The Opium Economy
A possible approach to reform

Jeremy Berkoff

1. Introduction

Much has been written about illicit drugs and the harm that they do. Options for addressing this harm range from intensified prohibition, through differing forms of regulation, to full liberalisation of drug markets. The official consensus is close to full prohibition and the United Nations points to “encouraging signs of mid-term containment”, arguing that any weakening of resolve would undermine the regime as it shows signs of success. But many reject this consensus. In supplying countries, a degree of tolerance appeals to cultural traditions (as in Bolivia), farmer livelihoods or the costs of prohibition. In transit countries, trade is facilitated by corruption, rogue states (as by North Korea) and banking regulations (as in tax havens). And in consuming countries, personal use of ‘soft’ drugs has been liberalised (as in Holland, even ‘hard’ drugs as in Russia), opium and its substitutes are given on prescription (as in some European countries) and a blind eye is turned to limited drug activities (as in the UK). Shifts in practice are complemented by numerous proposals for further reform.

This paper accepts the general case for reform. But, in contrast to many observers,\(^1\) it reviews options within a holistic context, arguing that the drugs trade must be understood as a total system. Taking opium as an example, markets are tracked from Afghanistan to the UK so as to throw

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\(^1\) Most observers focus on either supplying or consuming countries. Reports focusing on Afghanistan include those by the United Nations Office on Drugs and Crime (UNODC 2000; 2006), the World Bank (Byrd & Ward 2004; Ward & Byrd 2004; Byrd 2006) and the Senlis Council (Senlis 2005; 2006); those focusing on the UK include those by the Prime Minister’s Strategy Unit (2003a; 2003b), the Royal Society for the encouragement of Arts, Manufactures & Commerce (RSA 2007) and the Transform Drug Policy Foundation (Transform 2006). These build on a research literature that has documented production and trade in great detail, a detail that is far beyond the scope of the present paper.
light on how this system works. A holistic approach highlights in particular the difference between farmgate and retail prices (a ratio of 1:25 or more). This difference is often attributed to excessive profits. But if drug markets are even moderately competitive, profits would have to be unreasonably high for this to be the main explanation. More important must be the costs and risks linked to their illicit nature. If so, rather than prohibition and reform being alternatives, the key might be to maintain prohibition while adopting a strategy that diverted trade into public hands. As public supply expanded, trafficking would contract. With the costs and risks of trafficking kept high, public agencies could in due course adopt a form of ‘predatory pricing’ designed to eliminate residual private profits. Regulated local markets might also be created to complement public supply. Since public supply, regulated markets and predatory pricing would not be designed to suppress demand altogether, they would need to be backed by continuing treatment and education designed to suppress use as far as possible.

A merit of this approach is that it could be implemented incrementally, limiting the need to confront those who support prohibition. The paper suggests how such a gradualist approach might be realized. The first part reviews the economic forces at work in the opium economy, quoting liberally from UN, Afghan and UK reports. The second reviews some past reform proposals before presenting the proposed approach. The paper ends with a concluding note.

2. Economic forces

2.1 General

Data are unreliable but the United Nations Office on Drugs and Crime (UNODC) has done much to quantify the drugs trade. A recent Royal Society for the encouragement of Arts, Manufactures & Commerce (RSA) report gives a good introductory summary:

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2 Predatory pricing can be defined as: “An anti-competitive measure employed by a dominant company to protect market share from new or existing competitors. Predatory pricing involves temporarily pricing a product low enough to end a competitive threat” (www.investorwords.com). The proposed mechanism would aim to squeeze out illicit drug competitors by the pricing strategies of public agencies and by the prices maintained in regulated local markets. But rather than maximising revenues, or the profits of licensed traders, the aim thereafter would be to steadily suppress drug use.
... illegal drugs are a business ... that, though illegal, operates in most ... ways like any other large-scale business. It operates in a global market. That market is highly competitive ... There is no reason to think that ... [it] can simply be closed down ... Its operations are ... secret or disguised with the help of expert lawyers and accountants ... but no one would deny that illegal drugs are a multi-billion dollar global commodity. [The UN's best estimate of the value of the market in 2003 was $13 B at the production level, $94 B at the wholesale level ... and $322 B at the retail level ... The largest market is for cannabis herb (with a retail market size in 2003 of $113 B), followed by cocaine ($71 B), the opiates ($65 B), [ATS ($44 B)] and cannabis resin ($29 B). While UNODC is reasonably confident with its estimations on opiates, cocaine and the ATS ... certainty is far lower for cannabis ... [recently] the market for opiates is up following a renewed supply-push from Afghanistan ... The market for cocaine is [also] up ... with a ... noticeable rise in demand in Europe ... In terms of profitability, cocaine is perhaps the world's number one drug, thanks to the combination of high demand and a relatively high price, as compared with heroin (high price but relatively low demand) and cannabis (high demand but relatively low price) (RSA 2007).

US$322 billion is equivalent to 0.7% of Gross World Product (CIA 2007). If the wholesale value of drugs approximates their value in world trade, they account for about 0.7% of total imports or 12% of agricultural imports (WTO 2005). These are large figures and a further RSA statement is thus unconvincing: “Far from illegal drugs being expensive ... they are in fact remarkably cheap” (RSA 2007 op. cit.). This is highly questionable. UN estimates imply a wholesale to farmgate price ratio of 8:1 and a retail to wholesale ratio of 3:1 (25:1 in total). Mark-ups for hard drugs must be well above this average given much longer supply lines and higher risks (Section 2.3). Such huge mark-ups cannot be explained by normal processing and marketing costs, even allowing for high profits. They must also reflect the additional costs arising from their illicit nature. These include the costs of drug seizures and other losses, secrecy, corruption, lack of integration, money laundering, etc., and the very high-risk premiums demanded. Though prices are contained by competition and have fallen for explainable reasons (Section 2.2), they would collapse far below present levels if the drug trade were to be fully liberalised. It is thus misleading to say that drugs are “remarkably cheap”. Interception has failed to prevent drug supplies getting through in quantities that meet demand at

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3 The competitiveness of the retail market is well described in a chapter in *Freakonomics* entitled “Why do drug dealers still live with their moms?” (Levitt and Dubner 2005).

4 UNODC 2006.
prevailing prices, but prohibition maintains prices well above those that would prevail under a fully liberalised trading regime.

2.2 Issues in supply

World trends

Figure 1 summarises trends in cultivated area under illicit poppies, and Figure 2 those of potential output of illicit opium and heroin. Several conclusions arise: (i) cultivated area worldwide has declined since 1990, perhaps providing “encouraging signs of mid-term containment” (UNODC 2006, op. cit.); (ii) however, there has been no comparable fall in potential production, and average yields have risen; (iii) Afghanistan’s share had also risen markedly; and, finally, (iv) the absolute numbers are tiny. The area in 2005 was just 151,000 ha or 0.01% of world arable area. Even in Afghanistan, poppies occupied just 1.3% of arable land, equivalent to 4.0%–4.5% of the area under wheat and 3.5%–4.0% of irrigable land (perhaps 7% of actual irrigated area in 2004). World potential output in 2005 was equivalent to no more than 472 tonnes of heroin. This could be carried in four Boeing 747 freighter aircraft.

