco use.

There are arguably benefits relating to the economic activity of the illegal markets themselves in terms of income and employment, particularly for certain marginalised populations. Most illicit income results in legitimate spending. These have not been assessed or included, but a full cost-benefit analysis would have to reflect these benefits.

It is also worth noting that some economic analysis[77] has identified drug consumption itself as an economic benefit on the basis that when it is rationally informed, the drug user—from a personal cost-benefit analysis—views themselves as better off. The benefits they derive from the use, be they pleasure, quasi-medical (relaxation, increased alertness/concentration, pain relief, sleep aid etc.), or other, can be ascribed an economic value, just as any externalities or harms related to their use can similarly be (and indeed are in this paper). Of course drug use is not always rationally informed if decision-making is distorted either by intoxication or dependency, but these factors demonstrably do not influence the majority of drug using decisions. This analysis is understandably controversial and is not factored into this paper, but does at least warrant further consideration, potentially by considering economic analysis of other comparable risk taking adult choices related to pleasure-seeking/leisure activities, such as alcohol consumption (for which ascribing benefits is somewhat more common, including by Government, and less incendiary).

Political benefits of prohibition have also been excluded—they are controversial and very difficult to ascribe a value to, even if it is hard to argue that they are a key element in many cost/benefit decisions from the politicians' perspective.

Total benefit

So for the purposes of this paper the total benefit from prohibition in deterring drug use and therefore reducing the health and social costs of Class A drug use across the 4 scenarios is—£309m, £0m, £309m and £618m in England and Wales in 2003/04.

77 See Miron 2004 'Drug War Crimes; the consequences of prohibition', chapter 5; 'Is prohibition good policy?'

3. An analysis of the costs and benefits of regulated drug markets

The regulatory approach being speculatively costed in this section is outlined in *Definitions, 1.2*.

Crime

Under a regulated market the dynamic of the drugs-crime link would change dramatically. There would still be costs from drug-intoxication related offences, such as vandalism, intoxication-fuelled violence and drug-compromised driving. Such offences would, of course, remain criminal under any regulated system and as such there is no reason to think the volume of these would be substantially changed by legal status (assuming equivalent levels of use before and after). Under more effective regulation, and with the development of new social norms/social controls, such costs could potentially fall. Alcohol is the drug currently responsible for the majority of such intoxication-related offences, and it is difficult to speculate about which direction social, cultural and economic trends in alcohol consumption will move relative to other drug consumption, or what (potentially conflicting) impacts regulation, prohibition or other policy interventions will have on them. The Government has notably not identified drug intoxication-related crime costs in its latest research[78].

However, in an optimally regulated market with other prevalence variables remaining the same, whilst the comparatively small subset of intoxication-related crime would be essentially unchanged, acquisitive crime related to fundraising by dependent users (which constitutes the majority of Class A 'drug-related crime' and the associated criminal justice costs) would be negligible.

Some illegal market activity would doubtless continue as it does with tobacco, around 25% of the market for which is 'grey' (legally produced, then illegally imported and sold), of which a smaller proportion still is counterfeit. Even if, based on tobacco (and we should note that the illicit alcohol industry is comparatively insignificant in the UK), we assume 25% of the market for currently illegal drugs remained illicit, the costs associated with it would be likely to be less than a simple 25% of the crime costs of the present illicit market because:

i) The inflationary pressures on the remaining market would be lessened, and illicit prices would be lower (they would be competing with assumed lower regulated market prices) meaning dependent users who still used illicit sources would need to fundraise proportionally less from offending.

ii) The relatively small population of high-harm causing long-term relapsing chaotic users, responsible for 50% of the offending[79], would be targeted and brought within the legal framework as a priority of any policy transition process.

