
3 The policy framework

Key points

- There are strong rationales for government regulatory and policy involvement in gambling, including the need to ensure probity and to avoid harm to consumers.
- The key criteria for policy should be the overall wellbeing of the community:
 - This means that measures aimed at addressing the adverse impacts of legalised gambling need to be balanced against the sizeable benefits of gambling for recreational gamblers and the industry.
- Public health and consumer policy frameworks provide the best basis for coherent gambling policies, emphasising the importance of policies that address the gambling environment as well as gamblers' behaviours
 - The framework for gambling policy needs to recognise that it goes beyond ameliorating the harms to people suffering severe harm from their gambling.
- Even harm minimisation measures with modest efficacy may produce worthwhile net benefits so long as they do not also inadvertently generate excessive costs
 - Approximate calculations suggest that a ten per cent reduction in the harm related to problem gambling could yield a gain of around \$450 million annually, and an accumulated gain of billions of dollars.
- There are pervasive uncertainties about which gambling policies can effectively reduce harm. Demanding a very high or potentially unachievable standard of proof about what works would risk policy paralysis in an area where there are demonstrably large costs from inaction.
- Policy needs to take account of both the costs of mistakenly introducing ineffective policies as well as the costs of failing to act when a policy option may in fact be effective.

3.1 Governments and gambling

Australian governments have struggled with the contradictions posed by gambling, reflecting the multiple goals of policy, the legacy of the past and the ambivalence of the public and politicians to gambling. Governments are involved in nearly every aspect of gambling. They act as suppliers, tax collectors and police. They fund and organise help services for gamblers experiencing problems. Above all, they are

regulators, and have put in place an array of laws and rules about who can gamble, when and where they can do it, what they can gamble on, which businesses they can deal with and how these can behave.

Governments at all levels have responsibilities for gambling policies. Local governments have planning responsibilities. The Australian Government determines national laws about internet gambling and, through the broader health system, is a supplier of some help services. However, state and territory governments oversee most facets of gambling. Within any government, there are usually several departments or other agencies that oversee particular policies, provide services or act as regulators.

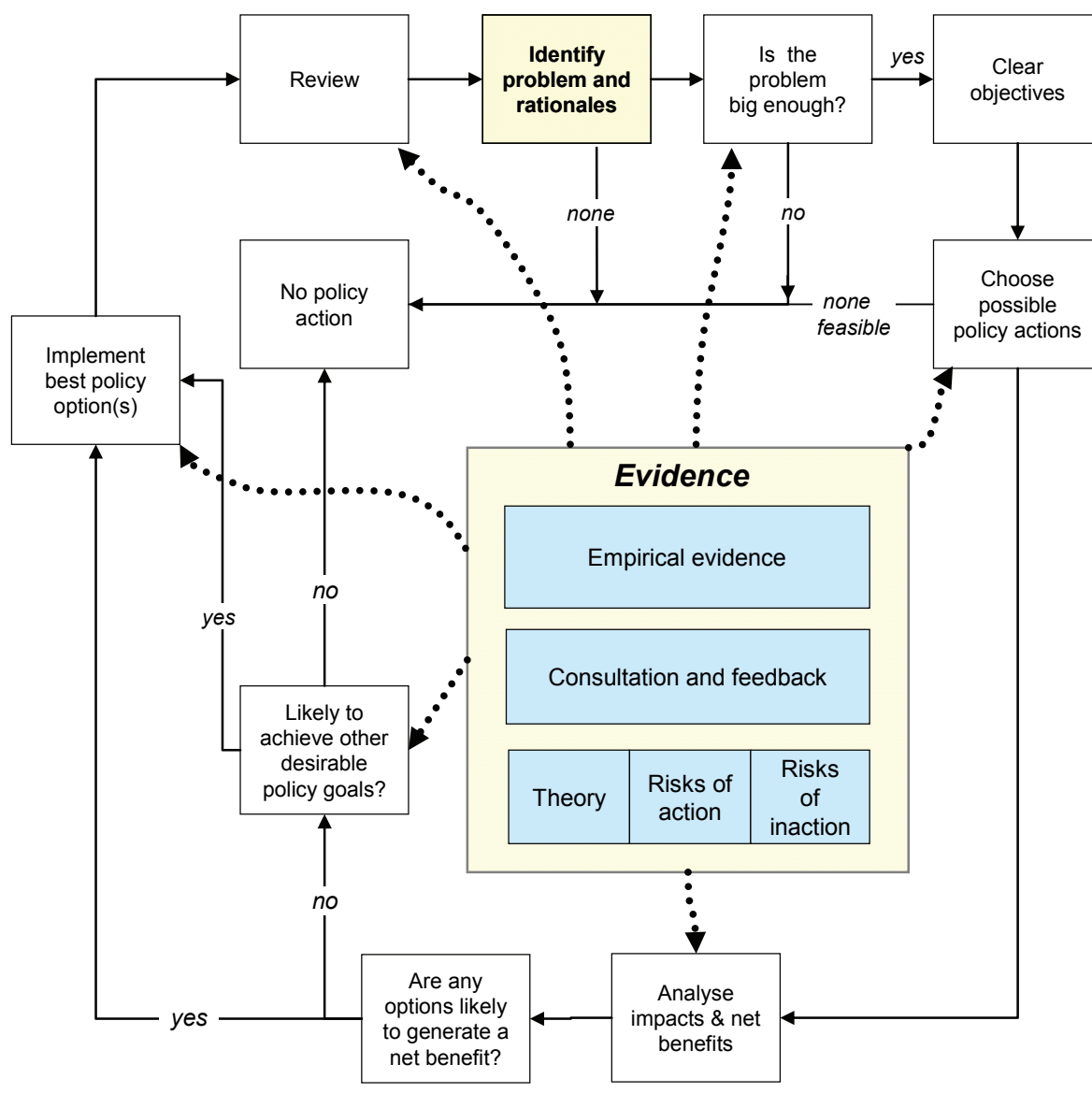
Given the breadth of the regulatory roles of government generally and the number of governments and agencies involved, the policy environment in gambling is highly complex. As outlined in chapter 1, this report does not aspire to assess the adequacy of government regulations and policies across all governments and gambling forms. Rather it selects those areas where the gains for Australian consumers and communities from changed policies are likely to be the largest.

3.2 Steps to good policy

While effective policymaking can be more art than science, there are some simple rules that are generally applicable (figure 3.1). As a rule, gambling policymaking should:

- address problems that are large enough to justify government action
- require clear objectives to develop targeted policies and to reduce the risk of unintended impacts (for example, on recreational gamblers or industry segments where there are few consumer problems)
- reflect assessment of the likely effectiveness of different options, including of their likely costs and benefits, and taking into account the risks of inaction as well as action (a matter discussed in greater detail in section 3.6)
- enable the community and industry to give their views about policy development and the performance of existing policies — underpinned by transparent decision making (and public data availability)
- involve impartial periodic reviews of the performance and net benefits of programs after they have been implemented, so that policy measures may be removed or amended (chapter 14).

Figure 3.1 Steps to good policy



A key requirement for all of the above features of good policymaking is the appropriate use of evidence — broadly interpreted as in figure 3.1 — to justify policymakers’ decisions. (This underpins the need for high quality gambling research and evaluation — chapter 15).

The Commission has used this framework in assessing problems affecting Australia’s gambling industries and in determining policy options. We also use this framework, where relevant, in assessing the effectiveness of the processes used by governments when making and evaluating gambling policy (chapters 14 and 15).

3.3 Rationales for gambling policy

Ultimately, the desirability of any changes to current policy settings and institutional arrangements for gambling rests on whether such changes would be likely to improve the wellbeing of the Australian community. However, under that very broad criterion, there are several rationales for government gambling policies, including:

- obtaining the benefits of gambling for consumers and others through legalised supply
- ensuring the probity of suppliers
- raising tax revenue
- meeting community norms
- dealing with the vulnerabilities of consumers and communities in general arising from legalised gambling, and problem gamblers specifically
- reforming legacy regulations.

