

THE BENEFITS AND COSTS OF BANNING INTERACTIVE GAMBLING

This report was prepared by Econtech Pty Ltd for
the National Office for the Information Economy

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Executive Summary

Scope

The National Office for the Information Economy (NOIE) commissioned Econtech to model the economic benefits and costs of banning interactive gambling, but not the technical feasibility, which is being assessed by other consultants. Four banning scenarios are modelled. Under each scenario, the ban applies to the interactive equivalents of all forms of gambling including wagering, casinos, electronic gaming machines and lotteries.

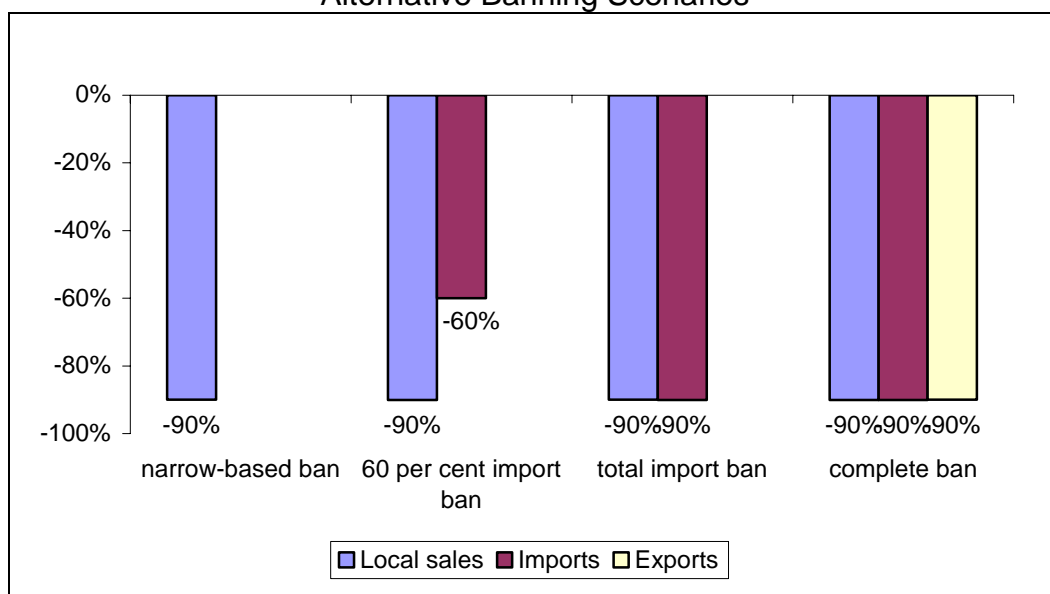
This report uses the Interactive Gambling Model (IGM), which was constructed specifically for this report. This economic model covers the entire economy but has a special emphasis on gambling, both interactive and traditional.

Banning Scenarios

Interactive gambling is a small but rapidly growing industry. A baseline scenario was constructed in which interactive gambling was assumed to grow to maturity, taking it to many times its current size. Four banning scenarios were then modelled using the IGM, and the effects of each ban were assessed by calculating the differences in results between the banning scenario and the baseline scenario. The four alternative banning scenarios are depicted in Chart 1 from least to most restrictive, and are explained as follows:

- narrow ban: a ban only on local companies supplying interactive gambling to Australian residents;
- 60 per cent import ban: extends the ban to imports. In this scenario, banning offshore providers from supplying interactive gambling to Australian residents is assumed to be 60 per cent effective;
- total import ban: in this scenario the import ban is assumed to be totally effective; and
- complete ban: further extends the ban to exports. That is, local companies are also banned from supplying interactive gambling to foreign residents.

Chart 1
Assumed Changes in Local Sales, Imports & Exports of Interactive Gambling under Alternative Banning Scenarios



Note: for technical modelling reasons, total bans are modelled as 90 per cent bans.

Benefits and Costs of Gambling

The Productivity Commission report on gambling divides gambling into two categories, recreational gambling and problem gambling. Recreational gambling is no different from other consumer products in that it provides consumers with benefits. Problem gambling is different because it incurs specific social costs beyond the costs of producing the gambling services.