Figure 1: Cultivation of illicit opium poppies

Note: The anomalous 2001 estimates reflect the ban in Afghanistan under the Taliban Government.
Source: UNODC 2006.
The Opium Economy

Trends in Afghanistan

Despite these tiny numbers, “the impact … on Afghanistan’s economy, polity, and society [has been] profound, producing some short-run economic benefits for the rural population and macro-economy but major adverse effects on security, political normalization … state-building … [and] sustainable longer-term economic development” (Byrd and Ward 2004). Ward and Byrd (2004) put drug-related income in 2004 at US$2.8 billion, more than a third of national drug-inclusive GDP (54% of drug-exclusive GDP). Instability has limited opium’s macro-economic benefits, which have also been limited by exchange rate and capital flow effects. Farmgate prices perhaps weakened in real terms during the 1990s. If other things had remained equal, output would probably have continued to rise and real prices to fall. However, other things did not remain equal. The Taliban ban was a massive shock. Output plummeted and farmgate prices soared (Figure 3). With the Taliban’s overthrow, output recovered and farmgate prices again fell. Once Afghanistan consolidates its world dominance in opium production, farmgate prices will probably settle at some broad equilibrium level while varying in response to climate, the impact of prohibition and other factors (but see below).
These trends reflected shifts in relative negotiating power: “the lion’s share of opium income in the 1990s went to traffickers … [in contrast] close to half the annual gross income … [accrued] to the farm level in 2002 and 2003, although this share [again] declined sharply as farmgate prices fell in 2004” (Ward & Byrd, 2004). The Taliban ban thus gave a windfall gain to the few farmers that grew poppies during the ban and to all opium farmers for a time thereafter. By 2004 the situation was returning to ‘normal’. Ward & Byrd estimate income at farmgate prices in 2004 at “more than $600 million”, implying that 75%–80% of total income again accrued to traffickers. These trends have continued: “the Winter Survey suggests that opium cultivation in Afghanistan in 2007 may not be lower than the record harvest” (UNODC 2007) and press reports suggest a significant rise. Prices rose in mid-2005 due *inter alia* to drought, but fell back in 2006 in response to the record harvest. In the light of the 2007 Winter Survey, prices for the remainder of 2007 will undoubtedly weaken further.

*Market Competitiveness*

Ward & Byrd (2004) suggest two possible models for the drug market. On the *cartel* model, drug prices remain relatively high, excess profits are generated notably outside Afghanistan, and both production and drug incomes rise relatively slowly. On the *competitive* model, opium prices equate to marginal costs, excess profits are eliminated, normal profits cover a risk premium, and interdiction costs and output grow in line with
demand: “The nightmare scenario under the competitive model is one of an efficient, competitive drug industry increasingly embedded in Afghan society and with low opium prices stimulating world growth in demand”. The evidence tends to confirm the “nightmare” competitive model. Ward & Byrd (2004) agree: “Opium markets in Afghanistan seem to operate efficiently as small scale, rapid turnover businesses … there is no evidence of cartels” even though “the lion’s share” of income goes to traffickers (op. cit.). Perhaps the risks and costs of interception are rising, perhaps “more opium is now processed into morphine and heroin within Afghanistan”. ‘Taxation’ by warlords, the Taliban and others is also highly significant. Thus, competitive conditions broadly coexist with high costs and taxes due, on the one hand, to interdiction and, on the other, to the ‘taxes’ levied.

Alternative crops
According to Ward and Byrd (2004), “in the 1990s … several crops were financially competitive with opium, [though] this … changed drastically after the Taliban ban”. Table 1 provides evidence from a UNDCP project before the Taliban ban.

Black cumin, onions and orchard crops earned a higher gross income than opium before the project. With the project, so did white cuminin
Table 1: Profitability of crops in 2000 in three target districts of Kandahar

<table>
<thead>
<tr>
<th></th>
<th>Yields: tonnes/ha</th>
<th>Gross income: US$ per hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before project</td>
<td>After project</td>
</tr>
<tr>
<td>Winter crops</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Opium poppy</strong></td>
<td>0.0301</td>
<td>n.a.</td>
</tr>
<tr>
<td>Wheat</td>
<td>1.80</td>
<td>3.50</td>
</tr>
<tr>
<td>Black cummin</td>
<td>0.90</td>
<td>1.35</td>
</tr>
<tr>
<td>White cummin</td>
<td>0.70</td>
<td>1.30</td>
</tr>
<tr>
<td>Onion</td>
<td>15.00</td>
<td>24.00</td>
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<tr>
<td><strong>Summer crops</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maize</td>
<td>2.00</td>
<td>4.50</td>
</tr>
<tr>
<td>Beans</td>
<td>1.35</td>
<td>2.25</td>
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<tr>
<td><strong>Orchards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grape</td>
<td>10.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Pomegranate</td>
<td>7.5</td>
<td>18.0</td>
</tr>
<tr>
<td>Apple</td>
<td>18.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Almond</td>
<td>11.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Apricot</td>
<td>8.0</td>
<td>13.0</td>
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<tr>
<td>Weighted average: legal crops</td>
<td>n.a.</td>
<td>n.a.</td>
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and—perhaps surprisingly—wheat, the main irrigated winter crop that competes with opium. Table 1 implies that opium is ‘just another crop’. But the picture is more complicated than a simple reading of the table might suggest. Comparisons should reflect net rather than gross returns, and account for the investment costs and risks of tree crops; risk-taking capacity varies greatly between farmers; and subsidies help explain differences between ‘before’ and ‘after’. But perhaps the most critical issue is price:

- Traditional export items (almonds, raisins, dried apricots, etc.) are low-weight, high-value preservable items adapted to a land-locked country with an arid climate. They represent an obvious export opportunity once the security situation stabilises. However, commercial risks will confine orchards to rich farmers with access to irrigation. Thus, even though Afghanistan is a price receiver for these items, orchard areas will inevitably be limited.
Onions and beans are low value-to-weight annual crops with a limited risky domestic market and few export prospects. They are also largely confined to entrepreneurial farmers. In contrast, wheat is a tradable good. But in its case, exports are limited by the low value-to-weight ratio and by the resulting difference between export and import equivalent prices. If all farmers obtained 3.5 t/ha (Table 1), local markets would be swamped and prices would collapse to export equivalent levels. Some farmers would be bankrupted, fertiliser use would decline, and yields would fall back the following year. In other words, yields are limited as much by market as by physical conditions (Berkoff 2001). That a high yield is feasible on a small, subsidised project does not mean that average national yields could reach such levels.

Opium is exceptional as a low-weight, easily preserved, high-value annual crop adapted to Afghan conditions and readily exportable. Now that Afghanistan dominates supply, world prices are set relative to Afghan costs and by the costs and risks of trafficking Afghan products. The expansion of low cost Afghan production largely explains the steep decline in world prices during the 1990s (Figure 5). The Taliban ban muddied the picture, but this price decline was effectively a one-off effect as Afghanistan took over the market and it is misleading to state that “instead of rising, [drug prices] tend to fall” (RSA 2007 op. cit.).
What does this imply? Orchards, vineyards and vegetable crops can out-perform opium if security conditions allow and irrigation is assured, but areas will be confined by local markets for non-traded goods and by the financial costs and risks of tree-crop exports. By far the most important substitute for opium will thus remain wheat. Wheat yields may rise in response to local demand and if world prices maintain their current upward trend. In a good year, this might lead to an export surplus. But export-equivalent prices would in turn depress local prices and, via this feedback loop, yields would adjust to a level broadly determined by local demand. Moreover, opium prices can readily respond so as to preserve profitability relative to wheat. If farmgate prices rise, wholesale prices would also rise as traders preserved margins and warlords preserved taxes. So long as it retains its comparative advantage, world demand for illicit opium can thus readily be met by Afghanistan at whatever price level develops.