The benefits of gambling

Many people enjoy gambling and the venues where it takes place (box 3.1). In aggregate, the majority of Australians who do not experience problems with their gambling would lose an entertainment worth potentially billions of dollars to them were they no longer able to gamble (as shown in the Commission's 1999 report). Moreover, prohibition would erode people's freedom and would risk the criminality and corruption associated with the provision of illicit gambling. This provides the rationale for one of the most important policy stances of government in relation to gambling — simply allowing it to be legally supplied.

Apart from direct gains to consumers, there may be gains to others in the community, such as business owners, wage earners and taxpayers (from taxes imposed on foreigners). However, in aggregate and net terms, these economic gains will be much smaller than the benefits to consumers from gambling. This is because many of the apparent benefits would still be present were the gambling industries to be smaller. This reflects the fact that someone working in the industry does not have 'Only to be employed in the gambling industries' stamped on their forehead. It is often not well understood that unemployment and labour force participation — and therefore jobs — are not determined by the industry structure of a country, but by more aggregate factors, such as the wage determination process and the business cycle.

Box 3.1 **Gambling is enjoyable for many**

As shown in chapter 2, most Australians participate in at least one form of gambling each year. The high participation rates suggest that many people enjoy gambling. A survey of EGM and TAB punters found that around 90 per cent were motivated to gamble because it was an entertainment or something to do (McDonnell-Phillips 2006, p. 7).

A similar survey found that around 70 per cent of regular Victorian gamblers were motivated to gamble because it was a hobby or favourite recreational activity; and 60 per cent were motivated by the thrill of winning (Centre for Gambling Research 2004a).

For some people the entertainment values are high. For instance, a 2007 survey found that around 2.5 percent of Tasmanian gamblers thought gambling had made their lives a 'lot' more enjoyable (SACES 2008b, p. 54). A further 20 per cent thought it had made life a 'little' more enjoyable'. Not surprisingly, regular players found gambling more enjoyable than non-regular players. (On the other hand, around 74 per cent of gamblers thought it had made no difference to their lives over the past year, while 2.3 and 1.3 per cent considered it had made life a 'little' and a 'lot' less enjoyable respectively.)

This is evidenced by the fact that different countries can have quite different industry structures without any differences in their employment rates. Similarly, industry structures have changed radically in Australia over recent decades, without any obvious effect on unemployment rates. Consequently, while there are many jobs (and wages earned) *in* the gambling industry (chapter 2), that does not mean that those jobs were *created* in any net sense, since the people concerned would have been employed in other industries were the gambling industries smaller.

The modelling undertaken by the CIE on behalf of the gaming industry for this inquiry incorporated this well-known feature of labour markets. Their model showed no long-run effect on national employment from even full prohibition of the gambling industries (Centre for International Economics 2009). A similar study undertaken by PricewaterhouseCoopers (2009, pp. 58ff) on behalf of the Australian Hotels Association found similar results. Of course, abrupt changes in industry structures associated with regulatory changes can cause unemployment over the shorter run — and this is one factor when considering the desirability of 'cold turkey' or more gradual policy changes.

There can be benefits if, at the margin, employees in the gambling industries get higher wages than they would have, had they been employed in other businesses. Similarly, business owners may make greater profits and taxpayers may get higher tax receipts from foreigners. In particular, there are likely to be some national

income benefits for specific gambling ventures, such as casino complexes that form major entertainment and accommodation hubs, and that attract overseas tourism. Nevertheless, the overall (incremental) supply-side gains are small fractions of the observed wages, profits and taxes associated with the industry.

This report does not undertake extensive analysis of the overall benefits of gambling because such benefits are obviously not a ‘problem’ requiring any counteracting policy responses. As such, the importance of such benefits can be lost in debates about gambling. As noted by HunterCoast Marketing:

For example, the 1999 report commented on satisfaction from “an enjoyable form of entertainment” and “benefits due to the enjoyment of playing” – presumably for most of the 82% of Australians who had a flutter. Yet this very strong indicator received no prominence in the media. (sub. 57, pp. 2–3).

Accordingly, gambling per se should not be seen as uniformly problematic for consumers. Indeed, in some cases, the Commission is proposing further liberalisation of gambling to increase the potential for enjoyment of gambling (chapters 12 and 13).

The key policy relevance of such benefits is that optimal harm minimisation policies are balancing acts, which seek to extract as many gains as possible from reduced harms from gambling with as little detriment as possible to its positive features. (For instance, it would be possible to reduce problem gambling by abolishing gaming machines, but that would entirely negate the entertainment value of playing gaming machines and would probably reduce overall community wellbeing.)

But the subsidiary goal of limiting any negative impacts does not mean there will be no such impacts, and indeed, in some cases a policy that causes detriment to the industry and the benefits enjoyed by recreational gamblers may be preferred to the one that does less, so long as there are commensurately greater gains from effective harm minimisation. (Industry viability is not an end in itself, and the size of the industry should be determined by offsetting costs and benefits and nothing else.) Three gambling experts have also highlighted the tradeoff:

... [harm minimisation strategies] should have a minimal impact on the satisfaction of recreational gamblers. However, this should not be the predominant variable that determines the acceptability or utility of any harm minimisation intervention. The predominant factor would be the potential for the protection against, and reduction of harm associated with, problem gambling (Blaszczynski et al. 2001, p. 19)

This is illustrated by the hypotheticals in table 3.1. Policy 1 is poor because, while it produces some reduction in harms, that reduction is not worth the collateral damage to consumers and other parties. (Indeed, policy 1 would not pass a cost-benefit test). Policy 2 is far superior because it has the same level of adverse effects for

consumers and others as policy 1, but with a more than offsetting dividend from a reduction in harms. Policy 3 has no adverse effects on recreational consumers or others, but produces only small reductions in harm. Policy 4 is superior to all other policy positions, even though it has worse outcomes for recreational consumers and others than either policy 1, 2, 3 or the status quo.

In fact, with careful targeting and appraisal, there are good prospects of avoiding ‘collateral damage’ on recreational gamblers from harm minimisation measures. It should also be emphasised that some harm minimisation measures are likely to improve outcomes for some ordinary consumers, and may indeed, enhance their enjoyment.¹

Table 3.1 Ranking policies

	<i>Recreational consumer gains</i>	<i>Tax and business gains</i>	<i>Harm</i>	<i>Net benefits</i>	<i>Ranking</i>
	A	B	C	A+B–C	
Status quo	100	20	70	50	4
Policy 1	95	18	66	47	5
Policy 2	95	18	60	53	2
Policy 3	100	20	68	52	3
Policy 4	90	15	45	60	1

Probity

A long-standing basis for government involvement has been concerns about the probity of games (‘rigged’ games), suppliers (organised crime) and gamblers (money laundering), with the ultimate objective being protection of consumers and discouraging criminal behaviour. No participant in this inquiry has contested the role of government in this area.

Revenue raising

The gap between Commonwealth grants to the states and their fiscal needs have to be filled through the states’ limited avenues for own-source revenue. These include gambling.

Reform of the national tax system — currently being assessed by the Treasury — might overcome this imperative. Nevertheless, in the absence of major overall tax

¹ For example, McDonnell-Philips (2006, p. 321) found that some non-problem gamblers thought that various harm minimisation measures would *increase* their enjoyment.

reform, collection of revenue from gambling activities by states and territories is appropriate.

It is less clear, however, that constraints on competition and supply *intended* to underpin significant licence fees (such as those that apply to casinos, or until 2012, the duopoly arrangement for EGMs in Victoria) are warranted, as discussed in the Commission's 1999 report. That said, where supply is constrained for other reasons (such as reducing problems associated with gambling) and where price controls are not feasible or desirable, there are arguments for governments to set licence fees to extract the excessive profits that would otherwise be earned by commercial operators.