These social costs from problem gambling include distress to family and parents, breakup of relationships and depression. They also include the costs of over-consumption of gambling services: problem gamblers devote more of their incomes to gambling than they would if they were able to control their gambling addiction.

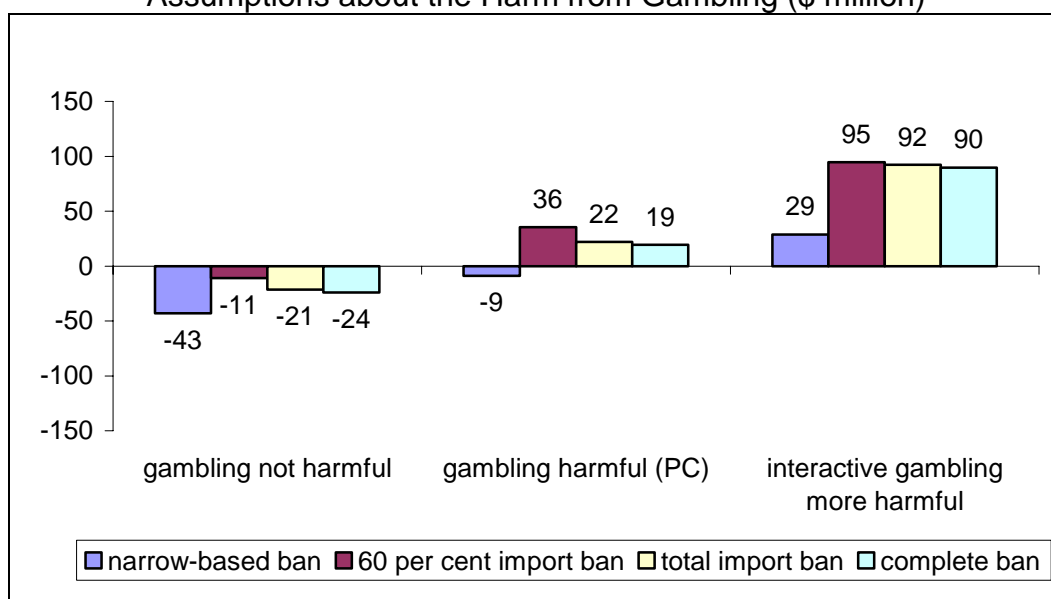
To accommodate a full range of views, the IGM allows for three alternative assumptions about the level of specific social costs from traditional and interactive gambling:

- *gambling is not harmful*: gambling involves no specific social costs;
- *gambling is harmful (PC)*: gambling involves social costs similar in magnitude to those estimated by the Productivity Commission; and
- *interactive gambling is more harmful*: the same as the “gambling is harmful” scenario except that the specific social costs for interactive gambling are assumed to be 30 per cent greater than for traditional gambling. Interactive gambling may be more prone to problem gambling because of easy access.

Effects of Bans on Economic Welfare

Chart 2 shows the estimated economic welfare effects of the four alternative bans under each of the three alternative assumptions about the social costs of gambling.

Chart 2
Annual Effects on Economic Welfare of Alternative Gambling Bans under Alternative Assumptions about the Harm from Gambling (\$ million)



The results in Chart 2 can be used to address two different questions. First, if interactive gambling is to be banned, what should be the nature of the ban? Second, should interactive gambling be banned at all?

If interactive gambling is to be banned, the ban should extend to imports. The chart shows that, whatever assumption is made about the social costs of gambling, the outcome for economic welfare is always higher under a wider ban that includes imports, than under the narrow ban, which is confined to local companies providing interactive gambling in Australia. Compared with the wider bans, the narrow ban distorts consumer choices by favouring imported over locally-produced interactive gambling.

Equally, there is no benefit to national economic welfare from including exports in the ban, as in the complete ban. This is because exports of interactive gambling do not impose any social costs on Australian residents. However, in considering whether to allow exports of interactive gambling, the Australian government may need to take into account the views of foreign governments about whether interactive gambling should be available in their countries.