**Comparative advantage**

Will Afghanistan retain its comparative advantage? Afghanistan and Myanmar have dominated illicit production in recent years. Both are relatively isolated, unstable countries with abundant labour and few other economic opportunities. But Afghanistan is greatly favoured by aridity, sunshine and irrigation. Afghan yields have been no less than four times those in Myanmar (Figure 6), and this gives Afghanistan a decisive advantage.

The UNODC thus exaggerates when it says that the collapse of Myanmar output is “an overlooked success story”. This collapse reflects the working of a typical market. Declining world prices (Figure 5) drastically reduced returns to low-yielding SE Asian cultivation so that farmers shifted to more sustainable crops and activities (their incomes no doubt declining in the process). The Taliban ban was similarly effective within

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5 “Sustained progress has been made by the governments of Myanmar and Lao PDR in addressing illicit opium poppy cultivation. In 2005, Myanmar achieved a further reduction of the total area under cultivation, by 26 per cent to 32,800 hectares … Since 1998 … opium poppy cultivation in these two … countries has been reduced by 78 per cent” (UNODC 2006). Stating that the Myanmar government “achieved” a reduction is very misleading given that most cultivation takes place outside its jurisdiction and is exported via Thailand and China. Not only are trade routes longer than from Afghanistan but Thai efforts, including the massacre of more than 2,000 suspected drug dealers in early 2003 (Human Rights Watch 2004), have added greatly to perceived costs and risks. Moreover, the decline in poppy output has no doubt weakened the Karen and Shan rebels. According to press reports, the government itself is considering poppy cultivation, always of course possible for a rogue state whatever the price.
Afghanistan because farmers anticipated high real costs if they ignored it—they might be killed or imprisoned or excluded from society. If terror and/or religious sanctions had sustained the ban, prices might well have risen permanently, perhaps returning cultivation to Myanmar despite its low yields. The earlier “success” in Thailand similarly reflected market conditions. Opium is management and labour intensive. During the 1970s and 1980s, Thailand lost its comparative advantage relative to poorer SE Asian countries due to such factors as urbanisation, rapidly rising wages, expanding markets for high value crops, transport integration and extension of the rule of law. If Afghanistan was to be as economically successful as Thailand, it might similarly lose its comparative advantage. But such an outcome is highly unlikely, not least because wages would have to rise relatively much more than in Thailand in view of the high Afghan yields.

The most likely outcome is therefore that Afghanistan will consolidate its position. Over time, farmgate prices might rise to sustain returns above those of wheat and to reflect the costs and risks of more active eradication programmes. World prices would then adjust. If eradication is more successful than anticipated, world prices might in principle rise sufficiently for output to move back to the Golden Triangle or elsewhere (Iraq? Somalia?). The bottom line is that demand will be supplied from somewhere, at a price that balances supply and demand.

Figure 6: Opium yields—Afghanistan and Myanmar

Source: UNODC 2006

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<thead>
<tr>
<th>Year</th>
<th>Afghanistan</th>
<th>Myanmar</th>
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<tbody>
<tr>
<td>1990</td>
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<td>1991</td>
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<td>2005</td>
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</table>
Jeremy Berkoff

Legal supply
It surprises some that legal cultivation is as extensive as illicit cultivation (Table 2). Most legal output is harvested as poppy straw, though in India it is harvested as opium (labour costs in India are comparable to those in Afghanistan). Morphine, codeine, and other alkaloids are derived from both opium and straw (Table 3). Illicit and legal production are not strictly comparable and illicit data are included only to indicate orders of magnitude.

Table 2: Legal areas of opium poppies cultivated for opium and straw (hectares)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opium</td>
<td>32,385</td>
<td>18,243</td>
<td>18,477</td>
<td>12,490</td>
<td>18,751</td>
<td>8,376</td>
<td>7,550</td>
</tr>
<tr>
<td>Straw rich in morphine</td>
<td>84,084</td>
<td>116,019</td>
<td>128,220</td>
<td>155,167</td>
<td>87,223</td>
<td>147,900</td>
<td>156,022</td>
</tr>
<tr>
<td>Straw rich in thebaine</td>
<td>7,362</td>
<td>12,526</td>
<td>10,405</td>
<td>9,170</td>
<td>7,581</td>
<td>8,140</td>
<td>7,350</td>
</tr>
<tr>
<td>Total legal area</td>
<td>123,831</td>
<td>146,788</td>
<td>157,102</td>
<td>176,827</td>
<td>113,555</td>
<td>164,416</td>
<td>170,922</td>
</tr>
<tr>
<td>Memo item</td>
<td>Total illicit area</td>
<td>221,952</td>
<td>142,094</td>
<td>180,172</td>
<td>168,600</td>
<td>195,940</td>
<td>151,500</td>
</tr>
</tbody>
</table>

1 Figures for 2005 and 2006 are estimates.
2 Estimated illicit area derived from Figure 1.
Source: INCB 2006.

Table 3: Production of legal codeine, morphine and thebaine (tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>15</td>
<td>21</td>
<td>15</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Morphine</td>
<td>294</td>
<td>302</td>
<td>328</td>
<td>378</td>
<td>358</td>
</tr>
<tr>
<td>Thebaine</td>
<td>n.a.</td>
<td>23</td>
<td>53</td>
<td>77</td>
<td>78</td>
</tr>
<tr>
<td>Total</td>
<td>309</td>
<td>346</td>
<td>396</td>
<td>468</td>
<td>449</td>
</tr>
<tr>
<td>Memo item</td>
<td>Potential heroin</td>
<td>469</td>
<td>160</td>
<td>449</td>
<td>466</td>
</tr>
</tbody>
</table>

1 Production in any one year does not correspond to the areas quoted in Table 2.
2 Production of codeine derived from opium. Codeine is also produced through the transformation of morphine whether derived from opium or poppy straw.
3 Production of morphine derived from opium, poppy straw and concentrated poppy straw.
4 Production of thebaine derived from opium, poppy straw and concentrated poppy straw. No data for 2000.
5 The total production of codeine, morphine and thebaine as defined above (no data for thebaine in 2000).
6 Potential heroin derived from Figure 2, corresponding to the estimated illicit areas in Figure 1.
Source: INCB 2006.
It is worth quoting from a paper on Tasmanian opium:

The industry is characterised by a high degree of vertical integration … Australia produced 51% of the world’s morphine CPS [concentrated poppy straw] in 1998 … Turkey produced 23%, France 21% and Spain 4%. The other major [legal] producer is India, which manufactures … opium. … Of the countries which grow poppies for CPS, Australia has 10.7% of the crop area, and produces 45.8% of [output] … Tasmania’s natural advantages coupled with technological developments and skilled farmers have enabled Tasmania to consistently produce the highest alkaloid yields in the world … The isolation of Tasmania is also an advantage for narcotic security … (Fist 2001).