Community norms

Government regulations can legitimately reflect public opinion about what is socially acceptable, with accountability for those regulations determined through the political process. The evidence suggests that, in contrast with many other pleasurable recreational activities, community norms concerning gambling reflect disquiet about its effects:

- While many Australians gamble, they remain sceptical about the overall community benefits (figure 3.2). For instance, one survey estimated that around 80 per cent of Victorian adults considered that gambling had done more harm than good (with little difference between the views of gamblers and non-gamblers).
- In Australia, commercially-supplied gambling is currently restricted to people aged 18 years and above, whereas in some countries, such as the United Kingdom, adolescents are legally able to gamble on lotteries and fruit machines (a form of electronic gaming machine). No developed countries allow young children to engage in commercial gambling.

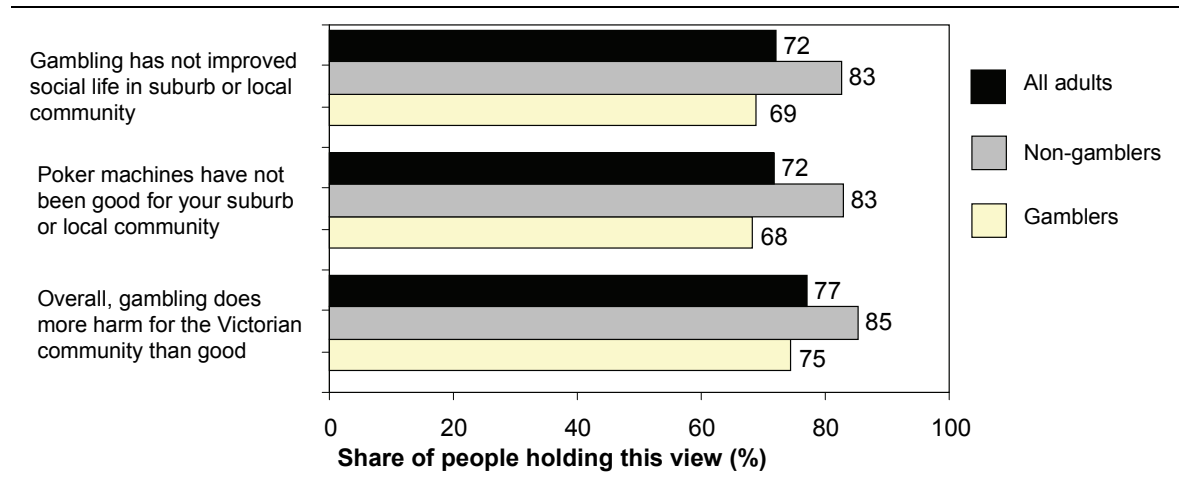
Community norms may reasonably provide a rationale for some restrictive regulations, such as in relation to access by children. However, in many other cases it can be very difficult to substantiate that the apparent 'norms' have sufficiently widespread support to justify them. In addition, such norms tend to evolve over time, so that what might be justified at one time is not at another.

Vulnerabilities of consumers

Consumers face a variety of problems with some goods and services (PC 2008) and this is particularly true of gambling. There is evidence (chapter 4) of widespread and persistent consumer misconceptions about certain gambling forms that might

lead to people spending too much time or money. People are also prone to impulsive decisions that they later regret. (This is not peculiar to gambling. Governments mandate cooling-off periods in law for some types of purchases — such as door-to-door sales — recognising that impulsivity may have adverse effects on consumers.) In some instances, behaviours by gambling suppliers, through advertising and promotions, might accentuate consumers’ general vulnerabilities in this area (chapter 8).

Figure 3.2 People gamble themselves, but remain uneasy about the community involvement



^a Data relate to Victoria in 2003.

Data source: The Centre for Gambling Research (2004a).

Moreover, some forms of gambling have features that may condition people’s behaviour in ways that are not necessarily in their interest. Such problematic conditioning effects do not require malign intentions or deliberative actions by suppliers, but may simply reflect the fact that, in a process similar to biological evolution, gambling products with more pronounced conditioning effects will tend to be commercially successful. These effects need not be isolated to ‘problem’ gamblers. As in the case of faulty cognitions, they may also affect other consumers. The empirical research has been dominated by a focus on serious gambling problems, rather than more frequent and less severe difficulties affecting consumers generally.

Some groups of consumers — such as people with intellectual or mental health disabilities, poor English skills, and those who are emotionally fragile (say due to grief) — may be particularly vulnerable to problems when gambling. That vulnerability is relevant when determining any alleged unconscionable conduct by gambling suppliers, and more generally for regulations, help services and information provision that aim to address the problems of these groups specifically.

Problem gambling

The most notable form of consumer vulnerability is ‘problem’ gambling, where individuals experience difficulties in controlling their gambling. Work undertaken for the Ministerial Council on Gambling has reached a generally accepted definition of problem gambling:

Problem gambling is characterised by difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others, or for the community. (Neal et al. 2005, p. i).

Sometimes, particularly in the United States, problem gambling has been identified as a mental illness. While some problem gamblers have pre-existing conditions, such as bipolar disorder or impulsivity disorders, that may pre-dispose them to problems with their gambling (chapter 4), Australian researchers and help professionals have rarely characterised difficulties with gambling as a medical problem (Professor McMillen sub. 223, p. 6). Instead, they have primarily seen it as a public health issue (see later). Addressing problem gambling has been the key concern of public policy in the decade since the Commission completed its past review and is a major focus of this report.

While problem gambling is one form of consumer vulnerability, it is useful to distinguish it from other problems experienced by consumers, because it requires policies specifically directed at it, such as help services.

Vulnerabilities of communities

Some communities face widespread problems stemming from poverty, poor health, low social and human capital, rundown or missing local community resources, substance abuse and crime. Some Indigenous communities fall into this group, but to a lesser extent, so too do particular communities in most major cities in Australia. These communities may be geographically concentrated or may be spatially-dispersed sub-groups sharing common vulnerabilities (such as recent refugees). These community traits can concentrate risks of problems with gambling, as well as compound some community-wide disadvantages. As part of a package of measures, policies tailored for certain ethnic groups, area-based policies in the provision of help services or specific rules about the accessibility of gambling may sometimes be justified to reduce such community vulnerabilities.

‘Cleaning out the closet’: policy and institutional reform to address policy failures

A major basis for adaptations or amendments to gambling policy is to address the flaws in existing policy arrangements.

A more nationally-oriented policy framework

State and territory governments are pre-eminent in gambling policy, each constructing complex sets of arrangements for taxing and regulating the industry, helping people with problems, collecting information and commissioning research. Policy variety can be a useful source of experiments from which others can learn. However, this requires good and transparent evaluation, which has often not been present. Policy variety can also be the result of poor coordination between jurisdictions; the exigencies of local politics; and arbitrary decision making, with little justification for the policy differences. This raises costs to gambling suppliers and the community generally. Among other things:

- Variants of gaming machine standards (and approval processes for new features) apply in each jurisdiction. Sometimes these differences might be justified by reasonable views about what might reduce harm, but some are without clear foundation or downplay the cost of variations (chapter 14)
- jurisdictions have conducted different prevalence surveys at different times, which complicate interjurisdictional comparisons that may have been useful in understanding the nature of the problems people experience from gambling, a basis for more effective policy (chapter 4 and chapter 15)
- there has been little coordinated learning about the best way of assisting problem gamblers through help and treatment services (chapter 5).

In some areas of policy, there is a strong rationale for more cooperation and consistency between jurisdictions — that is, ‘policies about policies’. The potential for a national approach in particular areas of gambling is raised, where relevant, in the chapters that follow, with a summary in chapter 14.

Competition policy failures need addressing

As one participant quipped during this inquiry, ‘all gambling industries are special, but some are just a bit more special than others’. This observation derives from the observed differences in government policy across segments of the industry.

