

This is the cost each year to Australian businesses from illicit drug use

Why you should read this report

by Dr Alex Wodak President, Australian Drug Law Reform Foundation

The Australian Drug Law Reform Foundation was established in 1993. Its charter for reform attracted membership from academic, legal, medical, political, religious and community sectors.

The charter declares that 'the aims of the Australian Drug Law Reform Foundation are to minimise the adverse health, social and economic consequences of Australia's policies and laws controlling drug use and supply'.



Dr Alex Wodal

Since 1993 the Foundation has supported governments in their provision of health services and treatment programs and pursued public education with publications and newsletters. Advocacy for change has been based on the recognition that **the War on Drugs has failed** and that governments' responses to drug use should give primary emphasis to health and social programs while supporting criminal and legal sanctions.

Professionals from almost every conceivable discipline discuss drug policy. Surprisingly, in an era when economic thinking determines many policies, the voice of economists is rarely heard when it comes to these discussions.

The Commonwealth Department of Health commissioned studies on three occasions from Professors David Collins and Helen Lapsley, two of our leading economists, to estimate the costs to the Australian economy of alcohol, tobacco and illicit drugs. The estimates in this paper cover the year 2003.

The research presented here by David Collins, Helen Lapsley and Robert Marks shows that the cost of illicit drugs in 2003 to business was at least \$3.3 billion out of the total estimated costs to the entire community of at least \$6.7 billion.

These costs have increased over the past 50 years. They show no sign of abating.

Why does our current drug policy seem to be failing us?

On the basis of their work, the Australian Drug Law Reform Foundation asked a very simple question: who pays for the costs resulting from the current arrangements we have in Australia to deal with drugs?

We were fortunate to be able to engage David Collins and Helen Lapsley to analyse their own data to answer this question.

The costs that the authors have identified in this report show that the business community cannot afford to ignore the overall costs to the community of the continuation of the current War on Drugs approach.

This paper invites further research to determine more effective ways of reducing the economic impact of illicit drugs on the community. If we are to contain these costs, let alone reduce them, we need to improve our understanding of the market for illicit drugs – a market which has grown inexorably over the last half century.

In many ways, the illicit drug trade is organised like trade in other strongly desired commodities. Global integration and improving technology have assisted those trading in illicit drugs just as they have assisted those trading in many legal commodities.

A law enforcement approach to the drug trade has been shown to have disappointingly limited efficacy in achieving society's core objective of protecting its citizens.

In 2005, Timothy J Moore of the Drug Policy Monitoring Project, Turning Point Alcohol and Drug Centre, Melbourne, estimated that Australian Governments spent \$3.2 billion on illicit drugs in 2002-03, with \$1.3 billion spent on "proactive" policies and \$1.9 billion spent "reactively", dealing with the consequences of illicit drug use.

Of the total, law enforcement and crime responses accounted for the majority (75%) of expenditure with health and social measures accounting for less than a quarter (23%) and miscellaneous items (2%) making up the residual.

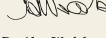
Adjusting this imbalance would be a logical first step to working for reform.

The Foundation challenges the business community to:

- accept the evidence of this report;
- support the Foundation in working for reform;
- convene a Roundtable to develop policies to save money and lives.

The business community itself is best equipped to act to reduce the cost it bears for illicit drug use.

The Australian Drug Law Reform Foundation has not modified this report by Professors Collins, Lapsley and Marks in any way. All views expressed in their report are those of the authors.



Dr. Alex Wodak March 2007



Prof. David Collins



Prof. Helen Lapsley



Prof. Robert Marks

Professors David Collins and Helen Lapsley are economists who have undertaken research together in the economics of drug abuse (alcohol, tobacco and illicit drugs) since 1990. Their publication *Estimating the economic costs of drug abuse in Australia*, published by the National Campaign against Drug Abuse in 1991, produced for the first time in Australia estimates of the social costs of tobacco, alcohol and illicit drugs. Since 1991 they have completed two more studies in this area for the Commonwealth Department of Health and Ageing and a fourth is currently in preparation.