The alkaloid yield in Tasmania averaged 9.3 kg/ha between 1994–98 compared to a potential heroin yield worldwide of about 2 kg/ha, based of course on different varieties. Opium yields in India are comparable to those in Afghanistan and much higher than in Myanmar. Opium is suited to low wage economies whereas straw is harvested mechanically.

The legal trade is much less competitive than illicit trade: “The USA has a policy of sourcing 80% of its narcotic raw materials from… India and Turkey (the “80:20” rule)” (Fist op. cit.). Production can shift radically due to policy and/or subsidies. Subject to these, the legal crop is in many ways ‘just another crop’. Farmers grow it if it is to their financial advantage but shift to other crops if relative returns decline. The Tasmanian area, for instance, fell from 20,000 ha in 2000 (1,250 growers) to 10,000 ha in 2006 as other countries promoted the crop (including the UK which licensed 1,500 ha in 2004). Thus, while it may have appeared to the Tasmanian authorities that “The major challenge … is to continue to improve … cultural practices and … alkaloid content” (DPIW 2004), the real challenge lay in the distorted international market.

The industry contributed “around $200 million to the Tasmanian economy … some farmers getting returns of up to A$6,000 per hectare [about US$5,000]” (DPIW 2004 op. cit.). By analogy, this suggests a total value worldwide of perhaps US$0.50bn–$0.75bn. Allowing for a 50%–100% mark-up for processing, trade and retail costs, the total value at retail level seems likely to have been in the order of US$1.0bn–$1.5bn. In other words, the retail value of the legal crop was no more than about 2%–3% of that of the illicit trade (US$65bn—UNODC 2006 op. cit.). Since gross returns at farm level in Afghanistan are only some US$800/ha (Table 1), the difference is almost entirely explained by the high margin between farm and retail levels in the illicit trade.
2.3 Issues in trafficking

Routes and seizures

Trafficking follows multiple channels and responds flexibly to sources of supply, interdiction and emerging demand. Global seizures in heroin equivalent have risen more rapidly than use (Figure 7) and in 2004 were equivalent to 24% of potential world output. Despite countries along routes from Afghanistan to Europe being characterised by weak governance, they accounted for 85% of the total in 2004 (UNODC 2006) and though interdiction has failed to stop supplies, seizures and other measures have greatly added to the costs of trafficking. Indeed, the decline in wholesale prices (Figure 5) might otherwise have been (much?) greater, given that yields in Afghanistan are so much higher than in SE Asia (Figure 6).

![Figure 7: Global seizures of opiates in heroin equivalent](image)

Source: UNODC 2006

Trafficking costs and prices

“We do not know as much as we would like about the middle link of [the] chain as the drug trade is notoriously hard to monitor” (UNODC 2006). Despite the uncertainties and inconsistencies, however, the pattern seems clear and as might be expected (Table 4). Retail prices are two to three times wholesale prices and the further the country is from Afghanistan, the higher are both retail and wholesale prices.

The estimates in Table 4 cannot be readily compared with Afghan farmgate prices since farmers sell opium rather than heroin and the heroin
market within Afghanistan appears distorted. But, whatever the true picture, substantial costs are clearly incurred between Afghanistan and the UK. Traffickers are notoriously skilled in varying smuggling routes and keeping one step ahead of the authorities. Even so, enhanced interdiction ensures that their costs and risks remain high whichever route is taken. If international trade was to be fully liberalised, costs in principle need be no more than those incurred in the legal trade and retail prices would fall drastically.

Legal trade

Procedures governing the legal trade seem to work well, at least at international level: “In 2005, as in recent years, no cases involving diversion of narcotic drugs from licit international trade into the illicit traffic were detected … [though] the diversion of pharmaceutical preparations … from domestic distribution channels … [has] continued in many countries” (INCB 2006). The 1961 UN Convention on Drugs requires that countries allowing poppy cultivation establish one or more national agencies with exclusive rights for “importing, exporting, wholesale trading and maintaining stocks other than those held by manufacturers of opium alkaloids,
medicinal opium and opium preparations” (UN 1972). Whereas international trade and the handling of opium by national agencies and licensed firms appears to be under control, distribution of opium preparations within each country is subject to leakage, due presumably to the widespread location of hospitals and other distribution points (Shipman’s murders in the UK being a notorious example of domestic leakage).

2.4 Issues in demand

Trends

About 16 million people worldwide use illicit opiates (0.4% of the population aged 15–64) (Table 5) (UNODC 2006). UNODC concludes that: “Opiates continue to be the main problem drug world-wide, accounting for almost two thirds of all treatment demand in Asia and close to 60 per cent of treatment demand in Europe”.

<table>
<thead>
<tr>
<th></th>
<th>Estimated number of users</th>
<th>% population aged 15–64</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Of which heroin</td>
</tr>
<tr>
<td>Europe</td>
<td>4,030</td>
<td>3,340</td>
</tr>
<tr>
<td>North America</td>
<td>1,300</td>
<td>1,240</td>
</tr>
<tr>
<td>South America</td>
<td>980</td>
<td>300</td>
</tr>
<tr>
<td>Asia</td>
<td>8,530</td>
<td>5,430</td>
</tr>
<tr>
<td>Oceania</td>
<td>90</td>
<td>30</td>
</tr>
<tr>
<td>Africa</td>
<td>910</td>
<td>910</td>
</tr>
<tr>
<td><strong>World total</strong></td>
<td><strong>15,840</strong></td>
<td><strong>11,250</strong></td>
</tr>
</tbody>
</table>

Source: UNODC 2006

The UK has one of the highest incidences of illicit opiate use, although most recent increases are attributable to Asia, especially countries lying along the trafficking routes (Iran, South and Central Asia, Russia). Dependant users of alcohol and tobacco are, however, far more numerous than those dependent on illicit drugs (Table 6): “Relative degrees of addictiveness are debated, but it is generally agreed that nicotine is the most addictive of psychoactive substances, ahead of heroin and crack cocaine” (RSA 2007). The Strategy Unit (2003a) classifies 280,000 (“between 200,000–400,000”) opiate and crack users as causing “high
harm”, of which 136,000 use only opiates (heroin and methadone), 22,000 only crack, and 120,000 both opiates and crack. Another estimate of Class A drug problem users ranges from 281,000 to 506,000 with a median of 337,000 (Godfrey et al. 2002). Finally, an unsourced but “current” estimate quoted by the RSA (RSA 2007) puts problematic users at 327,466—“an increase of more than 50,000 over the previous estimate, produced little more than five years ago”.

Opiate consumption in the UK is surprisingly recent. After years of minimal use, new users rose modestly in 1976–86 but then expanded dramatically (Figure 8). This coincided, perversely, with intensified international and UK efforts at prohibition: “The world began a process that would eventually globalize drug prohibition in the form of the UN Convention on Drugs in 1961, followed by two further treaties in 1971 and 1988 … The UK’s substantive domestic response came in the form of the Misuse of Drugs Act 1971” (Transform 2006).

According to the Strategy Unit, opiate use peaked in 1996 and then levelled off. This is consistent with the British Crime Survey (Figure 9). The BCS is, however, a household survey and fails to capture many problematic drug users who often lead chaotic lives. Thus, even if opiate use has stabilised, the number of problematic users may well have continued to rise.
Figure 8: Three estimates of new opiate users in the UK, 1968–96

Source: De Angelis, Hickman and Yang (unpublished), quoted in Strategy Unit 2003b
Note: The Strategy Unit fails to identify the three sources of these estimates.