The first notable instance is the treatment of the racing industry. It is the recipient of significant government support through hypothecated gambling tax revenue. While some mechanism must exist to secure payment for the racing industry to hold the events on which gambling is based, the existing arrangements may be coloured by the more questionable objective of industry support. We take that issue up in chapter 13.

A further manifestation of differential industry treatment is policy in relation to online gambling, which is inconsistent with the treatment of venue-based gambling regulated by state and territory governments (chapter 12).

And while variations in the regulatory treatment of different types of businesses may sometimes be legitimate, these variations need to be assessed against a public, rather than, a private benefit test:

- Clubs generally face lower gambling taxes than hotels, and often have greater entitlements to EGMs. A possible rationale for the treatment of clubs is that they are not-for-profit, ‘member-owned’ bodies that might have stronger incentives to address consumer problems associated with gambling than for-profit businesses. The Commission also received many submissions from clubs — or those supported by club gambling revenue, stressing their role in sustaining local communities — through sponsorship of local community and sports groups. However, the arguments for the present concessional treatment of clubs are not straightforward, because these concessions involve forgone tax revenue. Government could have used this forgone revenue to fund services valued by the whole community and not just those selected by club management, a point also made by McMillen (sub. 223, pp. 13–14).
- Casinos are also subject to varying rules in relation to taxation and machine caps — but they represent a much smaller share of aggregate spending, are more often aimed at different customers (high-rollers and tourists) and, due to their destination nature, are not as ubiquitous as hotels and clubs.

Throughout this report, the Commission assesses whether harm minimisation measures should apply in the same way to casinos, clubs and hotels. But, beyond that issue, the report does not examine the concessional treatment of clubs compared with other venues. The Commission is considering many of the complex issues associated with the competitive neutrality effects of taxation and the regulation of clubs as part of its concurrent inquiry into the not-for-profit sector (PC 2009, forthcoming).

3.4 Different frameworks inform policy

Given the breadth of rationales for government policy described above, there is no single theoretical construct for considering policy options.

For example, many see policy in this area through the lens of personal responsibility applied to other issues. From this perspective, there is a weaker rationale for government initiatives to address adverse consequences flowing from individuals’ decisions, with consumers expected to exercise self-control and to take

responsibility for their actions when gambling. While diffident about gambling and seeking to control it further many in the community also believe in self-responsibility. For instance, in five surveys undertaken between 1996 and 2003, around 80 per cent of Victorian adults considered that the onus was on individuals to control their gambling (Centre for Gambling Research 2004a, p. 142).

The failure of litigation relating to alleged negligence or unconscionable conduct by gambling suppliers (chapter 8) has partly reflected the significance courts assign to personal responsibility. Eroding the presumption of self-responsibility would substantially increase the risks of vexatious litigation and reduce the incentives for people to act prudently.

However, there may still be grounds for litigation if venue behaviours breach an appropriate standard (chapter 8). And, while sometimes the presumption of ‘self responsibility’ may reduce the merit of litigation, that need not diminish the merit of regulation. In particular, a pure ‘self-responsibility’ model ignores:

- the general vulnerabilities of consumers, which may be accentuated by particular aspects of the gaming environment and its technologies (chapter 4)
- the vulnerabilities of groups suffering from mental health problems. For example, people with depression and bipolar disorder have a much higher likelihood of developing gambling problems. Overall, around 35 per cent of problem gamblers have a severe mental disorder compared with around 2 per cent of non-problem gamblers (Jackson 2008)
- the fact that irresponsible behaviour may have damaging consequences for society as a whole
- groups where the strong incentives posed by the adverse personal consequences of their actions (gambling, but also binge drinking and dangerous driving) appear to have few effects on their subsequent behaviour. These groups — particularly poorly educated and disadvantaged young men — have systematically higher risks of persistent harmful behaviours
- the potential for regulation to reinforce, rather than undermine, self-responsibility. For example, some of the measures explored by the Commission in relation to gaming machines are designed to ‘irritate’ impulsive people (while not affecting others), increasing their incentives for self-regulation.

Accordingly, while there are reasonable social expectations that people take responsibility for their own behaviour, that expectation does not limit the need for significant regulation of gambling.

In that context, the three main frameworks shaping policy are the medical, public health and consumer-focused models (figure 3.3).

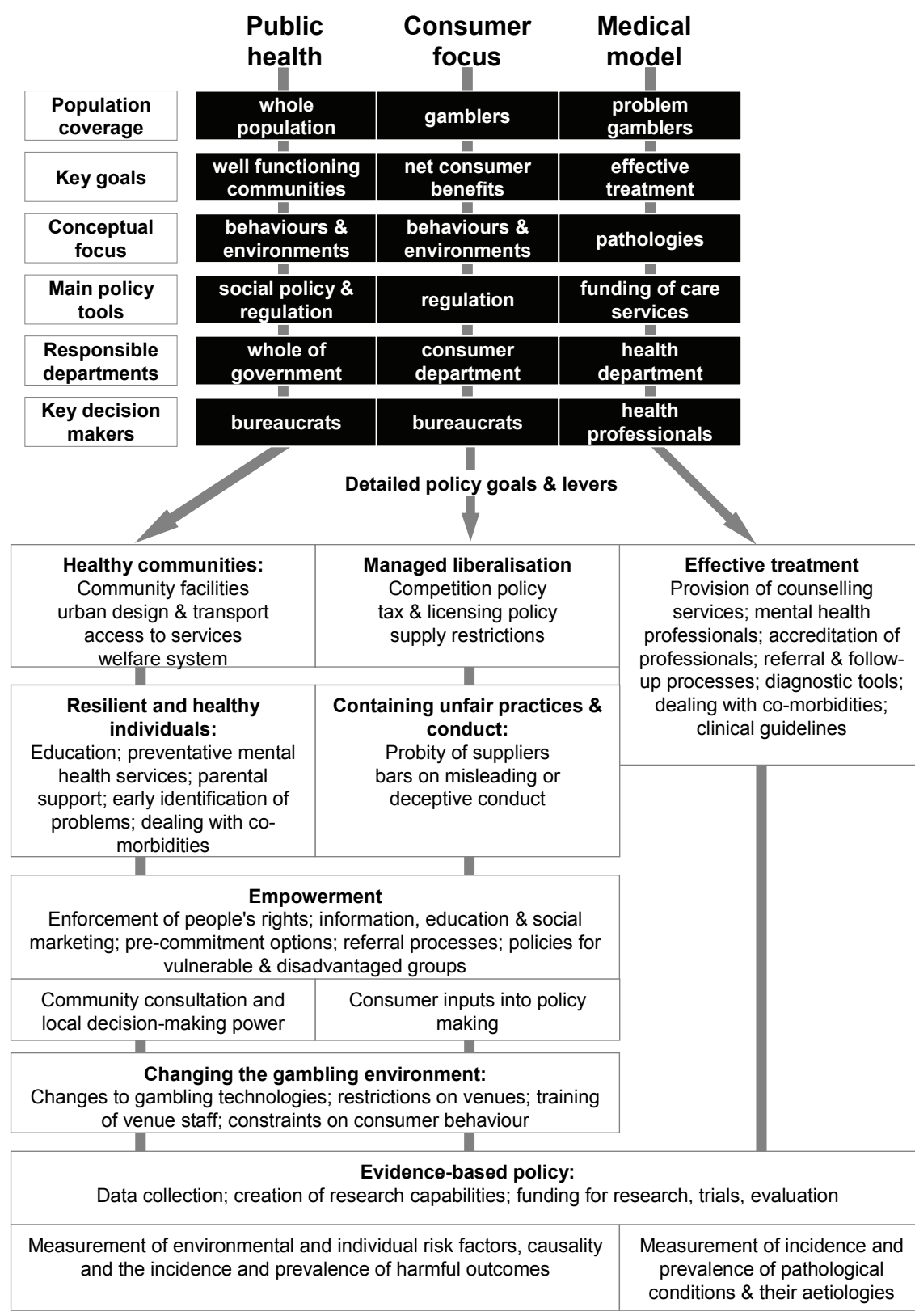
The medical model

This concentrates on the effective treatment of people who already have some ‘dysfunctional’ health condition, and encompasses the specialised professionals and knowledge required to achieve this. In the gambling area, this includes counselling and psychiatric services for problem gamblers; specific diagnostic criteria, such as the Diagnostic and Statistical Manual of Mental Disorders; specialised therapies, such as psychotherapy and cognitive behavioural therapy; dealing with co-morbidities such as depression or substance abuse; and the development of professional standards and accreditation.