78 Measuring different aspects of problem drug use: methodological developments, 2006, 46-85, Home Office Online Report 16/06. London: Home Office **http://www.homeoffice.gov.uk/rds/pdfs06/rdsolr1606.pdf**

79 PM's Strategy Unit Drugs Report: Phase 1 - Understanding the Issues (2003) **http://www.cabinetoffice.gov.uk/media/cabinetoffice/strategy/assets/drugs_report.pdf**

Whilst many current long-term dependent users were involved in offending before their problematic use began and would be likely to continue to have above average offending levels even with legal regulated and affordable supply, the volume of offending would be reduced significantly, as has been demonstrated when long-term users have heroin made available on prescription. If drugs are available and priced realistically this population's fundraising-related offending (the majority of the 'drug-related' acquisitive crime such as burglary, fraud, robbery and shoplifting and criminal justice system costs) would fall to the low/negligible levels associated with dependent drinkers and tobacco smokers (or OTC or prescription drugs) from equivalent socio-economic backgrounds.

By the same analysis we can reasonably expect that the crime and criminal justice costs associated with drug supply would also fall by a proportion equivalent or greater than the contraction in demand for the illicit product once a legal alternative is available. It is, however, reasonably expected that some individual and organised criminal energies would, as illicit drug opportunities dwindled, be redirected into other criminal enterprises such as counterfeiting or extortion[80]. That said, crime is, to a large degree, a function of opportunity and it is hard to imagine that anything approaching the billions on offer from the illicit drug trade are available in untapped criminal opportunity elsewhere in the UK (or globally).

So a conservative estimate is that drug-related crime costs would fall by 75% from £13.9 billion to £3.475 billion. So using the 4 scenarios drug-related crime costs would be £1.738 billion, £3.475 billion, £5.213 billion and £6.95 billion

Health and social care costs

There are health benefits from effective regulation of drug supply and use. The prohibitionist approach not only ensures there is effectively no market regulation, but actively maximises health risks associated with use, by pushing users into marginalised unsafe environments, encouraging high-risk behaviours (injecting, needle sharing etc.) and the use of higher-risk more potent preparations, driving users away from services, and ensuring the drugs consumed are of unknown strength and purity and sold with none of the health and safety information or warnings familiar with most legal drugs.

Alcohol and tobacco provide instructive if contrasting examples. Tobacco use has been falling steadily in the UK for a number of decades due to a combination of evidence-led regulation of tobacco marketing (advertising bans) tobacco pricing (through taxation) and use (ban on smoking in public places) and effective public education about previously poorly understood health risks. This public health led approach has helped foster new social norms about what is socially acceptable, responsible health behaviour—without resorting to expensive enforcement of punitive prohibitions or blanket criminalisation of users. Evidence from around the world shows that similar controls on price and marketing[81] can be effective regarding alcohol although alcohol regulatory policy, in the UK at least, seems to be lagging behind progress on tobacco by 10–15 years (products are yet to carry mandatory health warnings, for example).

80 This cost is not included – being impossible to gauge

81 See World Health Organisation resources on Alcohol control and harm reduction here: **http://www.who.int/topics/alcohol_drinking/en/**

For the purposes of this paper, however, due to resource constraints, it shall be assumed that health and social care costs per opioid and crack user remain the same, so using the 4 scenarios above, the increase in health and social care costs in a regulated system would increase by somewhere between -£278.5m to £557m, so the total cost would be £278.5m, 557m, £835.5m or £1.114bn.

Drug-related death

On the basis that a substantial proportion of drug-death risk factors stem directly from the behaviours, environments and products associated with illicit drug culture, particularly around injecting, we assume that the drug-related death rate would be reduced by 50%. It is notable, for example, that injecting drug overdose deaths effectively fall to zero in supervised settings. In 2003/04 1,400 drug-related deaths cost £923m which is roughly £660,000 per death and it is assumed that this is halved to 700 drug-related deaths. So using the 4 scenarios the cost of drug-related deaths would be £231m, £462m, £693m and £923m.

Young recreational and older regular use

Again using the 4 scenarios above the costs of young recreational and older regular use of Class A drugs would range from –£30.65m to £61.3m and so the total cost would be £30.65m, £61.3m, £91.95m or £122.6m.