Figure 9: Use of the most prevalent drug types

Source: British Crime Survey 2005/06, quoted in Roe and Man 2006
What are the costs to society?
The world retail drugs market in 2003 was about US$322 billion (UNODC 2006 op. cit.) or £165 billion. According to estimates quoted by the RSA (RSA 2007), the UK—with about 1% of world population—accounts for perhaps 2.5%–4.0% of total sales of illicit drugs. The UK market for heroin is worth about £1.9 billion (3% of the world total), with the value of heroin and cocaine together valued at about £2.9 billion, equivalent to 0.2% of GDP. Sales of alcohol and tobacco are much higher, though these are in part accounted for by tax. Large though the drugs market is, it is dwarfed by the ‘harms’ attributed to drug use (Table 7). Estimates are speculative but some broad conclusions are possible: premature deaths due to tobacco are far higher than from alcohol or illicit drugs; health care and life costs are broadly shared between illicit drugs, alcohol and tobacco; and crime costs attributable to drugs (especially problem drugs) are higher than those for alcohol and far higher than for tobacco.

“It is important to make the distinction between the harms that result from drug misuse and the harms that are a result of policy” (Transform 2006). Premature death, health care costs and lost productivity tend to be due to misuse, while crime tends to be due to policy. Quoting various sources, the RSA puts deaths in the UK attributable to tobacco at 106,000

<table>
<thead>
<tr>
<th>Table 7: Market value, tax revenue and costs—UK (£bn approx.)</th>
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<tr>
<td>Reactive gov. exp</td>
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<tr>
<td>Market value</td>
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<td>Tax revenue</td>
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<tr>
<td>Costs</td>
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<tr>
<td>Premature death</td>
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<tr>
<td>Health care</td>
</tr>
<tr>
<td>Work &amp; other</td>
</tr>
<tr>
<td>Crime</td>
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<tr>
<td>Total</td>
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</table>

^1 Almost entirely accounted for by smuggling of cigarettes.

Sources: See column headings.
in 2004, compared to 8,350 from alcohol and perhaps 700–800 from illegal drugs, mostly heroin: “It is worth asking why we are more shocked by drug-related deaths than deaths from other types of substance abuse” (RSA 2007). Health costs cover treatment of drugs and of conditions due to drug use. Costs of lost quality of life and output are much less certain, though these are put at three times health costs. They cover lost output and damage to mental health and life skills.

Health and social functioning costs are, however, far exceeded by those due to crime. In the UK, 83% of all offences are committed by drug users, of which 56% are drug-motivated (Table 8). Drug-motivated crime accounts for 33% of total crime costs, including much property crime, and most shoplifting and burglary. The link to high trauma crime is less marked, though drug-motivated crime accounts for most muggings and

<table>
<thead>
<tr>
<th>Table 8: Indicators of non-drug and drug-motivated crime in the UK</th>
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<tbody>
<tr>
<td><strong>Offences</strong></td>
</tr>
<tr>
<td>Total costs</td>
</tr>
<tr>
<td>Of which: no trauma</td>
</tr>
<tr>
<td>low trauma</td>
</tr>
<tr>
<td>medium trauma</td>
</tr>
<tr>
<td>high trauma</td>
</tr>
<tr>
<td>Shoplifting</td>
</tr>
<tr>
<td>Domestic burglary</td>
</tr>
<tr>
<td>Non-domestic burglary</td>
</tr>
<tr>
<td>Theft from motor vehicle</td>
</tr>
<tr>
<td>Robbery</td>
</tr>
<tr>
<td>Fraud</td>
</tr>
<tr>
<td>Theft of motor vehicle</td>
</tr>
<tr>
<td>Stranger and acquaintance violence</td>
</tr>
<tr>
<td>Muggings</td>
</tr>
<tr>
<td>Homicides</td>
</tr>
</tbody>
</table>

1 Including 17 million offences committed by drug uses that are not motivated directly by drug use.

Source: Strategy Unit 2003a
130 homicides per year. Of cost attributable to drug-motivated crime (£19 billion), 85% is due to 280,000 heroin and crack users. The 30,000 highest offending users account for more than 50% of all drug-motivated crime and the highest offenders cost as much as £360,000 per user per year. Moreover, drug-motivated crime more than tripled between 1995–2002, whereas other crime remained relatively stable (Figure 10).

Supply-side responses

Figure 11 gives an assessment by the Strategy Unit of how demand is likely to respond to supply-side interventions. Perhaps the most important conclusion is that high prices reduce initiation rates. It thus appears critical that prices in illicit markets should be maintained at least at present levels so as to limit new users, especially amongst children.
3. Policy prescriptions

3.1 General

Regarding illicit drugs, the world is faced by a paradox. On the one hand, governments and international agencies have demonised their use—notably of heroin and cocaine—and spent billions on an unending ‘war’ to eradicate production, interrupt trade and suppress usage. On the other hand, opium and cocaine contribute to the incomes of poor farmers; traffickers have become skilful and ruthless in marketing drugs; and consumers simply ignore official prohibition. At the heart of this paradox are money and pleasure. So long as profits are to be made, farmers will cultivate opium and cocaine, and traffickers will support cultivation and market the output. The world is too large and governance too weak for eradication and interception to be more than partially successful. Given the harm that drugs do, the most surprising fact is that demand persists.
But persist it does (Section 2.4). Exploited by pushers, the urge “to have fun, to enjoy the company of friends, to relieve pain, [to explore] spiritual enlightenment … simply [to] experiment” (RSA 2007 op. cit.) has been more powerful than the law.

3.2 Some past policy prescriptions

International agreements
Concern over illicit drug supply and trafficking led to the 1961 Single Convention on Narcotic Drugs, which limited production, codified prior conventions and simplified control machinery: “Because of international resistance, the penal measures eventually adopted are moderate and devised to avoid conflict with the different legal systems of the Parties” (Senlis 2006). The scope of international control was extended by the 1971 Convention on Psychotropic Substances (LSD, ecstasy, amphetamines). “The major novelty in these two conventions was … providing … for medical treatment, care and rehabilitation … and resulted in a more elastic interpretation of international obligations by some states. However, this did not result in any fundamental change… under the influence of the United States, law enforcement … became a priority for the UN. When, by the mid-1980s, the problem of money laundering grew, so did the growth of the global consciousness of the dangers of the illicit traffic” (Senlis 2006). This led to the 1988 Convention on Illicit Traffic in Narcotic Drugs and Psychotropic Substances devoted mainly to fighting organized crime. Ratified by almost all states, these three conventions govern the present official consensus.

Producing countries: Afghanistan
The Counter Narcotics Directorate (CND) was created in 2002 and a national strategy was adopted in FY2005. This targeted a 70% reduction in opium production by 2008 and its elimination by 2013: “The mechanisms are an alternative livelihoods approach coupled with progressive enforcement of a cultivation ban, interdiction and prosecution of trafficking and processing, and forfeiture of drug-related assets” (Ward & Byrd 2004). Given the record 2007 harvest anticipated (Section 2.2), the strategy is clearly unrealistic though it continues to be supported by donors. For instance, with the assistance of the US Department of Defence, the US FAST programme “is designed to identify, target, investigate, disrupt, or
dismantle trans-national drug trafficking operations in the region, providing training, guidance, and mentoring to its Afghan counterparts” (US Government 2006). The UN and others focus on alternative livelihoods. One view is that the strategy remains basically sound but that its priorities and sequencing should be refocused. “Priority [should be given] to combating trafficking and processing ... start with interdiction and alternative livelihoods, then implement eradication in due course” (Ward & Byrd 2004). This would target the most harmful elements first while recognising the need for economic growth, poverty reduction and responsible governance.