However, even in considering the effectiveness of treatment services (chapter 5), some of the concerns posed by the consumer and public health frameworks still have relevance. For instance:

- non-medical approaches, such as financial counselling, may help people to overcome gambling problems
- people can overcome the problems experienced by their gambling without treatment through learned adaptation of behaviours, self-help manuals and informal help by friends and families. One of the challenges posed for the ‘treatment’ approaches is to demonstrate that they have greater effectiveness than such informal approaches
- all people with a broken leg seek treatment, but few people experiencing gambling problems do so. Why that is the case and what, if anything, to do about it raises social not medical issues. For instance, social stigma appears to be one reason why many people do not seek help
- unlike fixing a broken leg, the outcomes and forms of treatment for gambling problems depend on the community context. For instance, many Asian communities have specific beliefs that counsellors need to consider when helping them. Modes of help may need to be different in Indigenous communities.

Figure 3.3 Different models for understanding gambling policy



The public health model

This is defined as ‘the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals.’²

Many researchers and policy analysts have placed policy responses to gambling within a public health framework (Korn and Shaffer 1999; Messerlian et al. 2005; IPART 2004). This was also true of many participants in this inquiry (box 3.2).

In areas outside gambling there have been a myriad of successful applications of the public health approach. These include social marketing to limit smoking (Hammond et al. 2007); immunisation (Applied Economics 2001); the positioning of sleeping infants to reduce cot death rates (Van Der Weyden 2003); ‘black spot’ programs to reduce traffic accidents (Meuleners et al. 2008); design changes to motor vehicles (Morrison et al. 2003); and the removal of carbon dioxide from the domestic gas supply to reduce suicides (Clarke and Mayhew 1988). Historically, measures such as improved sanitation, clean water and public education have been credited with major reductions in morbidity and mortality across whole populations.

In gambling, the public health model is generally contrasted with the medical approach. The latter concentrates on the treatment of problem gamblers (that is, resolving individual dysfunction by dealing with the individual), while the latter aims to *prevent* problems associated with gambling however they may arise, and, more generally, the *promotion* of wellbeing generally. In that sense, the public health approach shares many of the goals and insights of the economic approach to consumer issues (as for example, set out by a recent OECD paper by Sassi and Hirst 2008).

² This is attributed to C.E. Winslow (a bacteriologist at Yale Medical School) in 1920, and still the commonly cited definition of the public health model.

Box 3.2 Many participants favoured a public health approach

A public health framework, which underpins *Taking action on problem gambling*, recognises that there are a range of behaviours associated with gambling. As gambling behaviour becomes more problematic so too does the range, intensity and complexity of the behaviours involved. This means that multiple strategies are needed to prevent gambling becoming problematic and to reduce gambling related harm. Prevention, treatment and harm minimisation are the cornerstones of a public health policy framework and are used to address other problem behaviours such as alcohol abuse and drug taking. (Victorian Government, sub. no. 205, p. 67)

The Queensland Responsible Gambling Strategy is a holistic approach to the issue of gambling and acknowledges the spectrum of healthy and unhealthy gambling behaviours in the population. It is based on a public health approach which views problem gambling as a complex issue requiring multiple collaborative solutions and incorporates elements of prevention, protection and rehabilitation. Broadly, the goals of a public health approach to gambling are to promote informed attitudes and behaviours towards gambling, prevent the development of gambling problems, protect vulnerable and at-risk populations and provide help and support to those affected by problem gambling. (Queensland Office of Liquor, Gaming and Racing, sub. no. 234, p. 8)

We believe NSW needs a Host, Agent and Environment population approach as in drug, alcohol and tobacco. We believe the reason we don't have such an approach at present is that the strong political influence of the gambling industry has blocked development toward this model preferring the "Reno Model" with its focus upon individual behavioural treatments, consumer education and philosophy of responsible choice. This model (in contrast to a public health approach) fails to address the social determinants of problem gambling and product safety issues. (Gambling Impact Society NSW, sub. 59, p. 2)

A public health approach to primary prevention and early intervention that focuses on information, education and treatment for problem gamblers and their co-morbid issues is essential to limit gambling related harm. (South Australian Council for Social Service sub. no. 179, p. 10)

... regulators and licensing authorities should give more consideration to a public health approach to harm minimisation which stresses the importance of the local social environment on both the aetiology and prevention of gambling-related harm, and on the maintenance of individual and community capacity and wellbeing (Professor Jan McMillen, sub. 223, p. 23)

Although some jurisdictions maintain that they adopt public health models in gambling, these tend to be heavily focused on 'downstream' interventions such as the provision of counselling services or use of large scale (expensive) media campaigns highlighting the dangers of excessive gambling ...A contemporary public health approach would place far more emphasis on 'upstream' approaches to the problem, in this case effective regulation to limit harm and better regulate the harm causing mechanism – in this case, the EGM system. (Livingstone, Woolley & Keleher, sub. 134, p. 4)

As is apparent with the preceding non-gambling examples, the public health approach uses many different levers to address risky or socially adverse behaviours or to promote healthy communities. Of particular relevance to gambling, these policy levers include:

-
- providing communities and individuals with richer opportunities for interactions with each other and for leisure.³ In a gambling context, this might, on the one hand, include measures that reduce boredom or alienation as motivating factors for escapist gambling. On the other hand, the public health approach does not rule out the positive impacts of gambling. For example, beyond its immediate recreational value, gambling may have broader social benefits to a community, such as through safe and inviting venues
 - providing people with useful factual information so people can make more informed decisions. For example, in gambling this might mean information about the cost of playing a machine per hour, the likelihood of long-term losses for a regular gaming machine player; provision of information where people have persistent cognitive misperceptions; records of gambling transactions; and strategies to keep gambling expenditure under control (such as the existing capacity for people to set limits on ATM withdrawals)
 - empowering the general community, for example by giving them a say about where gambling may be located in their area, or the capacity to seek control over a family member's problem gambling through third-party exclusions
 - using social marketing campaigns, for example, to promote help seeking behaviour or to encourage people to watch out for friends who might be developing a problem (as exemplified by the NSW 'gambling hangover' campaign aimed at young men)
 - legal sanctions, such as prohibitions on certain kinds of inducements to gamble, or on children participating in commercial gambling or failure by venue staff to enforce responsible gambling
 - mitigating risks by changing technologies. For example, this might involve changes to bet limits, bill acceptors or rates of return, or requiring breaks in play, cashless gaming or pre-commitment
 - reducing risks for gamblers by changing the behaviour of staff in gambling venues, through training programs about responsible service of gambling and awareness of the behaviours shown by patrons experiencing problems
 - altering the environment more broadly, such as through restricting the general availability of gambling opportunities (such as evident in the Western Australian approach to gaming machines); changes in venue operating hours; the location of the gaming room within a venue; the availability of ATMs; and the disclosure of risks through printed or audible warnings.

³ Income redistribution to reduce inequality is often cited as an important social dimension of the public health approach generally, but it is less clear that this would be relevant to harm reduction associated with gambling.

A key aspect of the public health approach to gambling— similar to its application to alcohol and motor vehicles — is that gambling is not an inherently ‘bad’ product whose consumption should be discouraged (as compared with tobacco or illicit drugs). Accordingly, public health approaches often centre on ‘harm minimisation’ strategies, allowing supply, but mitigating its harmful effects.