Thus, under the criterion of maximising national economic welfare, if interactive gambling is to be banned, the ban should cover interactive gambling supplied to Australian residents, whether by local or offshore providers, but should not cover the supply of interactive gambling to foreign residents.

In terms of banning scenarios, this means that the recommended form of ban corresponds to the second scenario (“60 per cent import ban”) or the third scenario (“100 per cent import ban”), depending on the effectiveness of the import ban.

Whether interactive gambling should be banned at all depends on what is assumed about the social costs of gambling.

Under the extreme assumption that gambling has no specific social costs (“gambling not harmful”), all bans on interactive gambling, no matter how narrow or wide, involve a loss in economic welfare. Under this unrealistic assumption, any ban lowers economic welfare by restricting the choices available to consumers. As shown in Chart 2, the estimated annual loss under the recommended form of ban is \$11 million to \$21 million depending on the effectiveness of the import ban.

Under the second assumption that gambling has social costs similar to those estimated by the Productivity Commission (“gambling harmful (PC)”), a ban may modestly raise economic welfare. As shown in Chart 2, the estimated annual gain under the recommended form of ban is \$22 million to \$36 million depending on the effectiveness of the import ban. Banning interactive gambling while not banning traditional gambling does not treat both forms of gambling in a neutral way, but this may be justified if gambling has social costs and there are differences between the two forms of gambling.

One difference is that interactive gambling is taxed lightly whereas traditional gambling is taxed heavily. On the imports side, interactive gambling completely escapes Australian gambling taxes. On the local production side, interactive gambling is prone to tax competition between states because a provider can operate from any state and provide services Australia-wide. Thus most interactive gambling sites are licenced in states with low gambling taxes, such as the Northern Territory or Tasmania, or states which offer specific

tax breaks to interactive gambling e.g. the ACT applies a lower tax rate to interactive casinos than to its traditional casino.

In theory the best way of dealing with the concessional tax treatment of interactive gambling compared with traditional gambling would be to eliminate the tax concessions. This would require unifying gambling tax rates across the country, across both types of gambling, and across local-provided and imported supplies, but there are many obstacles to this and there is no sign of it happening. Assuming interactive gambling has social costs, a ban provides a “second best” way of responding to the artificial encouragement given to interactive gambling by its concessional tax treatment.

Under the third assumption that the specific social costs for interactive gambling are 30 per cent greater than for traditional gambling (“interactive gambling more harmful”), a ban on interactive gambling substantially raises economic welfare. As shown in Chart 2, the estimated annual gain under the recommended form of ban is \$92 million to \$95 million depending on the effectiveness of the import ban. It is not surprising that banning interactive gambling but not traditional gambling can be justified if interactive gambling has high social costs that exceed those from traditional gambling. In addition, as under the second assumption, a ban provides a rough correction to the effects of the concessional tax treatment for interactive gambling.

As a final observation on Chart 2, whatever assumption is made about the social costs of gambling, a 60 per cent imports ban is better for economic welfare than a 100 per cent imports ban. This result reflects a more general point. The arguments against interactive gambling lead to the conclusion that there are greater benefits from severely restricting its supply to Australian residents than from banning it totally.

Effects of Bans on State Revenues

A ban on interactive gambling will help shore up state revenue. Interactive gambling sites are concentrated in the smaller states — Tasmania, the ACT and the NT — which offer low tax rates for interactive gambling. These sites will in part attract gambling dollars away from the mass markets for traditional gambling in the larger states. This will result in a significant net loss in state gambling tax revenue.

By averting this leakage from high-taxed traditional gambling, an interactive gambling ban will boost state gambling tax revenue. The wider the ban, the larger the boost. Under the recommended form of ban, the annual gain in gambling tax revenue ranges from \$34 million to \$42 million, depending on the effectiveness of the import ban.