Drug strategy costs

The Drugs Intervention Programme would no longer be needed in its current form (although some level of arrest referral programme would continue) and a proportion of the costs of enforcement would be redirected to researching and establishing the emerging regulatory infrastructure and its administration. The cost of drug treatment would be assumed to remain at roughly current levels (£800m) to provide psychosocial interventions, key working, detoxification and rehabilitation for those who sought help for their drug use. It is assumed that this budget would change relative to the population of users—so £400m, £800m, £1,200m, £1,600m against the four scenarios. Prevention and information programmes would continue to be funded based on evidence of best practice from the UK and around the world as well as the lessons from what works in reducing tobacco- and alcohol-related use/harms, with £100m allocated to this objective. A world leading research centre would be set up, costing £100m to research the best ways to reduce and prevent drug-related harm. The total cost for the drug strategy would therefore be £600m, £1,000m, £1,400m, £1,800m.

Drug prescription costs

The Strategy Unit Report estimates that over 50% of the total crime costs incurred by heroin and crack users are created by a population of around 30,000 individuals termed High Harm Causing Users or HHCUs. Under the regulated scenario proposed, this 10% of the problematic heroin and/or crack cocaine users that cause the most harm would have heroin (and cocaine—see below) made available via medical prescription—it is assumed that identifying and targeting this group would be dramatically easier under a legally regulated regime. Heroin prescribing costs in the UK have been estimated

in 2003[82] to be £7,717–9,691 per user, but this figure is based on a supervised use model, which increases the costs considerably, and a cost for the heroin itself of £4,858 per annum. The UK cost of prescribed heroin reflects a monopoly supply scenario that has drastically inflated prices; the equivalent cost for the same heroin in the Netherlands was noted to be £1,200. We assume that the monopoly issue will be addressed and the heroin will be available at £2,000 per user per annum, with the total for supervised use adding a further £4,000 per annum to make a total of £6,000 per user/annum.

If 30,000 HHCUs utilised the more expensive model, this produces a total cost of £180 million, falling to £120million if half utilised the more conventional take-home prescribing model, or £60million if all did. For the purposes of this paper we are assuming that in the first instance this prescribed heroin will use the more expensive supervised model.

Although legal under the same laws that govern heroin prescribers, in that a Home Office licence can be obtained, there are no suitably established prescribing models for cocaine preparations, either oral preparations, in powder form, or in smokable form, on which to base prescription costings (some have been mooted and others subjected to limited experimentation). Prescribing models do exist for some stimulants, notably for amphetamines, which are currently prescribed to around 1,000 users in the UK, but it is difficult to translate these into a cocaine model given the differences in the nature of the drugs' effects and related behaviours/patterns of use. Until workable models are developed we can only speculate as to how cocaine could be made available through a licensed medical model—and posit that cocaine powder would be prescribed at the levels described in table 1, at a cost approximately one tenth of the current street value. The 2003 Strategy Unit Report estimates that there are 140,000 problem crack users in the UK, of which 120,000 are also using heroin. For the purpose of this paper, the costs have been worked out on the basis that cocaine would be available through more conventional prescribing procedures to an equivalent population of 30,000 at a price of £2,190 per annum (£6 a day). This would amount to a total annual cost of £65.7million. Again this would play out through the 4 scenarios so that the total cost of prescribing diamorphine and cocaine would be £122.85m, £245.7m, £368.55m and £491.4m.

These prescription costings exclude any revenue clawed back through prescription charges, or savings in terms of lower levels of opiate substitute prescribing.

The remaining problem heroin and cocaine users would have access to legal supplies through pharmacy/druggist models, at equivalent cost (within the cost range for heavy problem drinkers/smokers identified in table 1), subject to a range of additional controls as appropriate, outlined in 1.5.

Regulatory infrastructure and administration

A drug regulatory agency would be set up costing £150million a year to regulate the new market in drugs and to enforce the new drugs laws. This speculative costing is loosely based on considering the running costs of the Medical Health Regulatory Agency (£90 million in 2007) the General Medical Council (£73 million in 2007) and the Health and Safety Executive (£213 million in 2007). This cost does

82 Stimson and Metribian, JRRF 2003 'Prescribing Heroin, what is the evidence?' **http://www.jrf.org.uk/sites/files/jrf/1859350836.pdf**

not include any start up costs, or resource transfers from current enforcement administration. There is a need to identify and cost proposed regulatory infrastructure and administration more carefully.