The consumer model

The consumer approach recognises that gambling is a consumer good, and that, as for other consumption, the policy environment should seek to maximise benefits for consumers. This includes ensuring appropriate product safety standards; fitness for purpose; informed consent; the absence of unconscionable behaviour and misleading or deceptive conduct by suppliers; protection of vulnerable consumers; and markets that encourage innovation and low prices for consumers.

There are some differences between public health and consumer-oriented approaches. The former would typically ignore competition issues (though these are often strongly associated with consumers’ wellbeing), while the latter would not typically look at changes to local communities as a policy option. However, there are more conceptual commonalities than differences. For instance, the imperative for adequate product safety in gambling would require appropriate modification of features of gaming machines that are potentially hazardous to consumers. Consumer policy would target the same features as preventative health measures.

The names do not matter much

There are sometimes debates about what *name* to apply to the framework that might yield policy changes aimed at achieving desirable outcomes. Is a public health, consumer protection, psychiatric, community empowerment or other ‘framework’ the appropriate one to apply? In our view, the name matters less than the capacity for the framework to clearly express the goals of policy and to generate the right policy questions and answers. Nevertheless, the ‘public health’ and ‘consumer protection’ frameworks — as traditionally understood — provide the broadest insights into the kinds of policies that promote the public good in this area.

The policy goals are clear

The ultimate objective of gambling policy is to achieve the best outcomes for consumers and Australians generally. As the discussion above shows, that involves achieving many subsidiary goals. These goals are to:

-
- reduce detriment to consumers, which in turn requires:
 - preventing consumers from becoming problem gamblers
 - lower levels of harm experienced by those gamblers who are already experiencing problems (for example, because they are able to more effectively limit their time or money spent gambling) and, associated with these, reduced harms for their significant others and the community at large
 - more effective help services for those gamblers experiencing significant control problems
 - appropriate behaviours by suppliers of gambling
 - overcoming consumers’ cognitive misperceptions or poor information, so they can make better informed judgments about their gambling decisions
 - achieve better value for consumers through:
 - lower prices (alleviating the impacts of anti-competitive arrangements, ineffective cost-increasing regulatory requirements and unnecessary red tape for gambling suppliers — all of which ultimately fall on consumers as higher prices)
 - higher quality and more innovative gambling products
 - a capacity for greater consumer sovereignty by giving consumers more tools to control their own gambling
 - meeting public expectations through:
 - the better realisation of community norms and aspirations, noting that the community’s ambivalence to gambling partly derives regulation
 - more accountable and transparent government decision-making, in an area where the public have a strong policy interest
 - better functioning communities
 - introduce better institutional arrangements for gambling policy making and regulation — a goal that underpins the capacity to achieve the other objectives.

Sometimes there are tradeoffs between policy goals. For example, open competition might lower prices and encourage innovative new products, which benefits consumers as a group. Nevertheless, the resulting increase in accessibility of gambling might exacerbate problem gambling or challenge community norms. So, in working out the best policy options, those who benefit from, and those who are disadvantaged by, any policy measures need to be considered. However, these considerations can fit into a standard economic framework, so the overall goal of gambling policy can still be characterised as maximising net community benefits.

3.5 The size of the ‘prize’

As emphasised throughout this report, careful targeting of harm minimisation measures should avoid reducing the pleasurable aspects of gambling for consumers, while offering the potential for large gains by alleviating the harms to some gamblers. But how big could that prize be?

Understanding the magnitude of the costs of gambling problems provides an indication of the size of the prize from effective harm minimisation policies (so long as these do not overly reduce the recreational benefits of gambling). Gambling problems impose many costs, including burdens for family members from the financial and social impacts of problem gambling behaviours, and costs for the society generally from increased fraud, provision of help and welfare services and other impacts. Some of these costs are discussed in chapter 4. Delfabbro (2009) has recently summarised their nature and qualitative importance, and they were partly quantified in the Commission’s 1999 report. That report estimated total social costs of between \$1.8 and \$5.6 billion (PC 1999, p. 9.11), with an additional loss of \$2.7 billion due to ‘excess’ spending by problem gamblers (p. C.25).

Since then, there have been several offsetting pressures on these aggregate costs. On the one hand, the prevalence rate of problem gambling has probably declined somewhat (chapter 4). On the other:

- the adult population has grown from around 14 million to nearly 17 million over this period
- household income has risen significantly. The value of avoiding adverse social and health outcomes typically rises with income, suggesting that the social costs of gambling have probably risen roughly in proportion with that income
- gambling expenditure (player losses) has nearly doubled.

The Commission has not undertaken any further detailed research in this area as the exact numbers are not relevant to the need for policy action.⁴ However, a ‘thought-experiment’ was conducted to explore the order of magnitude of the gains from a 10 per cent reduction in the harms from problem gambling (box 3.3).

⁴ In the context of the large literature on the subject, the Commission has not provided a comprehensive assessment of the adverse social impacts. Stakeholders have not disputed their importance.

Box 3.3 Some 'back-of-the envelope' calculations

Two main factors determine the overall costs of problem gambling. The first is the size of the social costs *per* problem gambler. Using the results from the Commission's 1999 report as the base for social costs, rising inflation and real household income per capita will have pushed these social costs up by around 70 per cent in nominal terms over the decade. That suggests social costs in 2008–09 of between \$10 500 and \$32 600 per problem gambler (denoted by *S*), up from between \$6100 and \$19 000 in 1997–98 (PC 1999, p. 9.11 and where problem gambling was measured by the SOGS 5+ criterion).

The second important factor stems from the fact that some proportion (*P*) of problem gamblers' spending does not genuinely reflect a benefit to them, given the difficulties they face in controlling their gambling. By 2008–09, gambling expenditure (*E*) was around \$18.9 billion, up from \$10.8 billion in 1997–98. For any given assumption about the expenditure share of problem gamblers (*Sh*), it is then possible to estimate the value of expenditure by problem gamblers and the loss that implies for them ($Sh \times P \times E$).

Given an estimate of the adult population (*POP*) and the appropriate problem gambling prevalence rate (*R*), then the overall costs in 2008–09 of problem gambling can be estimated as $C = (R \times POP \times S) + (Sh \times P \times E)$.

However, that number is just the cost for one year, while problem gambling, and its associated costs stretch into the future. Moreover, the population is growing, and so is household income. These influences will increase the numbers of problem gamblers (though not the prevalence rate), raise gambling expenditure and produce greater social costs per problem gambler. Given that people care less about costs tomorrow than costs today, these long-run future losses have to be discounted to their 'present value'. Taking all these factors together, the 'present value' of the costs of gambling in constant 2008–09 prices at a given prevalence rate are:

$$PV_C = C \times \frac{(1 + \text{discountrate})}{\{\text{discountrate} + 1 - (1 + \text{productivity})(1 + \text{popgrowth})\}}$$

where *discountrate* is the long-run discount rate (an interest rate); *productivity* is the average rate of productivity growth (which will determine how income per capita moves over time) and *popgrowth* is the long-run average rate of population growth.

The gain from a sustained 10 per cent reduction in harm is therefore one tenth of PV_C . The Commission has taken a conservative approach, using estimates of the variables that give an overall low measure of the cumulative costs of problem gambling. This included assuming a small spending share by problem gamblers (of just 20 per cent); the lowest estimate of the social cost per gambler; a relatively high real discount rate (7%); a low annual population growth rate (0.25%) and a low real annual productivity growth rate (1.5%). Moreover, the Commission applied a low estimate for the long run problem gambling prevalence rate. (The estimate assumed a CPGI8+ rate of 0.5 per cent and a CPGI3–7 rate of 1.3 per cent, which equates to around a 1 per cent SOGS rate).