Effects of Bans on Industry Activity

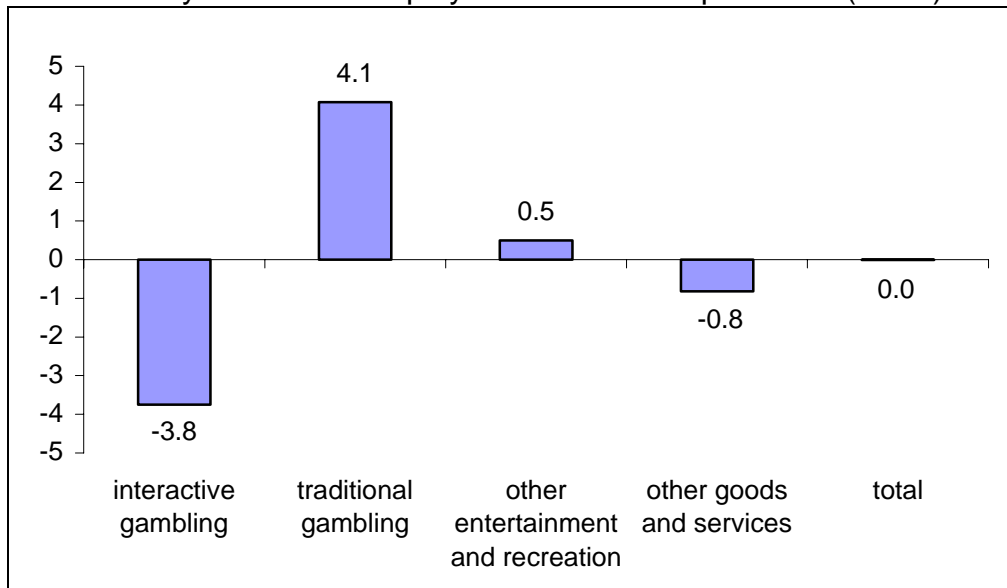
Obviously a ban on interactive gambling will reduce economic activity in the interactive gambling industry, with the extent of the reduction depending on the nature of the ban. For example, Chart 3 shows a loss of 3,800 jobs from the interactive gambling industry under the complete ban, but this result is subject to two important qualifications.

First, this job loss is hypothetical. It compares a situation where the interactive gambling industry is banned with a situation where it is allowed to grow to a mature industry with about 4,000 jobs. At its present formative stage, there are few people employed in the Australian interactive gambling industry, and the actual jobs loss from imposing a ban now may be one or two hundred, not thousands.

Second, and more importantly, this job loss is offset by job gains in other industries, particularly traditional gambling. This reflects a more general point that unemployment levels in Australia depend on the efficiency of the Australian labour market, not industry policy issues such as whether or not interactive gambling is banned.

That is, industry policy affects the industry mix of jobs, not the total number of jobs, which depends on labour market policies. Industry policies need to be judged on their effects on economic welfare, as in the above assessment of the various banning options.

Chart 3
Industry Effects on Employment of the Complete Ban ('000s)



Effects on Trade

Finally, the import and export bans obviously do result in lower trade flows. For example, under the complete ban the value of exports and imports are both down by about \$170 million annually. However, none of the banning scenarios show a significant effect on the trade balance. This is because, in the long-term, the real exchange rate adjusts to achieve a sustainable trade balance. Further, export and import values are not measures of economic welfare. The banning options need to be assessed against their effects on economic welfare as in the discussion above.

Introduction

The National Office for the Information Economy (NOIE) commissioned Econtech to model the economic benefits and costs of options for banning interactive gambling, but not the technical feasibility of the options, which is being assessed by other consultants.

Interactive gambling consists of two types of gambling, wagering and gaming. Interactive wagering refers to a bet placed interactively on a physical event such as horse racing, football, soccer, golf and basketball that takes place at an actual venue. Interactive gaming refers to the virtual equivalents of traditional gaming involving electronic gambling machines, casinos games, and lotteries. In interactive gaming, the games are generated by computer software and the results are determined by a random-number generator.

This report uses the Interactive Gambling Model (IGM) to assess the benefits and costs of four banning options. The IGM, which was constructed specifically for this report, is an economic model that covers the entire economy but has a special emphasis on gambling, both interactive and traditional. Besides taking into account the benefit to consumers from recreational gambling, this model accommodates a range of alternative assumptions about the social costs of problem gambling, including assumptions based on the findings of the recent Productivity Commission Report. The IGM is used to estimate the broad effects of the banning options on national economic welfare, employment and international trade. It also covers the industry effects, including the effects on interactive gambling activity, traditional gambling activity, and activity elsewhere in the economy. The IGM is outlined in section 1.