In addition to a number of studies for Australian and State governments and the National Drug Strategy, their work in this area has been published by the World Bank, the World Health Organisation, Health Canada and the Canadian Centre on Substance Abuse. In 2003 they were joint authors of the World Health Organisation publication *International guidelines for estimating the costs of substance abuse.* In 2006 they were lead authors of *International Guidelines for the Estimation of the Avoidable Costs of Substance Abuse*, published by the Canadian Government. They have been consultants on the social costs of drug abuse to the Rockefeller Foundation in South East Asia.

Professor Collins is affiliated with Macquarie University and Professor Lapsley is affiliated with the University of Queensland and the University of New South Wales.

Robert Marks first published a paper on drugs policy thirty-three years ago. In 1977 he was hired by the new Australian Graduate School of Management, where he rose to become a professor of management. He now teaches in the School of Economics at the University of New South Wales. Originally trained as an engineer, he has taught and studied at Melbourne, M.I.T., Cambridge, Stanford, U.C. Berkeley, and INSEAD (France). He has published in the areas of environmental and energy policy, drugs policy, public policy formation, oligopoly theory, industry economics, information processing, computer simulation, and model validation.

Illicit drugs damage Australian business

by David Collins, Helen Lapsley and Robert Marks.

Executive Summary

Illicit drugs are a major problem in Australian society, with their cost impacts being felt by individuals, families, businesses and government. **The business sector bears a large proportion of these costs**.

Recent 2003 estimates show the total cost to Australia of illicit drugs to be at least \$6.7 billion. Of that figure, business costs were \$3.3 billion (representing almost two per cent of total Australian corporate profits). Drug use-caused reductions in business productivity are estimated to have cost \$800 million, through a reduced workforce, and a further \$339 million through absenteeism. The costs of reduced on-the-job productivity were also likely to have been substantial, but were not able to be estimated.

Illicit drug use also imposes other costs on the Australian community. The unpaid output of the household sector in 2003 is estimated to have been reduced by \$397 million. Drug-attributable crime costs were \$3,248 million, while crime attributable to illicit drugs and alcohol used together cost a further \$1,310 million. Nearly a quarter of violent crime attracting jail sentences is attributable to illicit drugs alone, or to illicit drugs and alcohol used together.

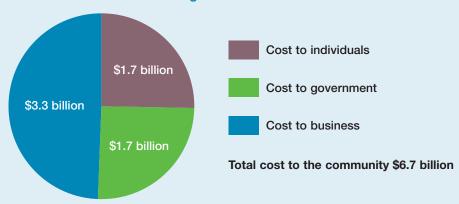
Health care costs were \$74 million (after taking account of the reduction in costs resulting from the premature deaths of drug users). Drug-attributable road crash costs were \$612 million, of which approximately 20 per cent were borne by the business sector.

Drug use imposes heavy burdens on individuals and on the government sector but the highest burden is borne by the business sector. Businesses will inevitably attempt to pass these costs on, mainly in the form of higher prices.

The illicit drugs market draws resources away from legitimate businesses supplying legal goods and services and paying their fair share of taxes. If illicit drug use were reduced, the business sector would benefit not only from reduced labour costs and a bigger workforce, but also from reduced drug-related property crime and corruption, and higher consumer demand for legally-supplied products. The potential for increased business efficiency could lead to greater export competitiveness, better worker and management rewards, higher profits and higher returns to shareholders.

1 Illicit drugs... a major economic problem

The social costs of illicit drug use in 2003



Illicit drugs are a serious problem for Australian society and Australian business. The total costs of illicit drug use to the Australian community are now estimated to be at least \$6 billion each year. There are, in addition, many types of costs upon which it is almost impossible to place a value, yet which represent very serious burdens, such as the physical and emotional trauma and social dislocation caused by drugs. Thus the true costs to society and to business are much higher than the estimated economic costs.