These calculations suggest a net benefit from a 10 per cent sustained reduction of problem gambling of around \$450 million a year, and an accumulated benefit of around \$9 billion (in present value terms). In the case of gaming machines alone, the benefits of effective harm minimisation are slightly less. When the calculations are restricted to just this group, the gains from a 10 per cent reduction are around \$350 million per year and \$7.4 billion in accumulated benefits. Although rough calculations, they provide a useful indicator of the scale of potential benefits from even modestly effective harm minimisation.

Even conservative estimates suggest that a small temporary reduction in problem gambling could produce sizeable welfare gains for Australians. The thought-

experiments suggests that a ten per cent sustained reduction in the harm associated with problem gambling could yield a gain of around \$450 million dollars and accumulated benefits of billions of dollars. These estimates ignore any of the costs faced by recreational or low risk gamblers, although the evidence suggests that, in aggregate, these may be high (chapter 4). Accordingly, even harm minimisation measures with modest efficacy may produce worthwhile net benefits so long as they do not also inadvertently generate excessive costs.

DRAFT FINDING 3.1

Even under conservative assumptions, a sustained 10 per cent reduction in the costs associated with problem gambling is estimated to generate benefits to society of around \$450 million a year in 2008-09 prices, and longer-term benefits amounting to several billion dollars. This implies that even harm minimisation measures with modest efficacy may produce worthwhile net benefits so long as they do not also involve excessive costs.

3.6 Evidence-based policy in gambling

Good policy relies on more than plausible rationales. It requires reasonable empirical or theoretical grounds that a policy would have its desired impacts without excessive costs. Some see evidence in relatively narrow terms as the empirical demonstration that a particular policy will work. However, strictly applied, a requirement for ‘hard’ evidence of this kind would cripple social policy.

It is mostly impractical for cost, time or ethical reasons to run true experimental trials of social policies. And, while such trials are sometimes claimed to be the ‘gold standard’, in reality their outcomes depend on the exact design and they may not apply in social contexts outside the environment in which they were tested. For instance, the famous Perry pre-school trial in the United States — a well run experimental trial with a proper control — found that early childhood education had significant lifetime benefits. However, wider application of early childhood education through the Head Start program was not as effective.

In the gambling field, there have been only a few trials (and none is equivalent to the ‘double blind’ randomised control trials that are the typical ‘gold standard’ in medical research).⁵ While the trials have provided useful insights, they have relatively narrow policy relevance and have had some limitations:

⁵ These have related to pre-commitment (chapter 7) and to the impacts of certain features of gaming machines, such as note acceptors and spin rates (chapter 11).

-
- A trial of the effects of various machine modifications illustrates the difficulties of conducting policy-relevant trials — a point emphasised by its authors (Blaszczynski et al. 2001). Among the variety of limitations they identified, the most fundamental was the capacity of gamblers in the study to choose whether to gamble on a modified or unmodified machine or to go to another venue (p. 71). This limited the capacity for a real control/treatment comparison. The design flaw is principally a reflection of the practical difficulties of conducting proper trials in gambling.
 - The trials of pre-commitment in South Australia and Queensland (chapter 7) illustrate a different dilemma. The trials have been conducted over a long period in several trial sites, with careful data collection (based on card use). They have provided many insights into the practical use of card-based gaming, but they only relate to a voluntary pre-commitment system. Accordingly, they have limited relevance to many alternative designs of pre-commitment systems, such as mandatory card systems.

This does not mean that policymakers should not conduct trials - on the contrary. However, where they run them, the design of the trial should, as much as possible, emulate the proposed policy (box 3.4).

Evaluation evidence based on ‘before-policy, after-policy’ outcomes may have more (cost-effective) potential to assess the magnitude of policy effects. The drawbacks of this approach are that it requires that governments implement the policy before the evidence is collected and that it requires that no other extraneous effects contaminate the analysis. On the other hand, it will often help guide the wider adoption of that policy (for example, to other jurisdictions), the amendment of existing policies or provide evidence for analogous policy initiatives. The Commission strongly favours better ex post evaluation of policies (chapters 14 and 15).

The study by Brodie et al. (2003) of the impacts of lowering the bill acceptor limit to \$20 in EGMs is a rare example of the use of before/after comparisons in gambling, but also provides an example of the difficulties. This is because the change in bill acceptor denomination was quickly followed by another policy change that allowed gamblers to insert multiple notes. Consequently, it is hard to tell whether the initial drop in spending, followed by a return to trend spending, was the result of adaptive behaviour by gamblers (with the implication that bill acceptor limits may not work well) or the result of a new policy initiative that undermined the first. (We explore this issue in greater depth in chapter 11.)

Box 3.4 How could a good experiment work?

The goal of experiments is to test the causal impacts of a policy in real world settings. Suppose that a government is considering reducing the denominations of bill acceptors on EGMs. One method for assessing the impacts of this proposal would be to conduct a trial, in which groups of EGM gamblers were assigned randomly to two groups: (a) those who could now only play on gaming machines with lower denomination bill acceptors (the ‘treatment’ group) and (b) those who could only play on unmodified machines (the control). The goal of random assignment is to get groups whose average characteristics are the same.

The people in the two groups would need to remain in their assigned groups. The evidence from the experiment would be weakened if the treatment group could choose to play on machines that had higher bill acceptor denominations — either in the venue concerned or at other venues not participating in the experiment. The point of the experiment would be to understand what would happen to their behaviour if they did not have that choice. A practical way of achieving this condition would be to conduct the experiment for all the gaming machines in groups of similar, relatively isolated towns (some towns with modified machines, and some towns without), with little scope for people to go to other nearby towns to play on their machines. In an ideal setting, people would not know they were participating in a trial so that their behaviour would not be moderated by the fact that they knew that researchers were observing them.

The researchers would run the experiment for a reasonable period to ensure that it took account of subjects’ adaptive behaviour. Then the effects of lower denomination bill acceptors could be estimated as the differences between the treatment and control groups for a range of relevant measures — such as time or money spent playing. Effects could also be estimated for policy-relevant subgroups, such as problem gamblers (of varying severity), at-risk players and recreational players, people playing in hotels or clubs so on.

Researchers could assess the varying effects of a whole range of choices about note acceptor denominations, including only permitting coins (dose response effects). As an illustration, a reduction of a note acceptor denomination from \$100 to \$50 might have negligible effects because most people do not put in more than \$50 notes anyway, and in any case, could easily break \$100 bills into two \$50 ones. However, requiring people to load machines with one dollar coins only might have a much bigger effect on spending. The value of the experimental approach is that it could calibrate policy. (Notably, the terms of reference given to Blaszczyński et al. 2001, did not allow them to consider anything other than the modification of note acceptors to a \$20 limit.)

There are many practical limitations to conducting an experiment like that above.

- the costs would be high, especially if many different machine features were being tested (since that would require many towns and many subjects)
- mandatory player loyalty cards would be required to capture data on playing time and losses
- it would take a long time to organise
- venues would need to voluntarily assent (and some would not, creating biases)
- there would be differences between the control and treatment sites since small towns would often be different from each other (invalidating the assumption that control and treatment groups are alike except in respect of receipt of the treatment)
- it would not be ethical to conceal the fact people were participating in a trial.

That said, a carefully designed experiment could probably address many of the above deficiencies, providing valuable insights into likely player behaviours after changing machine characteristics.

What are realistic options for ex ante assessment of proposed policies?