Interactive gambling is a small but rapidly growing industry. To take this into account, a baseline scenario was constructed in which interactive gambling was assumed to grow to maturity, taking it to many times its current size. Four banning scenarios were then modelled using the IGM, and the effects of each ban were assessed by calculating the differences in results between the banning scenario and the baseline scenario. They range from a narrow ban covering only local companies supplying interactive gambling in Australia, to a complete ban that also covers all Australian overseas trade in interactive gambling. The four banning scenarios are outlined in section 2.

The simulated effects of the four banning options are presented in sections 3 to 5.

Section 3 considers a “narrow ban” that applies only to local companies supplying interactive gambling to Australian residents.

Section 4 extends this ban to imports. In one scenario, banning offshore providers from supplying interactive gambling to Australian residents is assumed to be 60 per cent effective (“60 per cent import ban”), while in another scenario it is assumed to be totally effective (“total import ban”).

Section 5 further extends the ban to exports (“complete ban”). That is, local companies are also banned from supplying interactive gambling to foreign residents.

While all care, skill and consideration has been used in the preparation of this report, the findings are based upon the strict instructions of NOIE and are designed to be used only for the specific purpose set out below. If you believe that your instructions are different from

those set out below, or you wish to use this work or information contained within it for another purpose, please contact us.

The specific purpose of this report is to provide NOIE with estimates of the benefits and costs to the Australian community of banning interactive gambling in Australia.

The findings in this report are subject to unavoidable statistical variation. While all care has been taken to ensure that the statistical variation is kept to a minimum, care should be used whenever using this information. Should you require clarification of any material, please contact us.

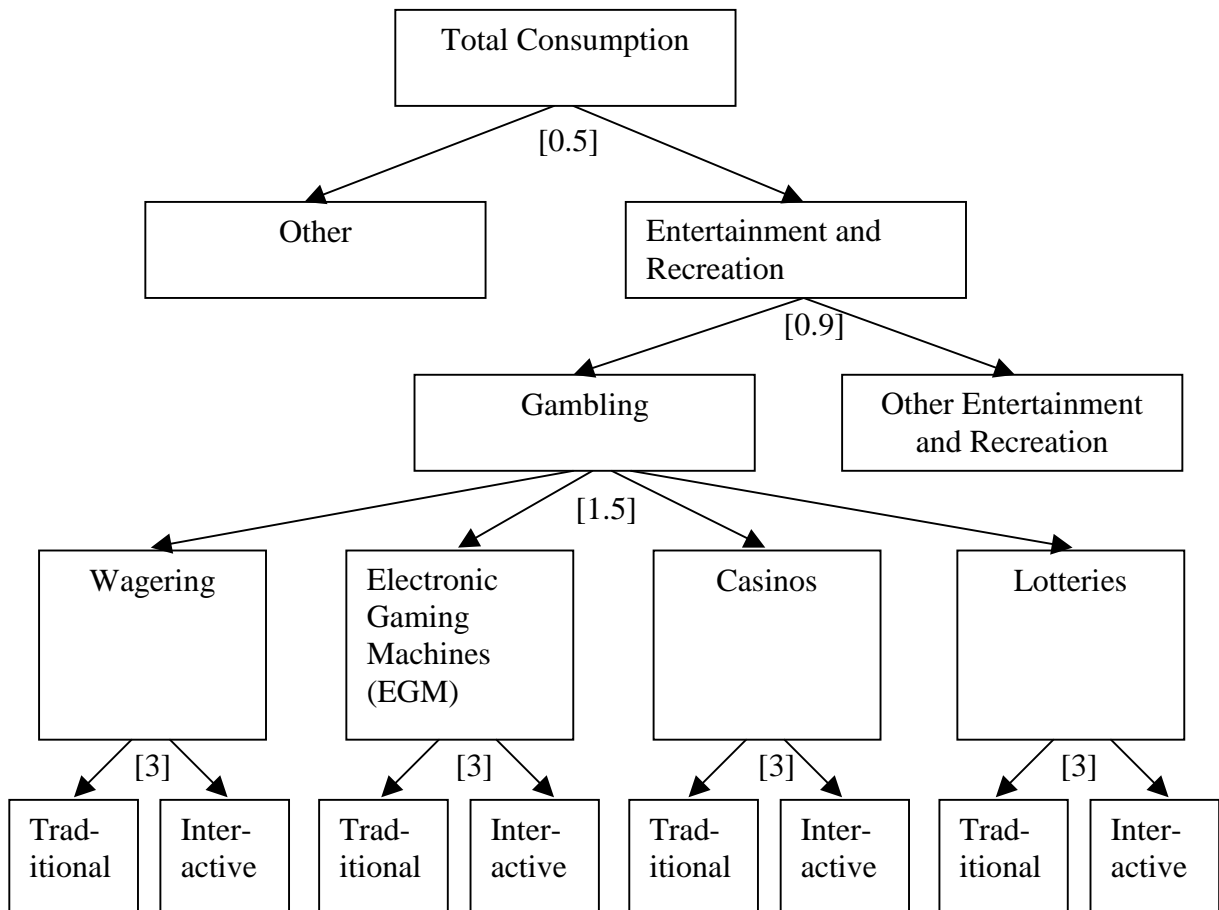
1. Overview of the Interactive Gambling Model