Clearly drugs impose great burdens on illicit drug users themselves and on their families and friends. These are estimated to be in the order of \$1.7 billion. Federal and State Governments also bear high costs (in the order of \$1.7 billion annually), mainly in the provision of health care and in dealing with drug-caused crime (police, courts and prisons). Although it is not widely recognised, the business sector bears an even larger burden than government, an estimated \$3.3 billion in 2003.

To put this latter figure in context, it represented nearly two per cent of total corporate profits in Australia. Illicit drug markets probably divert annual consumption expenditures of upwards of \$9 billion away from legitimate Australian businesses. As a result, the business sector would be a major beneficiary of a reduction in illicit drug use. The benefits of such a reduction could be an important source of improved business efficiency. A decline in illicit drug use could lead to increased worker and management productivity, higher worker and management pay and greater profits for shareholders.

2 Social costs of illicit drug use

Illicit drug use imposes both tangible and intangible costs. Tangible costs, an example of which is health care devoted to treating addicts, involve a loss or waste of productive resources. These costs are sometimes difficult to quantify, as in the case of the reduced on-the-job productivity which often results from drug use. However, once tangible costs have been quantified they are relatively easy to value because they involve goods and services which are bought and sold at readily identifiable prices. Intangible costs (for example pain, suffering and trauma) do not involve a loss or waste of productive resources. Though difficult to value, they are nevertheless very real and very important. The bereavement trauma suffered by parents as a result of the drug overdose death of their child is no less important because it cannot be easily valued.

The box below shows estimates of the tangible costs borne by the Australian community as a whole in 2003 as a result of the use of illicit drugs. It has two columns of data, the second of which is headed "Total cost adjusted for double counting". This form of presentation is adopted to provide comprehensive information on particular areas of costs while avoiding the problem of double counting of some costs. For example, crime costs include, *inter alia*, some productivity losses, but separate cost estimates of aggregate productivity losses are also presented. Productivity costs cannot be included in both areas without double counting, and yet to exclude them from crime costs would give the impression that the total costs of drug-attributable crime were lower than in fact they are. The *total* costs of illicit drug use can only be calculated when adjustment has been made for all double counting.

All the cost estimates presented here are taken from National Drug Strategy Monograph No. 49, *Counting the cost: estimates of the social costs of drug abuse in Australia in 1998-9*. Full reference details for this Monograph are given at the end of this paper. The 1998/9 figures have been adjusted to 2003 values by application of the relevant implicit price deflators from the *Australian National Accounts*, published by the Australian Bureau of Statistics.

The illicit drugs to which these cost estimates refer are cannabis (for example marijuana and hashish), opiates (for example heroin), stimulants (for example cocaine and amphetamines), hallucinogens (for example LSD) and anabolic steroids.

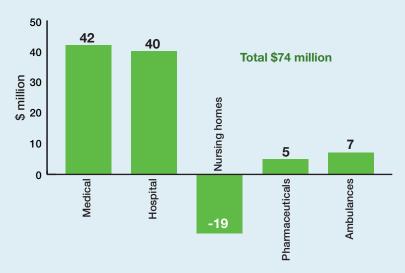
The tangible costs discussed here represent the value of the extra resources which would have been available to the community as a whole, including the business sector, had there been no past or present use of illicit drugs. These resources would then have been available to be used for legitimate consumption or investment purposes.

		Total cost adjusted
	Total cost	for double counting
Health care	\$74 million	\$74 million
Business productivity		
(net of reduction in consumption)	\$881 million	\$881 million
Household productivity		
(net of reduction in consumption)	\$307 million	\$307 million
Crime	\$ 3,330 million	\$3,010 million
Road accidents	\$612 million	\$282 million
Resources diverted to		
drug production or imports	\$1,600 million	\$1,600 million
Total tangible cost		\$6.154 million

These broad categories are now considered in substantially more detail.