A more radical suggestion, though falling well short of full legalisation, is that Afghanistan should licence opium for production of medicinal opiates. The Senlis Council, for instance, argues that: “an opium-based medicines industry ... could provide a solution to the severe global deficit ... make an effective and wide-ranging contribution to Afghanistan’s development ... an opium licensing system would strengthen the rule of law ... reduce the ... opium flowing into the illegal market, promote stability by providing sustainable and legitimate incomes to rural populations” (Senlis 2005). Phase 2 of this study is examining practical applications, including agronomic aspects, economic implementation, international law in relation to opium exports, aspects of governance, the design of an amnesty scheme, health care, and research on alternate methods of eradication in the light of worldwide experience. Pakistan’s President, Pervez Musharraf (Prospect, March 2007; The Economist, January 2007) is amongst those who have shown support for the Senlis proposals.

Consuming countries: the UK

The UK government adopted a 10-year drug strategy in 1998, updated in 2002. Within a prohibition paradigm, the strategy comprises four strands: (i) reducing the supply of illegal drugs; (ii) preventing young people from becoming drug misusers; (iii) reducing drug-related crime; and (iv) reducing the use of drugs via treatment programmes. Success is claimed: “... in terms of numbers into treatment, a reduction in drug related crime and improved drug education, innovative campaigns and improved interventions with young people. A significant reason why the existing strategy has been so successful is that it was developed following extensive consultation”. A new strategy will be launched by end-2007 to
“re-focus on strategies and interventions with the greatest positive impact, maintain a firm focus on drugs as a government priority, while building on opportunities to develop and deliver the strategy as part of the wider policy framework”. In other words, the current approach will be maintained, refined but not substantially reformed.

The Strategy Unit broadly accepted the official strategy while emphasizing the need to capture and grip ‘High Harm Causing Users’ (HHCUs) via the criminal justice system by: “introducing more coercion, criminalising heroin use and creating a register for HHCUs, alongside enhanced case management … with the Home Office responsible and accountable for bearing down on all drug harms … free prescription of heroin should be more extensively piloted … as one part of a treatment regime bearing down on crime and other harms” (Strategy Unit 2003b). The Strategy Unit concluded that supply interdiction has been ineffective, though drugs should be seized if the opportunity arises so as to eliminate social nuisance (on the streets, in crack houses); criminality (e.g. of organised crime, drug pushers) should be punished; and aid given to failing States. The report concludes: “a substantial reduction in the massive crime and other harms currently caused by heroin and crack use [is feasible], but only through a vision which combines increasing coercion; fundamental organisational reform; and a holistic, fit-for-purpose treatment regime which grips the user”.

The Drug Policy Commission (DPC) downplayed criminalisation, giving primary support to treatment and harm reduction initiatives (e.g. needle exchange, opiate substitution, reduction in HIV risk behaviour). It concluded that government has only limited impact on the rate of drug use:

The bulk of expenditure on drug policy … is still devoted to the enforcement of drug laws. The UK has introduced evidence-based measures, notably the expansion of treatment and harm reduction. On the other hand, it operates measures, such as classifying drugs to deter use and increasing use of imprisonment, that have little or no support from the available research. Even if the government can do little to reduce overall rates of drug use, it could … choose [evidence-based] policies that more effectively reduce drug-related death, crime, physical and mental health problems and other harms (Reuter and Stevens 2007).

The RSA Report goes further in rejecting criminalisation, arguing that drugs policy should be integrated into broader policies that address social
exclusion, housing, homelessness, etc. The aim should be “to regulate use and prevent harm rather than to prohibit use altogether. Illegal drugs should be regulated alongside alcohol, tobacco, prescribed medicines and other legal drugs in a single regulatory framework … drug consumption rooms should be made available where it is in the public interest”. The fight against the supply of illegal drugs should focus on organized criminal networks and their finances rather than on “largely futile efforts to interdict supply”. The report goes on to make a wide range of other proposals covering education, treatment and criminal justice. The Misuse of Drugs Act 1971 should be replaced by a new Misuse of Substances Act that: “sets drugs in the wider context alongside alcohol, tobacco and other psychoactive substances; is linked to an evidence-based index that makes clear the relative risks of harm from individual substances; and focuses punishment on harmful behaviour rather than the simple possession of drugs”. Responsibility should be moved from the Home Office to the Department for Communities and Local Government, with drug services devolved and the criminal justice system used strategically to get people into treatment. Among specific recommendations are: that GPs should not be given the option of opting out of drugs treatment; that the role of pharmacists and other health service workers should be recognized; and that treatment options should be broadened to include *inter alia* improved standards of methadone prescribing and heroin prescribing whenever appropriate.

The UK’s Transform Drug Policy Foundation is representative of those advocating legalisation. It advocates “the introduction of appropriate legal regulation and control of drug markets … some activities, outside of the regulatory framework, will remain prohibited” (Transform 2006).6 Transform maintains that the aims of reform (to remove the harms created by prohibition) should be kept distinct from the aims of drug policy (to minimise the health and social harms associated with drug use and misuse). It thus goes further than the RSA in proposing that the regulatory pragmatism governing alcohol, tobacco and prescription drugs should be

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6 Benefits claimed include: a dramatic drop in crime at all levels; a 30%–50% drop in the prison population; the lifting of a huge burden from the criminal justice system; a multi-billion pound ‘peace dividend’ for the Treasury; improved public health, fewer drug deaths and opportunities to control HIV and Hepatitis C; removal of destabilising influences on producer and transit countries; the decriminalisation of millions of people and guarantee of the rights of drug users and non-users alike; and removal of the smokescreen of prohibition to reveal the underlying social problems of problematic drug users.
extended to cover illicit drugs. In its view, vulnerable groups and society are best served by legal markets regulated and controlled by government, rather than by illegal markets operated by violent criminals and street dealers. Legal companies can be taxed, are subject to external scrutiny, and are answerable to the law; while regulation provides opportunities for other interventions in respect of availability and price. The existing system for legal drugs provides possible templates: production and trade could be licensed (as for diamorphine, alcohol and tobacco) or non-licensed (as for caffeine); supply might include prescription by licensed doctors and pharmacists (as for methadone), over-the-counter sales by licensed pharmacists (as for codeine preparations), sales by licensed vendors or in licensed (as for tobacconists, off-licenses and public houses) or unlicensed premises (as for khat). Further options might include specialist pharmacists licensed to dispense non-medical drugs and qualified to offer health advice; and licensed premises for which entry, purchase and consumption required membership with restrictions attached.