The Interactive Gambling Model (IGM) is a computable general equilibrium (CGE) model developed specifically to measure the benefits and costs of banning interactive gambling in Australia. The IGM covers industry costs and prices as well as industry production and employment, and models market-clearing, long-term outcomes under optimising behaviour.

1.1 Consumer Choice

Banning interactive gambling impacts directly on consumer choices. In the IGM, choices for Australian consumers are modelled as shown in the following Diagram.

Diagram
Trees of Choices for Australian Consumers in the IGM



For each consumer choice, the elasticity of substitution is shown in square brackets. For example, under entertainment and recreation appears the following: [0.9]. This means that a 1 per cent increase in the price of gambling products relative to the price of other entertainment and recreation results in a 0.9 per cent fall in demand for gambling products relative to the demand for other entertainment and recreation. Thus the higher the elasticity of substitution, the higher the price sensitivity. Products with high elasticities of substitution are seen by consumers as close substitutes.

As one moves down the consumer choice tree further dividing consumer choices, the products that are the subject of choice become more alike so the elasticity of substitution rises.

This approach takes into account that one effect of a ban on interactive gambling would be to induce substitution to traditional gambling, as shown in the fourth (i.e. bottom) tier of consumer choices in the diagram. It also takes into account that there would be some substitution from gambling to other forms of entertainment and recreation, as shown in the second tier of consumer choices in the diagram.

1.2 Other Modelling Assumptions

While this report does not focus directly on the New Tax System, it takes it into account through the inclusion of the GST in the Baseline Scenario. The IGM also builds in the current tax regime for the four forms of gambling, distinguishing between the tax treatments of traditional and interactive gambling where appropriate.

The IGM also provides valid measures of changes in economic welfare in response to policy changes, such as the banning of interactive gambling.

The IGM models a long-run equilibrium. In the long run, economic agents optimise, all markets are in equilibrium, and assets and liabilities follow sustainable paths. Some of the key assumptions involved are as follows.

- *labour market equilibrium*: local employment in the IGM is fixed, which means that in the long run the labour market is assumed to attain equilibrium, so that an economic shock has no lasting effect on total employment. This assumption is implemented by fixing the level of total employment. This means that direct job losses from banning interactive gambling will be exactly balanced by job gains in traditional gambling and other industries.
- *external balance*: in the IGM, the balance of trade is at a sustainable level. Specifically, a trade surplus is run equal to the amount required to service foreign-owned capital. The real exchange rate needed to achieve this trade surplus is determined by the IGM. Thus shocks to international trade, such as bans on imports or exports of interactive gambling, affect the real exchange rate, not the trade surplus.
- *budget balance*: the government budget is also assumed to be at a sustainable level. Specifically, it is assumed to be in balance. A lump sum tax/transfer is used as the swing fiscal instrument to balance out the effects on the government budget of interactive gambling bans.
- *private saving*: the level of private sector saving and associated asset accumulation are sustainable in the long run. Private saving is held constant in the IGM by fixing the quantity of capital that is owned locally, and changes in capital are only in the foreign-owned portion.