(a) Health care costs

Drug-attributable health expenditure in 2003 (net of reductions in expenditures resulting from premature deaths)



Not all health care costs associated with illicit drug use can be identified. Many services are provided for conditions which are made more severe, rather than caused, by illicit drug use. The many conditions which are attributable to or associated with illicit drug use include dependence on illicit substances, maternal drug dependence and newborn drug toxicity, drug psychoses, road injuries, accidental poisoning and suicide. Many of the conditions resulting from illicit drug use require hospitalisation. Other illnesses

not directly attributable to illicit drug use nevertheless often result in longer hospital stays by drug users than otherwise would be expected, because of their lower health status (co-morbidities).

Hospital services, as well as medical and ambulance services, are utilised as a result of drug overdoses. Medical services also are provided to illicit drug users who have numerous chronic health problems requiring frequent treatment.

Some of these costs, such as pain and suffering, are privately borne, but many health care services are provided by the taxation-funded public health system.

Expenditure on prescribed drugs and residential care can also result from illicit drug use. However, the premature deaths of addicts, while completely unacceptable from almost every aspect, nevertheless yield a minor "benefit" in the sense that they reduce the demand for nursing home places which would occur in a community with no drug addicts.

Even taking into account this type of "benefit", the other types of health care expenditures (medical, hospital etc.) are higher than they would have been in the absence of the use of illicit drugs.

(b) Productivity

Productivity losses in the workforce and the household, 2003				
(a)	Reduction in paid workforce	\$800 million		
(b)	Absenteeism	\$339 million		
(c)	Total paid workforce costs (a plus b)	\$1,139 million		
(d)	Household labour costs	\$397million		
(e)	Total production costs (c plus d)	\$1,536 million		
(f)	Consumption resources released as a result			
	of premature workforce deaths	\$348 million		
Net production costs (e minus f) \$1,188 million				

Drug use causes reductions in business productivity. Less obvious, but still very important, is reduced productivity in the unpaid household sector. Households make an important contribution to national output even though their efforts are not recognised in official national accounts measures of national output.

Losses in business productivity due to illicit drug use have three major sources:

- The pool of people available to the workforce is smaller, because of deaths and sickness of those who would otherwise be working (most of whom would be of tax-paying age). The cost of this type of productivity loss is estimated to have been around \$800 million in 2003.
- Drug users who are employed in the paid workforce are subject to paid and unpaid absenteeism due to their drug-attributable sickness or injury, and their reduced health status. This cost is estimated to have been almost \$340 million in 2003.
- Reduced on-the-job productivity of illicit drug users results in lower efficiency and lower profits to industry. This third category is often hidden, sometimes with other workers covering for or trying to compensate for under-performing colleagues and work-mates. Calculation of the extent of this category of costs is very difficult and no estimates are currently available.

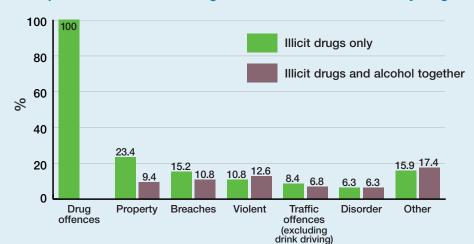
Household production costs result from death and sickness in the *unpaid* workforce. These costs are estimated to have been almost \$400 million in 2003.

Overall production losses attributable to illicit drugs are estimated to have been at least \$1.5 billion in 2003. However, adjustment to these productivity costs must be made to account for the fact that some consumption resources are released as a result of premature workforce deaths. This consumption saving is estimated to have been \$348 million in 2003, with the result that the net production costs were close to \$1.2 billion.

(c) Crime

A significant proportion of all crime is caused, directly or indirectly, by the consumption of illicit drugs. The box below shows the proportion of various types of crime, for which the offenders have been jailed, which are caused by illicit drugs consumed on their own and further proportions of crime caused by the consumption of illicit drugs and alcohol together.