3.3 A possible incremental approach

Introduction

Transform distinguishes between those who seek incremental change within a broadly prohibitionist framework, and those—such as itself—who would replace prohibition by a regulatory framework for legal production and supply (Transform 2006 op. cit.). In its view, incremental change within a prohibitionist framework “avoids taking a position on the respective merits of government and criminal controlled drug markets, but gives tacit support to the latter”. In contrast, legalisation of regulated markets would represent a paradigm shift, replacing criminal drug markets by private markets operating within a strict regulatory framework. Transform accepts that not all countries would simultaneously adopt such a shift. It therefore pins its hopes on country level reforms: “A number of countries have already effectively decriminalised the personal possession of some or all drugs … It seems likely that a coalition of these progressive countries will challenge the UN conventions within the next decade, to allow individual states to determine how their drug markets are regulated”.

7 A third camp—ratcheting up the war on drugs—is dismissed by Transform as largely limited to the US, and “has little significant political or popular support in the UK”. It should be noted that there are also those in the US that advocate legalisation. See Nadelmann (2007) and the website of the Drugs Policy Alliance, www.drugpolicy.org.
Transform focuses on consuming countries, setting aside issues in producing and transit countries. For the latter, there are in fact few realistic prospects for privatised markets since governance is too weak, smuggling is too easy, and leakage between illicit and licit markets would undermine regulation. But even in consuming countries, regulating legal markets would be very difficult. In theory, import and/or excise duties could be levied with the aim of managing prices, but in practice the gap between producer and retail prices is just too high (Section 2.1). If duties are set at a low (manageable) level, then retail prices would fall drastically, creating unacceptable incentives for new users (Figure 11); if duties are set at a high level, they would be ineffective. The problems of controlling the trade in cigarettes (Table 7) pale into insignificance when compared to those of controlling hard drugs, given weak governance, established smuggling routes and heroin’s high value and low weight. So long as large profits are to be made, liberalised markets in consuming countries will have to coexist with powerful counter-acting economic forces and incentives.8

Replacing criminal drug markets by regulated private markets, as advocated by Transform, thus appears at best to be a long-term vision. Only if profits can be squeezed out of the illicit trade worldwide can regulated private markets be envisaged on a significant scale. How can this be done?

The proposed approach

A possible solution advocated here lies in the steady expansion of public prescription and trade in drugs while maintaining strict prohibition of private trade at every level. The proposed approach would build on the precedent of existing programmes, expanding these systematically with the long-term aim of supplying as much of the market as feasible. Diversion of trade to public entities would itself reduce trafficker earnings by reducing the quantities remaining to private traffickers. These earnings could be further reduced by intensified interdiction worldwide so as to enhance trafficking costs, and in due course by (predatory) public pricing designed to undermine the private trade.

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8 Analogies with the repeal of alcohol prohibition in the US need to be handled with care. The US at the time was an exception since other countries (notably Canada) allowed private foreign and domestic trade in alcohol. Moreover, alcohol is a relatively bulky, low value good that can be produced where it is consumed. The analogy between alcohol and cannabis or amphetamines (both readily produced in consuming countries) may be more appropriate than that between alcohol and opium or cocaine.
The critical step is to link procurement from farmers to the supply of heroin or its substitutes to end-users. Farmgate and retail prices need to be set simultaneously with the aim of squeezing the margin between them. It would then be a matter of relative indifference as to the trafficking routes actually followed. Just as Afghanistan has eliminated illicit exports from Myanmar through market forces (Section 2.2), so enhanced prescription and public trading could aim to eliminate illicit exports from Afghanistan by manipulating prices. Subsidies would initially be required to expand public trading and to continue interdiction. But the costs of legal trading are inherently far lower than those of the illicit trade (Section 2.4) and in due course prescription and other charges could be levied, generating (potentially substantial) tax revenues to offset subsidies. Moreover, once trafficking had been contained, regulated local markets could also increasingly be considered. The more countries that adopted this approach, the greater would be the pressure on illicit traffickers. Over time, producing and transit countries might also participate, and incentives for meeting demand in these countries might in any case erode as profits from illicit exports to consuming countries declined.

The 1961 Convention specifies national opium agencies (Section 2.2), and these could expand their operations with the aim of driving criminals out of business. The approach proposed has many advantages:

- It addresses issues in supplying countries, in transit countries, and in consuming countries simultaneously within a coherent overall framework
- It tackles illicit profits directly by diverting trade from criminal to public entities, by squeezing illicit price margins, and by keeping illicit costs high by active interdiction
- It can be expanded gradually step-by-step without predetermining the final outcome and without requiring simultaneous action by all countries; and
- Monitoring and evaluation would dictate progress, with other countries progressively encouraged to participate depending on interim outcomes.

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9 Subsidies would also increase to fund the supply of heroin and its substitutes to end-users. That this would be politically sensitive is illustrated by a recent press storm concerning the costs of the existing programme and the relatively few addicts that appear to have been ‘cured’. See the **Guardian**, 18 October 2007.
Incremental change would be consistent with a strategic long-term vision that might approximate to that proposed by Transform, but movement towards such a vision would be gradual and evidence-based. And rather than prohibition being abolished in a ‘paradigm shift’, it would wither as countries increasingly promoted public supply and regulated local markets. Prohibition of international trade would continue, consistent with the terms of the 1961 Convention though the costs of enforcing prohibition would in due course decline as private trading withered.

**Cultivation**

Procuring opium should be straightforward. The legal crop already accounts for about half the cultivated area worldwide. The additional area would be small and should in principle be easy to protect. It could be located almost anywhere given the versatility of the opium poppy, though of course yields vary. Options include expanding cultivation in areas that supply the legal market (including the UK) or procuring opium in Afghanistan or other traditional sources of the illegal commodity. If the former, then the varieties adopted would depend on demands for opium, methadone, morphine and other alkaloids and products. Farmgate prices would be adjusted—subsidised as necessary—to ensure that financial returns are competitive with those of alternative local crops, and to provide licensed farmers with a fair (even good) return. Producing and consuming countries would need to reach agreement, and security measures and institutional capacity may need strengthening. Sourcing all UK supplies domestically would simplify operations. If, on the other hand, the choice were legal cultivation in Afghanistan, this would have a number of advantages:

- By most accounts, Afghanistan has a strong comparative advantage in opium (Section 2.2) and this would locate the opium industry where production is cheapest in real terms and where it best accords with natural and economic conditions
- Growers could be licensed in accessible irrigation commands in stable provinces under central control (e.g. close to Kabul). This would deprive warlords and insurgents of ‘tax’ income, facilitate improved security, and provide the central government with a potential (major?) revenue source
Legal cultivation would limit any ‘development shock’ to the Afghan economy from the suppression of illegal cultivation (Ward & Byrd 2004), and contribute to long-term economic development. Opium’s contribution to GDP would depend on evolving patterns of demand, as well as on such factors as prices, taxes, subsidies and investments in processing and storage, and would decline as other activities expanded.

Eradication outside sanctioned areas would in time fade as legal cultivation expanded and illicit markets contracted. Illicit growers would be deprived of income silently through the market (as, for instance, in Myanmar) rather than by the use of force. Farmers would have to adjust by growing wheat and other less profitable crops, but this process would eliminate a major source of friction between farmers and the government.

Legal cultivation in Afghanistan could make a major contribution to political and economic stabilisation and growth. If, however, this solution proved unacceptable or if security conditions precluded it, then cultivation could be readily shifted elsewhere. The real costs might be higher than in Afghanistan but security costs might be lower and, in any case, cost is a secondary concern. Market distortions are no doubt inconsistent with liberal market policies, but hard drugs are a special case and the legal market is already highly distorted.