The long-run nature of the IGM is important for the correct policy evaluation of the interactive gambling bans.

1.3 Benefits and Costs of Gambling

The Productivity Commission report on gambling divides gambling into two categories, recreational gambling and problem gambling.

Recreational gambling is no different from other consumer products in that it provides consumers with benefits.

Problem gambling is different because it incurs specific social costs beyond the costs of producing the gambling services. The Productivity Commission has estimated that there are just over 290,000 problem gamblers in Australia. This is equivalent to 2.1 per cent of the Australian adult population.

The social costs specific to problem gambling are of two types.

The first type of social cost is the cost of the contribution of problem gambling to social problems such as distress to family and parents from anti-social behaviour, breakup of relationships and depression. The Productivity Commission estimates this social cost at between \$1.8 billion and \$5.6 billion annually.

The second type of social cost is over-consumption of gambling services. Problem gamblers devote more of their incomes to gambling than they would if they were able to control their gambling addiction. The Productivity Commission estimates that problem gamblers account for about one third of aggregate gambling losses, or \$3.6 billion annually. Accounting for over-consumption of gambling services by problem gamblers reduces the Productivity Commission's estimate of the "consumer surplus" from gambling by between \$4.1 billion and \$6.5 billion.

Taking both types of social costs into account, and allowing for growth in the gambling industry since the base year of 1997/98 used by the Productivity Commission, the social costs specific to gambling are conservatively estimated on an annual basis at about \$6 billion on net expenditure on gambling of about \$14 billion.

For this report, an important issue is whether the social costs of interactive gambling are more or less than for traditional gambling. On this issue, the Productivity Commission has pointed out that:

- access to interactive gambling is available 24 hours a day;
- the internet has enabled the bypassing of restrictions such as caps on the number of gambling machines and licensing restrictions on the number of gambling avenues;
- games can be multilingual, increasing their accessibility to non-English speaking people; and
- there are no conditions of entry, dress or behavioural requirements at home to act as deterrents from gambling.

For these reasons, interactive gambling may be more prone to problem gambling than traditional gambling, leading to higher social costs.

To accommodate a full range of views and to assist in the interpretation of the results, the IGM allows for three alternative assumptions about the level of specific social costs from traditional and interactive gambling:

- *gambling is not harmful*: gambling involves no specific social costs;
- *gambling is harmful (PC)*: gambling involves social costs similar in magnitude to those estimated by the Productivity Commission i.e. about \$6 billion annually; and
- *interactive gambling is more harmful*: the same as the “gambling is harmful” scenario except that the specific social costs for interactive gambling are assumed to be 30 per cent greater than for traditional gambling. Interactive gambling may be more prone to problem gambling for the reasons noted above, especially ease of access.

2. Banning Scenarios

2.1 Baseline Scenario

Interactive gambling is a small but rapidly growing industry. A baseline scenario was constructed in which interactive gambling was assumed to grow to maturity, taking it to many times its current size. Estimating the potential size of this industry is difficult.

The Australian Casino Association has estimated that since the beginning of the industry, total revenue has been about \$13 million but clearly, in the absence of a ban, this is set to grow rapidly. Interactive gambling is making more inroads into the wagering and casino markets, than into the electronic gambling machines and lottery markets. Making judgements about potential penetration in each gambling market, Econtech estimates the potential size of the interactive gambling industry at gambling losses of about \$350 million annually.

This would represent about five per cent of the total gambling market. Compared to the entire economy, it represents about 0.05 per cent of GDP at factor cost, making this a small industry.

After constructing the Baseline Scenario, the next step is to vary the Baseline Scenario by simulating the four banning options in turn. Results are then calculated as the differences between the outcomes under each ban scenario and the corresponding outcomes under the Baseline Scenario. These results show the long-term effects of the bans compared with the situation if the industry matured fully.