Proportions of crime attracting a custodial sentence caused by drug use



As an example of the interpretation of this table, 10.8 per cent of all violent offences for which the offenders have been jailed are estimated to be attributable to (not merely associated with) the consumption of illicit drugs, with a further 12.6 per cent attributable to drugs and alcohol interacting. In total, 23.4 per cent of violent crime attracting custodial sentences is attributable either to illicit drugs alone, or to illicit drugs and alcohol together.

These and other data are used to generate the crime cost estimates presented in the box below:

	Crime costs of illicit	Additional crime costs of illicit drugs and
	drugs used alone	alcohol used together
Tangible		
Police	\$1,121 million	\$35 million
Criminal courts	\$95 million	\$3 million
Prisons	\$231 million	\$113 million
Violence	\$147 million	\$172 million
Property theft	\$420 million	Not available
Lost productivity of prisoners	\$667 million	\$325 million
Total tangible	\$2,681 million	\$649 million
Loss of life (intangible)	\$567 million	\$661 million
Total tangible and intangible	\$3,248 million	\$1,310 million

The "Illicit drugs only" column shows estimates of the costs of crime which are solely attributable to illicit drugs. The next column shows the crime costs of illicits and alcohol working together. Unfortunately there is no way of accurately breaking down these joint costs into illicit drugs and alcohol individually.

In addition to the costs quantified above, there exist various other crime costs which, though not directly quantifiable, are clearly substantial and have very serious and undesirable implications for the Australian community and for Australian business in particular.

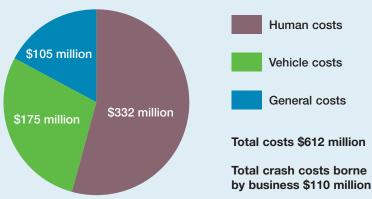
Illicit drug markets can create corruption in the policing and justice systems and in otherwise legitimate markets. As a consequence, the normal market price signals no longer direct resources to their most socially efficient uses. This not only changes the distribution of income and wealth, making some people rich while depriving others of legitimate income, but also reduces productive efficiency in the legitimate sectors of the economy. In addition, it facilitates tax evasion, increasing the tax burdens of honest taxpayers. Drug-related money laundering has effects similar to those of corruption.

Individuals too bear unquantified drug-crime costs, for example through crime-induced trauma.

(d) Road accidents

Increasing evidence is emerging of the link between road crashes and the use of illicit drugs. Drug-attributable road crash costs are estimated to exceed \$600 million annually, of which approximately 20 per cent are borne by the business sector.





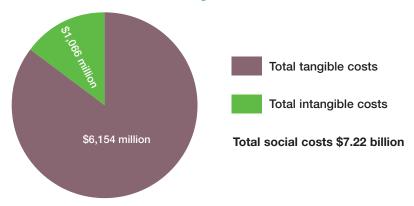
(e) Resources diverted into drug markets

The illicit drugs market draws productive resources away from legal markets which produce and supply goods and services yielding positive benefits to the community as a whole. These productive resources, when diverted into illegal markets and used for the production, importing or distribution of drugs, impose burdens on the community, rather than conferring benefits. The value of these resources, had they been used in legal markets, is estimated to have been about \$1.6 billion in 2003.

This figure is much lower than estimates of street values of all illicit drugs consumed during the year. Estimates of this figure vary widely but the authors estimated it to be in the order of \$8.5 billion in 1998/9. The difference between total street values and the values presented here is explained by the substantially higher values in illegal markets as a result of the risks involved in illegal activities. For example, dealers in illegal drugs apparently earn far higher incomes than they would be able to command in legal occupations.

3 The overall social costs of illicit drugs

Total social costs of illicit drugs in 2003



Bringing all the individual tangible costs and intangible costs together, it is clear that use of individual drugs represents a major burden on the Australian economy. The overall annual cost is at least \$7 billion. This figure cannot be compared directly with statistics of gross domestic product (a measure of the total output of the Australian economy) because a significant component of these costs, particularly intangibles and household production, is not counted in GDP data. However, taking only those drug use costs which are directly comparable with national accounts data, they still represent around one per cent of GDP, a major burden on the Australian economy.