Excluded costs

See excluded costs under prohibition (*p.27*).

This paper does not include the potential reduction of alcohol duty revenue if there were a substitution effect away from alcohol.

Potential increases in other forms of organised criminal activity as illicit drug based criminal opportunities diminish.

Total costs

The total cost of regulated drugs markets across the 4 scenarios would be £3.151 billion, £5.951 billion, £8.752 billion or £11.551 billion per year.

3.2 Benefit of regulated markets

Whilst this paper only considers heroin and cocaine markets because of data limitations, it is assumed that with regards to the rest of the drugs markets: cannabis would be sold through licensed sales and by licensed premises for sale and consumption along the lines of the Dutch coffee shop system (although production would also be legal and regulated). Cocaine powder, ecstasy and amphetamines would be sold through licensed pharmacists/druggists with restrictions on age and intoxication of purchaser, volume rationing and other controls as appropriate/indicated by research on evidence of efficacy relating to a set of clear and agreed performance indicators. Supply would also potentially be available for some drugs, in some circumstances, through prescription models for those with identified dependency issues.

As discussed above, injectable heroin and powder cocaine would be available under prescription models for around 10% of problem users. Crack would not be directly available but it is assumed that if cocaine powder were accessible it would be impossible to prevent the simple process of 'cooking up' into crack. Non-injected substitute opiates would be more widely available on prescription, and lower potency opiates (including slower release oral/pill form and smokable opium) available under the pharmacy/druggist model subject to appropriate controls.

One concept that this paper does not explore nor attempt to cost is the impact that the shift from illicit to legally regulated supply might have on patterns of use in terms of shifts in choice of drug and preparation of drug. One observed effect of prohibition is that the economic pressures of the illicit market tend to cause increased concentration of available drug preparations, which are more profitable per unit of weight. Just as under alcohol prohibition the trade in beers and wines gave way to more concentrated, profitable and dangerous spirits, the same trend has been observed over the past century with opiates—from opium (smoked or in drinkable preparations) through to snorted, smoked and injectable heroin, and more recently with the cannabis market being increasingly saturated with more potent/

profitable varieties. With coca-based products the transformation has been dramatic from coca leaf, through coca based drinks (tea, wines, and other drinks, once including Coca Cola) through cocaine powder and ultimately to smokable crack[83].

It seems likely that users, if a range of drugs and preparations are available, will tend to make rational decisions and shift towards the less harmful drugs, less harmful preparations and less risky behaviours and modes of administration. This phenomenon was observed following the repeal of alcohol prohibition when the market shifted away from spirits back towards beers and wines. Such a shift would be actively promoted and encouraged by a public health guided policy involving targeted education about drug risks combined with differential application of regulatory controls i.e. stricter controls (e.g. higher prices, restricted availability) for more dangerous drugs or preparations. Evaluating potential impacts of such approaches is beyond the remit of this paper but is again a potentially useful arena for future study.

Taxation

It is assumed that VAT, or any other form of tax, would not be levied on prescriptions and it is unclear what the size, or taxable value, of the remaining opioid and cocaine market (subject to a more conventional licensed retailing control model) would be. In the absence of some more concrete calculations we have not included any tax revenue in the benefits of the regulated model.

Whilst working through some speculative calculations, however, it became clear that once the economic pressures of the illicit trade are removed, the value of heroin and cocaine market under the regulated model would contract dramatically, probably by a factor of ten or thereabouts. The result is a market worth, at most, several £100s of millions rather than the current several £billions. It would therefore seem likely that taxable revenue, once the prescription element was removed, would be in the regions of several £10s of millions at most—values that do not dramatically change the overall cost-benefit picture for the regulation model.

Excluded benefits

Taxation revenue, prescription revenue, and savings on current opiod prescriptions are not included—see above.

The benefits from cannabis, ecstasy and amphetamine taxation have not been included as the costs from their use have not been costed or analysed by Government. Whilst revenues from ecstasy and amphetamines would be small—probably single figure millions, taxation revenue from cannabis—given the scale of consumption—could be quite significant under a legal regime. The Independent Drug Monitoring Unit estimates that combining the resin and herbal 'skunk' markets, based on a tax of £1 and £2 per gram respectively, tax revenue from cannabis sales of between a minimum of £341 million and maximum of £1.342 billion annually.