**Trafficking**

Trade liberalisation usually aims to minimise distortions, reduce costs and stimulate trade. In contrast, the aim of public trade would be to drive traffickers out of business and then, to the extent possible, suppress production, trade and use. Trade distortions would thus be adopted as required. The physical volumes are small and might fall further if processing is expanded in producing countries. Public trade would substitute a cheap transport system (cultivation in accessible areas, a few freighter aircraft) for the costly system run by traffickers. Efficiency could still be pursued (optimising yields and minimising transport, storage and distribution costs), but this is of secondary importance relative to the imperative of limiting harm.

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10 As in Myanmar, farmers would have to revert to subsistence crops and be impoverished. As sources of revenue declined, the ability of insurgents and warlords to wage war would erode and the outside world’s interest in Afghanistan might fade. In development terms this might be deplorable, but the world could probably live with it, as it does with failed states such as Somalia and the Congo.
Drug traffickers have typically kept one step ahead of those seeking to suppress them but, once money is taken out of the equation, these skills would no longer be much use and it would become increasingly immaterial which routes traffickers adopted.

If farmers are sanctioned in Afghanistan, then farmgate prices may need to be no higher than at present to compete with illicit output, given improved accessibility and reduced risks. If sanctioned farmers are elsewhere, then farmgate prices may need to be above present levels to sustain production and compete with Afghanistan and alternative crops. Whether revenues are generated depends on which demands are met. If, for instance, public supply in consuming countries were to be confined to medicinal demand, then there would be a net government cost. But if charges are made for public supply, or if local private markets are legalised, then tax revenues could potentially be large. There is also a strong case for allocating revenues to governments in supplying countries. If legal cultivation were sanctioned in Afghanistan, an excise or export duty on opium would strengthen the finances of the central government while simultaneously undermining the finances of warlords, insurgents and traffickers.

Consumption
The harm that drugs do will have to be addressed so long as drugs are used. Views as to how best this can be achieved range from those that advocate criminalisation of use (Strategy Unit 2003b); to those that argue that priorities should shift to evidence-based measures that address harms (Reuter & Stevens 2007); to those that reject criminalisation, arguing that drugs should be governed by policies that regulate use along with alcohol, tobacco and legal drugs to minimise harm rather than prohibit use altogether (RSA 2007); finally, to those who advocate a ‘paradigm shift’ seeking to replace criminal by regulated private markets that discourage use only when this is necessary to minimise harm (Transform 2006).

Irrespective of this debate, there is wide agreement, even by those endorsing criminalisation, that “free prescription of heroin should be more extensively piloted ... as one part of a treatment regime bearing down on crime and other harms” (Strategy Unit 2003b). Given also the needs for methadone treatment and for medicinal morphine and other alkaloids, legal supplies will need to rise. Strengthening institutions to handle this supply is implied in all the reports. To the extent that free prescription
diverts opium from illicit imports, trafficker profits would decline provided prohibition is sustained and use is contained to no more than current levels. Such a gradualist approach would also be consistent with subsequent movement towards more radical solutions. The RSA report, for instance, also supports drug consumption rooms (when “in the public interest”) where heroin and other drugs purchased on the illegal market could be consumed. From this it would be a short step to introducing prescription charges or selling drugs to users who do not qualify for free prescription. In due course, this might lead to a gradual expansion of other forms of public sale, and ultimately to the creation of regulated private markets using some or all of the mechanisms listed by Transform (Section 3.2). In other words, reform would be implemented gradually within the framework of a long-term vision. New measures would be tested and outcomes evaluated before taking the next step. Additional countries would increasingly participate as success is clearly demonstrated. Over time, profits should drain from the illegal trade, which in due course would be marginalised. Once this is achieved, the need for costly suppression programmes directed at the illicit trade—both at home and abroad—would decline and prohibition itself would fade.11

Pricing and institutional strategies
The difference between farmgate and retail prices opens up options for the public agencies to respond in creative ways to trends in the illicit market. Initially, opportunities may be limited. So long as public supplies are confined to prescription and medicinal demand, the control of the illicit trade will continue to depend largely on prohibitionist measures. But, as prescription expands, and as public sales are initiated and private markets are legalised, new possibilities arise and the burden of control could increasingly shift to pricing strategies. As in predatory pricing (Section 1), prices would be adjusted with the aim of eliminating (illegal) competitors. Adequate farmer incentives and institutional strengthening would be needed but, rather than maximising subsequent revenues, the longer-term aim would be to scale down drug use.

11 This implicitly assumes a continuing market for drugs, supplied by the public sector or in regulated local markets. Promotional efforts could increasingly be directed at reducing initiation of new users, an aim that would be supported by continuing high prices. Use would thus increasingly be confined to the existing cohort of users who in the natural order of things would move unhappily through their lives—victims of the failed system of prohibition.
Public trading and predatory pricing would be interim steps towards achieving this objective. With this in mind, public agencies would need to be staffed with the skills to monitor trends in the illegal sector, and to advise management on appropriate pricing and related strategies, though much of this work could continue to be undertaken by UN agencies—the United Nations Office for Project Services (UNOPS) and the International Narcotics Control Board (INCB)—and by the numerous academic and other entities skilled in survey and analysis.

4. Concluding note

This paper has highlighted the economic forces at work in the international opium market, arguing that producers and traffickers respond to incentives and competitive pressures in ways that are comparable to those in markets for other commodities. Opium and other drugs nevertheless have characteristics that set them apart, notably: the small quantities involved and the relative ease of smuggling; the massive difference between farmgate and retail prices; and the nature of addiction, which grips many but not all users, leading to great harm to users and society and providing dealers with what is in some ways a captive demand.

Rather than choosing between prohibition and legalisation, the paper proposes an incremental approach that responds to these economic forces and characteristics. The aim would be to move steadily from a predominantly prohibitionist framework to one that was increasingly liberalised. The approach focuses on squeezing—and ideally eliminating—the profits earned in the illicit trade: (i) by diverting trade from illicit traffickers to (licit) public agencies; (ii) by adopting forms of predatory pricing that squeezed the margin to illicit traffickers; and (iii) by enhancing the costs to illicit traffickers by continued active prohibition and interdiction. Over time, as the illicit trade withered, local regulated markets in consuming countries might become feasible, and public operations might give way to the private sector. As in the case of tobacco and alcohol, supply in private markets would be regulated and taxed with the aim of minimising harm and, to the extent feasible, suppressing demand. To achieve these goals, pricing would be complemented by advisory, educational and treatment measures to guide and manage potential and actual users.
The present international regime is maintained primarily by the USA and its domination of the UN drug control agencies (Transform 2006). But support for reform appears to be growing and there is an increasing divergence between ‘traditional’ and ‘progressive’ states. Reform has started as some states modify drug regimes within their national borders. Likeminded countries might associate to negotiate necessary reforms in the international regime. Since many ‘reforming’ states are members of the EU, a promising option would be for this to be undertaken by a group of willing EU members, who would simultaneously manage imports, limit leakage across borders, and harmonise their domestic reforms.

References


Mansfield, David, and Adam Pain. 2006. Opium Poppy Eradication: How to Raise Risk When There is Nothing to Lose? Afghanistan Research and Evaluation Unit (AREA), Kabul, August.


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