4 Avoidable costs of drug use

The above estimates of illicit drug use are total costs, some of which have already been incurred, while others could be avoided in the future with the introduction of effective policies and programs. It is difficult to estimate the amount of drug costs which could be avoided, for various reasons:

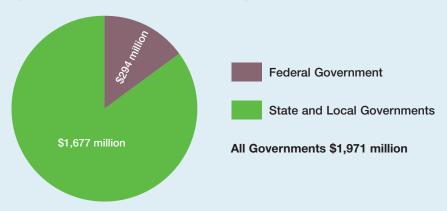
- Public policies aimed at reducing illicit drug use are not usually immediately effective.
- Some public policies, even when immediately effective, do not have measurable benefits (in the form of, for example, health effects) for some time.
- The avoidable component of drug-attributable crime costs depends on the adoption
 of public policies whose likely impacts have not been adequately analysed in the
 published literature.

It is reasonable to assume that avoidance of many of the costs of illicit drug use (for example, road crashes) will result in both immediate and long-term cost savings. As business has been shown to bear the highest tangible social costs of use of illicit drugs, then business has the most to gain when these costs are reduced.

5 Costs to Government

Illicit drug use causes a deterioration in the budgetary positions of governments as a result of increased expenditure responsibilities and reduced tax revenues. Expenditures increase in such areas as health care and the criminal justice system. Revenue losses result from a smaller workforce size, lower company profits and employee earnings, and reduced consumption expenditures. There are also substantial revenue losses resulting from drug-related tax evasion, although it is not possible to make an accurate estimate of this revenue loss. Evasion arises because illegal activities are by their nature untaxed and because the illegal drugs market creates substantial money laundering.



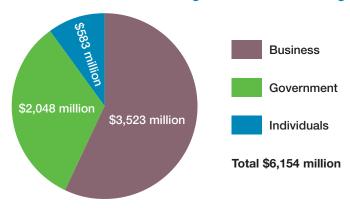


Illicit drug use costs government budgets, at an absolute minimum, almost \$2 billion annually. The greatest burden is borne by State Governments, who bear about 85 per cent of these costs.

6 Who bears the costs of illicit drug use?

The box below indicates the initial impact of illicit drug use on different sectors of the economy. The table refers only to tangible costs since all intangible costs (loss of life, pain and suffering) are by their nature borne by private individuals. There are no mechanisms by which these costs can be passed on to others. Over half of all tangible costs are borne by business and approximately one third by governments.

Current incidence of the tangible costs of illicit drug use in 2003



However the above table is not the end of the story since it relates only to the initial impacts of drug use. These initial impacts will inevitably provoke responses from those sectors adversely affected.

The business sector certainly faces significantly higher costs as a result of drug use. If it fails to react to these increased costs, business will earn lower profits and shareholders will bear the burden in the form of lower dividends and share values. If business does react, it will pass on at least some of the cost increases to consumers in the form of higher prices and to employees in the form of lower remuneration. In reality, the final outcome is likely to be a combination of lower share values, lower employee pay and higher consumer prices.

Similarly, governments are bound to react to a deterioration in their budgetary positions resulting from drug use. They have only three possible responses:

- Higher tax rates,
- Lower expenditures,
- Increased borrowing (or a reduced surplus), leading to higher interest rates.

In practice, they are likely to choose a mix of these responses. All three possibilities have the potential to inflict harm on the business sector.

The major budgetary burden of illicit drug use is borne by State Governments, whose taxing powers are severely limited and who rely to a very significant extent on business taxes and stamp duties. The estimated cost of illicit drug use to State Government budgets in 2003 (\$1,677 million) represented approximately 15 per cent of payroll tax revenue in that year. While these costs could never be completely eliminated, reducing them would provide scope for significantly lower business taxes.