83 For further discussion see Mike Jay 'From soft drink to hard drug – a snapshot history of coca, cocaine, and crack'. http://www.tdpf.org.uk/Policy_General_Cocaine_MJay.htm

Potential positive impacts from a contracting illicit market for producer and transit countries have not been included.

The only health benefits included in this paper are the reduction in drug deaths. Other health benefits would be evident from the use within a legal context—safer products, safer environments, safer behaviours, improved services, development of new social norms/controls around responsible use and so on. These, whilst assumed to be significant, are un-quantified and not included.

The reduction in the wider costs associated with prohibition, enforcement and illegal markets (briefly explored in 2.1 excluded costs) and potential social improvements that would follow are not included.

Possible substitution effects leading to a fall in alcohol, tobacco or inhalant use, are not included (see prohibition excluded benefits).

Total benefit

Whilst a number of benefits have been identified, none has been included for the reasons given.

4 Discussion and Conclusions

Overall, the total costs of prohibition in England and Wales in 2003/04 are estimated to have been £16.785 billion and the total benefit across the 4 scenarios (50% fall in use, no change in use, 50% increase in use, 100% increase in use) are estimated to have been –£309m, £0m, £309m or £618m and so the net cost is estimated to have been £17.094bn, £16.785bn, £16.476bn, £16.167bn

The total cost of regulated drugs markets in England and Wales in 2003/04 across the 4 scenarios would have been £3.151bn, £5.951bn, £8.752bn or £11.551bn per year and, with benefits remaining un-costed in this analysis, these figures also represent the net cost.

The conclusion on this analysis is therefore that regulating the drugs market is a dramatically more cost effective policy than prohibition and that moving from prohibition to regulated drugs markets in England and Wales would provide a net saving to tax payers, victims of crime, communities, the criminal justice system and drug users of somewhere within the range of, for the four scenarios; £13.943 bn, £10.834 bn, £7.724 bn, £4.616 bn.

We recommend that:

* The analysis of the *status quo* alone is sufficient incentive for the cost effectiveness of current enforcement policy/expenditure to be subject to far more rigorous scrutiny than has thus far been evident. Such analysis should be urgently commissioned from an independent academic body and/or similar analysis should be undertaken by the National Audit Office and subject to scrutiny by the Committee of Public Accounts. All commissioned work should be published in full.

* The Misuse of Drugs Act and UK drug strategy should be subject to a full Impact Assessment in line with guidelines applied to all new legislation. This should include evaluation of regulatory alternatives to prohibition.

* A more comprehensive cost benefit analysis should be commissioned and undertaken by the relevant agencies, comparing the costs and benefits of current policy with a range of alternative approaches—including models of legal regulation outlined here.

* A program of research should be commissioned by Government in line with the research gaps identified below, and all previously undertaken and withheld Treasury stock-takes on drug strategy spending and Home Office value for money studies be made immediately publicly available.

Whilst the methodology of a CBA is essentially simple, it is clear that in practice such an undertaking when applied to a policy issue such as drugs - that cuts across multiple policy arenas, both domestic and international - can rapidly become mired in complexity—problems magnified by the generally poor quality of data (illegal activities are, by nature, difficult to measure), the substantial gaps in research and analysis (many of which are identified below), and the fundamental difficulties in measuring many of the more nebulous costs identified.

As a result of the shortcomings identified the analysis in this paper is, by necessity, based on a series of what Harvard professor Jeffery Miron (in reference to some of his own similar speculative work) has referred to as 'heroic assumptions', particularly regards the speculative costings for the regulated model[84]. Doubtless these will be questioned, and we hope they are. Part of the aim of this project has been to make a first attempt at a viable framework for this kind of analysis, and provoke discussion about how it can be refined and developed.