Trial-based evidence is useful, but is only a small part of a broader range of evidence that can help make informed policy choices. There are many elements to evidence, summed up in a range of questions:

- *Are there good theoretical grounds to expect an initiative to change behaviour?* For example, given our knowledge of the incentives facing venues, mandatory shutdowns of machines at a time selected by a venue would be likely to occur when machine usage is lowest, and prima facie, would not likely to be effective (and this is borne out by the actual times selected by venues when they are given this discretion — chapter 10)
- *Is there other analogous evidence supporting or contradicting the policy initiative?* For instance, while educational programs that aim to inform children about responsible gambling have good face validity as harm minimisation measures, the evidence from other related programs is that they can actually promote harmful behaviours (chapter 6)
- *Is there aggregate evidence, based on ‘natural’ experiments that provide guidance on the effects of policy?* For instance, the effects of bans on smoking inside venues can provide useful evidence about the impact of forced breaks in play. Similarly, the lower proportion of female problem gamblers using help services in Western Australia provides a natural experiment about the impacts of gaming machine accessibility on problem gambling. Likewise, bans on gaming machines in some US states — and their dampening effect on calls to help services — also provides evidence on the link between accessibility and gambling problems (albeit being an expensive demonstration of that link)
- *Is there evidence on the size and duration of any policy effects?* For instance, mandatory clocks in venues have probably had little impact since their presence does not directly address dissociation (and people mostly have watches anyway)
- *How costly is the measure likely to be?* The potential benefits of any proposal have to be balanced against its costs (which include any reductions in enjoyment for recreational gamblers). Assessing these — even if qualitatively — can help determine whether an initiative is likely to meet a basic cost-benefit test. A measure that does not have ‘significant’ positive effects may still pass a net benefit test if it does not cost much. Costing also helps determine whether there are big risks entailed by the policy if, in fact, the policy is a poor one. The standard of proof for a low cost measure can be smaller than for a high cost measure

-
- *How easy (and inexpensive) is it to reverse or amend the policy?* Easily reversible or amended policies also require a lower standard of proof
 - *What are the likely positive and negative effects of the policy on different groups of gamblers ('problem' gamblers, 'at-risk' groups, recreational gamblers) based on an understanding of their gambling behaviours and on what they say?* For instance, if government were considering imposing a one dollar bet limit on EGMs, a key question would be how often do different groups of people bet more than one dollar? (This is an area explored by Blaszczynski et al. and in chapter 11). The answer to that can help assess who could be positively or adversely affected by the regulatory change. It would not be 'proof' of effectiveness, but it would help provide assessment of the potential for harm or gain, which is still useful evidence
 - *Given what we know about gamblers' behaviour, how do we think they may respond to an initiative?* For instance, re-locating ATMs outside a venue may create a longer 'break in play', encouraging some people with problematic spending to go home. However, they may partly compensate by bringing more cash to venues or simply gambling another day, using up the saved money. Evidence on gamblers' reactions to other regulation may help predict their responses to new ones
 - *What do experts advise?* Experts may be able to provide answers to some of the specific questions above, but they can also provide expert judgments that balance a range of issues.

While no single fragment of evidence or theory of the kinds described above provide a strong basis for policy action, cumulatively they may do so. The Commission has adopted this broad approach — known as 'triangulation' — to evidence in this report. For instance, multiple approaches were used to calculate the expenditure share of problem gamblers, recognising the limitations of any one method.

However, it is worth emphasising that 'evidence' often needs to be interpreted carefully. Two common difficulties in the gambling area are:

- assessing the nature and direction of causality from some feature of the gambling environment to gambling problems. For example, problem gamblers use in-venue ATMs more than other gamblers. This has obvious relevance to the issue of whether governments should ban ATMs from gaming venues (chapter 9). However, while easy access to cash may partly contribute to excess spending by problem gamblers, the main reason that problem gamblers make frequent visits to ATMs is their inability to control their spending. That incapacity would probably persist were ATMs removed, with problem gamblers often accessing cash in other ways

-
- isolating the policy factors that might lead to a lower or higher prevalence rate (or spending levels) in different jurisdictions. Given the variety of different policy settings in different jurisdictions, it is difficult to reliably conclude that a specific regulation has an effect (no effect) if the jurisdiction with that regulation has a lower (similar or higher) prevalence rate than jurisdictions without the specific regulation. This problem is accentuated by the imprecision in prevalence studies (chapter 4). Even were a policy to cut problem gambling rates by 20 per cent — a huge effect — it would not be reliably discernable from the statistical noise in the prevalence estimates, at least for many years.

What is the onus of proof?

It is common to argue that governments should not introduce regulations unless there is compelling evidence in favour of their net benefits. The unstated assumption behind this rule of thumb is that the cost of:

- failing to introduce a regulation that would, in fact, have been worthwhile (a ‘false negative’) is relatively low
- introducing a poor regulation (a ‘false positive’) is high.

In many instances, this rule of thumb is likely to be correct, given the lack of evidence of effectiveness of, or even a persuasive rationale for, many hurriedly introduced regulations.

However, in some instances the cost of false negatives could be significantly higher than false positives. In this case, a government should require a lower standard of evidence before implementing a regulation, or in some cases, should even reverse the onus of proof to require stakeholders to demonstrate why the government should *not* implement a regulation (as was the case under the National Competition Policy)

A major area where governments are particularly concerned about false negatives is public safety. For example, regulations do not allow the supply of new drugs or medical appliances until the manufacturers have sufficiently demonstrated their efficacy and safety, given the concerns about potentially large and widespread adverse impacts if a drug has unintended side effects.

In gambling, regulators do not permit a new supplier to supply services until they have demonstrated their probity, in part to protect the customers of that supplier, but also to encourage confidence by consumers in the whole industry. In doing this they are heeding the adage that ‘one bad apple spoils the barrel’ - the cost of wrongly including a bad apple far exceed the error of excluding a ‘good apple’. A criticism of gambling policy in the 1990s was that, despite international evidence about the

risks of highly accessible gaming, governments did not apply a precautionary evidence-based approach to justify the extensive and rapid liberalisation of gambling in Australia.

Equally, there are grounds for explicit consideration of the relative costs of false negatives and false positives in harm minimisation policies. A good illustration of this issue is the report by Blaszczynski et al. (2001), which found that a modified bill acceptor on gaming machines was associated with a relatively large reduction in player spending. That suggests that there could be gains from modifying the acceptors. However, the researchers found that there was a 5 per cent or higher chance that this effect could be spurious (a false positive), reflecting the statistical imprecision of the study. So policymakers have to weigh up two alternatives when deciding what decision to make:

- a potentially small (but in any case, greater than 5 per cent) chance that changing bill acceptors would not work
- a potentially reasonable prospect that they would work.

Deciding between these options depends on the costs of making the wrong decision. If the costs of modifying bill acceptors were high, there were large adverse effects on recreational gamblers or the harm mitigation from lowering spending were small, then it would probably be appropriate to require a high degree of scepticism about claims of the efficacy of modified bill acceptors (that is, require a low false positive rate). This is because the costs of decision errors would be higher with false positives than false negatives.

On the other hand, if there were sufficient prospective benefits from reducing harm, and the cost of a wrong decision were low (for example, few impacts on consumer satisfaction and low costs of implementation), it would be more appropriate for policymakers to gamble on modifying the machines. In that context, the cost of errors may still be asymmetric, but with higher costs for false negatives than false positives.

In this instance, determining which way the balance ultimately falls depends on other evidence and issues (chapter 11). Regardless, the example illustrates the dilemmas of policymakers acting under uncertainty, and the fact that, policy inertia is not always justified because of weaknesses in evidence. It also illustrates the potentially high payoff from:

- research, since this can reduce the uncertainty and, accordingly, reduce policy errors
- ongoing monitoring of policies with uncertain effectiveness and their subsequent rigorous evaluation (chapter 15).

So where should the balance lie?

Estimates from prevalence studies suggest that a significant share of regular gamblers experience gambling problems and that higher risk gamblers account for a significant share of total spending (chapter 4). That implies significant potential gains from policy action, and, by definition, significant potential costs from inaction.

The Commission does not consider that this is enough to reverse the onus of proof — that is, gambling suppliers be required to show why a whole range of harm minimisation measures should *not* be introduced. However, the high potential costs from inaction, or delayed action, suggest that the evidentiary burden should move from the standard in criminal law of ‘beyond all reasonable doubt’, to the standard in civil law of ‘the balance of evidence’. The approach is still evidence-based, but one that accounts for policy uncertainty and the relative risks of being wrong.