If the major governmental response to a deteriorating budgetary position was to reduce public expenditures the business sector would suffer. There would probably be a reduction in the level of public services for business (for example, export promotion) and there would certainly be a reduction in the demand for the outputs of the business sector.

A government decision to fund increased budgetary demands by borrowing would, through its interest rate effects, be unambiguously bad for business.

Thus, any government response to illicit drug cost borne by the public sector is almost certain to have an unfavourable effect on business.

7 How could business benefit from reduced drug use?

The business sector bears a very significant part of overall community drug use costs. It would, therefore, be a major beneficiary if drug use costs were reduced. The benefits to business would potentially take a number of forms, as indicated in the following box.

Potential benefits to business from reduced illicit drug use

Larger available workforce		
Higher productivity in existing workforce		
Higher consumer demand		
Reduced costs		
Fewer market distortions		
Reduced business taxes		
Greater export competitiveness		
Better worker and management rewards		
Higher profits		
Higher share values and returns to shareholders		

If illicit drug use were reduced, the potential numbers of people of working age available to the workforce would be greater. This would arise partly because drug deaths would be reduced and partly because many drug users, although of working age, remain outside the work force. Among those drug users currently working, it could reasonably be expected that productivity would improve.

In addition to labour costs, other business costs would also decline if illicit drug use were reduced. Businesses bear the costs of illicit drug crime in numerous ways. For example, increased insurance premiums, the costs of filing claims, the replacement of stolen goods and the costs of repair of damaged property due to drug-related crime are all costs which impact severely on business. A reduction in corruption would mean that legitimate markets would operate more efficiently in the absence of drug market-related distortions.

All these factors would lead to a reduction in business costs.

If expenditures on illicit drugs were diverted to the purchase of legally-supplied good and services, legitimate businesses would benefit from a significant increase in consumer demand.

At the same time, it is to be expected that a reduction in expenditure demands placed on the public sector, together with a possible increase in tax revenues resulting from the expansion of legitimate markets and businesses, would occur. This would create the potential for reduced taxes, including business taxes. Since the public sector costs of drug use fall most heavily on State governments, there could be significant scope for reducing the biggest State revenue raising instrument – the payroll tax.

As a result of all these effects a reduction in drug use could lead to improved export competitiveness of Australian industry. This has been an important objective of Federal Governments of both political persuasions in the past two decades. Within the industries and firms affected it is to be expected that there would be higher rewards for management and workers, higher company profits, and higher share values and returns to shareholders.

A strong case can be made, from the point of view of self interest, that the business community should be actively involved in programmes to reduce drug use. Many company executives would also accept that business has a broader responsibility, rather than purely self interest, to assist in furthering such programmes.

8 Future Research

The results presented in this paper come from the first comprehensive estimates of the costs (including crime costs) which illicit drugs inflict on the Australian community. Much further research is needed to refine these estimates, although the authors are very confident that such refinements would indicate that the actual costs are higher, rather than lower, than those presented here. **The current estimates are certainly conservative**.

Nevertheless, the most productive area for future economic research is likely to be in the evaluation of possible public policy approaches to reducing illicit drug consumption. Insufficient knowledge exists as to the most cost-effective approaches to reducing the economic impact of illicit drugs.

Note: This publication is the work of David Collins of Macquarie University, Helen Lapsley of the University of New South Wales and the University of Queensland, and Robert Marks of the University of New South Wales. All cost estimates in this pamphlet are based on David J. Collins and Helen M. Lapsley, *Counting the cost: the social costs of drug abuse in Australia in 1998/9*, National Drug Strategy Monograph Series No. 49, 2002 and adjusted to 2003 values by the application of relevant national accounts implicit price deflators. This monograph provides considerable background detail on the calculations upon which the estimates presented here are based. The PDF file of Monograph No. 49 can be accessed at:

(http://www.health.gov.au/pubhlth/publicat/document/mono49.pdf).

For more information about the work and issues surrounding drug law reform in Australia please visit our website.

www.adlrf.org.au