Notable areas of urgently needed research and analysis that this paper flags up include:

* Much clearer attempts to disaggregate drug use harms from drug policy harms—including a comparative analysis of the harm associated with legal use of prescribed pharmaceutical heroin (various models) and the harm associated with the use illicit street heroin (both practical and possible under the *status quo*).
* The cost of the impact of crack and heroin use on children living in crack- and heroin-using households.
* The welfare cost of unemployment associated with prohibition/criminality, rather than drug use *per se*.
* An analysis of the deterrence effects of prohibition and its enforcement at various levels and on various populations/drugs, particularly those most vulnerable to problematic use.
* Development of a methodology for measuring drug availability (overall availability and its various vectors), the systematic collection and publication of data on availability, and more analysis on how changes in availability impact on use and misuse of different drugs in different populations.
* An analysis of the impacts of price changes on levels of use/misuse of different drugs amongst different populations—particularly amongst high harm populations regards heroin and cocaine.
* An analysis of the economic and social costs of Class B and C drugs, notably amphetamines, ecstasy and cannabis.
* An analysis of the costs of prohibition on social economic and political development in producer and transit countries such as Afghanistan, Colombia, Mexico and Guinea Bissau.
* A parallel set of research data for alcohol and tobacco (and potentially inhalants, OTC drugs and prescription drugs used non-medically) for comparative analysis.
* An analysis of the impact of prohibition on street sex work and related costs/harms.

In the longer term key areas for further work will include:

- More detailed analysis of the impacts on demand for different drugs by different population under various regulated market models/ policy scenarios.
- More detailed analysis on the impacts the shift from illicit to legally regulated supply might have on patterns of use in terms of shifts in choice of drugs, preparation of drugs, and drug using behaviours.

Responding to many of these identified gaps in the research base is rightly the responsibility of Government. The situation has moved beyond merely unsatisfactory when serious policy decisions are being based on, as has been demonstrated in this paper, data that has never been collected (for example,

84 personal correspondence with Jeff Miron

as regards availability), analysis that has demonstrably not been done (for example, as regards deterrence effects), and by specific reference to cost-benefit studies that do not exist. The untenable nature of this *status quo* is more acute given that even a cursory reading of the Government's own publications demonstrates current policy is both expensive and delivering outcomes that are clearly the opposite of its stated goals, consistently and over a period of several decades. The political context of these analytical shortcomings cannot be ignored, whether it is an ideological commitment to prohibition, investment in populist drug war posturing, or fear of the domestic and international political implications of questioning the *status quo*, there are clearly substantial obstacles to mainstream policy makers moving forward on this issue that have nothing to do with rational policy analysis and debate.

For the purposes of this paper we have deliberately been conservative in our assumptions, excluded numerous costs associated with prohibition (most prominently its catastrophic international impacts regards conflict and development in producer and transit countries), and excluded a number of potentially significant benefits of regulation. Despite the lack of evidence that prohibition reduces or substantially constrains levels of use or misuse we have also presented costings for the regulation scenarios for increases in drug use of 50% and 100%, and found that even under these improbable and extreme scenarios the regulation model still emerges favourably from this cost benefit analysis. The economic benefits of regulation identified are also of a magnitude to suggest that even the significant margins of error we can assume for this paper's analysis would not alter the conclusion that moves towards legally regulated markets would deliver substantial net savings to the Treasury and wider society.

Considering the costs of the current policy responses, one conclusion is immediately obvious above all others: that prohibition of drugs is the root cause of almost all drug related acquisitive crime, and that this crime constitutes the majority of drug-related harms and costs to society. It is a relatively small subset of the using population, made up of marginalised low income dependent users offending to fund their drug use, who are disproportionately responsible for creating the secondary £13.9 billion in acquisitive crime costs from the £3.7 billion turnover of the illicit market for heroin and cocaine. That the heroin and cocaine market, freed of the distorting influence of criminal market economic pressures, would likely be worth around one tenth of the £3.7 billion figure highlights this particular negative impact of prohibition economics even more starkly.

Compared to the £3.65 billion market for heroin and cocaine and the £13.9 billion crime costs it generates, £40.3 billion was spent on alcohol in 2004[85] and no alcohol related acquisitive crime costs were identified by the Government[86] whilst roughly £13.4 billion was spent on tobacco in 2004 and again no costs of tobacco related acquisitive crime have been identified, even amongst the millions of low income dependent smokers and problematic drinkers. Whilst there are obviously other substantial health and social costs associated with alcohol and tobacco use (and failings in alcohol and tobacco policy alluded to above) the difference in terms of crime costs with illicit drugs is striking. It is reasonable to posit that if the Government were to legally regulate currently illicit drugs markets it would reduce drug related acquisitive crime to a comparably negligible level.

85 Alcohol: Price, legal availability and expenditure. Institute of Alcohol Studies.
http://www.ias.org.uk/resources/factsheets/price_availability.pdf

86 PM's Strategy Unit Report: Alcohol Harm Reduction Strategy for England (2004)
http://www.cabinetoffice.gov.uk/media/cabinetoffice/strategy/assets/caboffce%20alcoholhar.pdf

The Strategy Unit Report of 2003 made it clear that the Government understood this basic analysis—but the response to it was not to question the basic tenets of prohibition, nor to consider alternative approaches, but rather to target massive treatment resources at the population of high harm causing users via the criminal justice system. Whilst no one is opposed to making treatment available to those in need, the idea of using the criminal justice system as a primary tool in administering 'treatment' (often coerced), essentially as a crime reduction measure, has proved controversial and its effectiveness questionable. Moreover, the approach ignores the basic finding that prohibition enforced by the criminal justice system itself is the direct source of much of what is perceived as *'the drug problem'* in the first place, specifically the vast majority of drug related crime. Yet the Government analysis repeatedly fails to acknowledge that prohibition is a policy choice, not a given or fixed feature of the policy landscape that must be worked within, or around.

There are entirely understandable concerns that moves towards legal regulation would see an increase in health costs if availability and prevalence increased as a result. Whilst this is the most frequently stated objection to such a move, as demonstrated here it is not borne out by the evidence and is frequently based on misunderstandings about how post-prohibition regulation would operate. The deterrent effect of prohibition remains un-quantified but the assumption, based on the little relevant research that does exist, has to be that it is marginal, especially for key populations responsible for causing most harms. A similar conclusion can be formed regarding the impact of prohibition on reducing availability. This is a position arguably bolstered by the systematic ongoing evasiveness of Government in pursuing any research into the scale and impacts of these effects at the very heart of the prohibitionist paradigm, beyond repeatedly restating a 'belief' that such effects exist.

There is much speculation about how legal regulation would operate in practice but advocates for moves in this direction point out that whilst some pressures towards increased use would undoubtedly occur, these would be moderated by effective controls on availability, price, marketing and so on, whilst opposing or compensatory pressures could also emerge, significantly including the potential for the redirection of enforcement spending into public health programs; treatment, prevention, education and harm reduction. Significant misconceptions persist that a post-prohibition scenario would be defined by some sort of unregulated commercial free for all, and we hope that this paper has gone some way to correcting this error. The existing absolutist prohibitions on certain drugs sit at one extreme of the policy spectrum, whilst unregulated legal commercial activity sits at the other (undesirable for other reasons, evident from historic failings of inadequate tobacco and alcohol regulation). Evidence based regulation, the model that sits somewhere on the continuum between these two poles, is the rational policy response to managing any potentially harmful commercial activity present in society, and indeed is the norm for almost every other such policy response.

We would go further and say that the impact of drug policy more generally, on levels of use and misuse, has probably been dramatically overstated. It seems likely that levels of enforcement, choices of legal approaches and even investment in treatment, education and prevention have effects, both positive and negative, that are marginal relative to the impacts of wider social, economic and cultural variables. In researching this paper we were struck by the work of Richard Wilkinson[87] that found no correlation

87 See Richard Wilkinson 1996: *'Unhealthy societies, the afflictions of Inequality'* and Wilkinson and Pickett 2009 *'The Spirit Level: Why More Equal Societies Almost Always Do Better'*

internationally between levels of drug use and intensity of enforcement, GDP, or even levels of poverty (although within countries there is a clear localised link between levels of social deprivation and problematic use). A clear and significant correlation was found, however, between levels of drug use and levels of income inequality—thus the US and UK, with high inequality, are consistently shown to have amongst the highest levels of drug use (as well as numerous other indicators of low personal social wellbeing) whilst countries like Sweden and Netherlands, with lower levels of inequality, have amongst the lowest levels of drug use (despite having very different enforcement approaches). As Sanho Tree has noted:

> *"Ultimately, there is no substitute for building a healthy society. The root causes of drug abuse.... (as well as many other societal problems) can be traced back to poverty, despair and alienation."*[88]

Whilst this paper cannot expand on this discourse[89] it is worth flagging up, and the various elements of the drug strategy (as conventionally conceived) may be marginal in determining levels of use and misuse, what the analysis in this paper hopefully demonstrates is that it is far from irrelevant as regards determining levels of secondary drug related harms and associated costs to society.

It is clear that comparing drug use under prohibition and under a future regulated model is not comparing like with like. Not only does the drugs-crime dynamic change dramatically for the better but the landscape of use itself would change. Through a combination of evidence-led deployment of public health based regulatory tools and increased choice we can reasonably speculate that social norms about more responsible drug use could be fostered, and that use would migrate over time from more to less harmful drugs, preparations, modes of administration, and behaviours. In reality it is possible, and we would suggest likely, that drug related health risks/harms/costs per user, under a regulated model, would decrease to a degree that would more than compensate for marginal prevalence increases, should they occur.

Finally we acknowledge that there is something rather coldly utilitarian about cost benefit analysis such as this and many will find the process of ascribing monetary values to what is the very real human suffering of dependency, death and crime victimhood somewhat distasteful. Whilst sharing that distaste we must also acknowledge that such analysis has its place; in provoking discussion, and in rationalising the debate for policy makers who, for better or worse, have to make rather cold utilitarian policy decisions on a daily basis. They are spending our money on policies that have direct costs and benefits for us. And even if this analysis seems distant from the human face of every day experience, its conclusions point to the fact that there is a far higher human cost under the current policy of criminally controlled drug markets than would occur under policy alternatives involving state control and regulation. And that, ultimately, is the crux of this debate.

88 Sanho Tree 2009

89 Further discussion of the links between income inequality and drug use/misuse can be found in Emily Crick's chapter on *'Wellbeing and drug policy'* in 'The Politics of Narcotic Drugs', Ed. Julia Buxton, Routledge, May 2009

Annex

A table setting out the costs and benefits of the prohibition and regulation of the drugs market (heroin and cocaine)

PROHIBITION

Cost

- Drug-related acquisitive crime: £13.9bn
- Health and social care costs: £557m Drug-related death: £923m
- Economic and social costs of recreational Class A drug use by younger and older people: £61.3m
- Drug strategy: £1.344bn

Total Cost

£16,785 bn

Benefit

- Health and social care savings from constrained demand: - £278.5m, £0m, £278.5m or £557m.
- Economic and social savings from deterrent effect of prohibition on Class A drug use: -£30.65m, £0m, £30.65m or £61.3m

Total Benefit

-£309m, £0m, £309m or £618m

NET COST OF PROHIBITION

£17.094 bn, £16.785 bn, £16.476 bn, £16.167 bn

REGULATED MARKETS

Cost

- Drug-related crime: £1.738 bn, £3.475 bn, £5.213 bn or £6.95 bn
- Health and social care: £278.5m, £557m, £835.5m or £1,114m
- Drug-related death: £231m, £462m, £693m or £923m.
- Economic and social costs of recreational Class A drug use by younger and older people : £30.65m, £61.3m, £91.95m or £122.6m
- Drug strategy: £600m, £1,000m, £1,400m, £1,800m
- Prescriptions of diamorphine and cocaine: £122.85m, £245.7m, £368.55m, £491.4m
- Administration of the regulatory system: £150m

Total Cost

£3.151 bn, £5.951 bn, £8.752 bn or £11,551 bn per year

Benefit

- Potential tax revenues and other benefits not included

Total Benefit

£0

NET COST OF REGULATED MARKETS

£3.151 bn, £5,951 bn, £8,752 bn or £11.551 bn