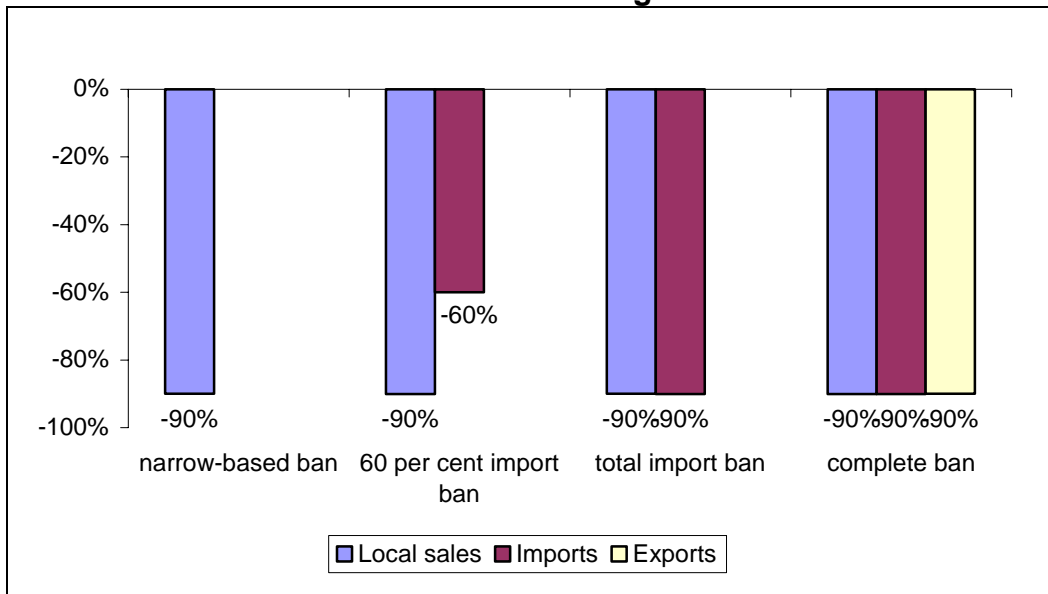
2.2 Four Banning Scenarios

The four alternative banning scenarios are depicted in Chart 2.1 from least to most restrictive, and are explained as follows:

- narrow ban: a ban only on local companies supplying interactive gambling to Australian residents — analysed in section 3;
- 60 per cent import ban: extends the ban to imports. In this scenario, banning offshore providers from supplying interactive gambling to Australian residents is assumed to be 60 per cent effective — analysed in section 4;
- total import ban: in this scenario the import ban is assumed to be totally effective — also analysed in section 4; and
- complete ban: further extends the ban to exports. That is, local companies are also banned from supplying interactive gambling to foreign residents — analysed in section 5.

The IGM only considers the effects of interactive gambling bans that are imposed unilaterally by Australia, and does not take into account the possibility of policy responses in other countries.

Chart 2.1
Assumed Changes in Local Sales, Imports & Exports of Interactive Gambling
under Alternative Banning Scenarios



2.3 Simulating a Total Ban

As shown in Chart 2.1, all simulations of “total” bans in fact are simulated as 90 per cent bans. The results from simulations of 100 per cent bans would be unduly sensitive to the choice of mathematical functional forms. In any case, simulations of 90 per cent bans provide indicative results for total bans.

3. The Benefits and Costs of a Narrow Ban on Interactive Gambling

This section outlines the economic effects of banning local companies from supplying interactive gambling products to Australian residents. This narrow ban does not cover exports and imports of interactive gambling products. Bans on imports and exports are considered in sections 4 and 5 respectively. However, the ban does cover all interactive gambling including wagering, casinos, electronic gaming machines and lotteries.

The assumed change in the volume of local sales of locally-produced interactive gambling products is summarised in Chart 3.1. For the reason explained in section 2, the fall is 90 per cent rather than 100 per cent.

Chart 3.1
Assumed Change in Local Sales of Locally-Produced Interactive Gambling under a Narrow Ban

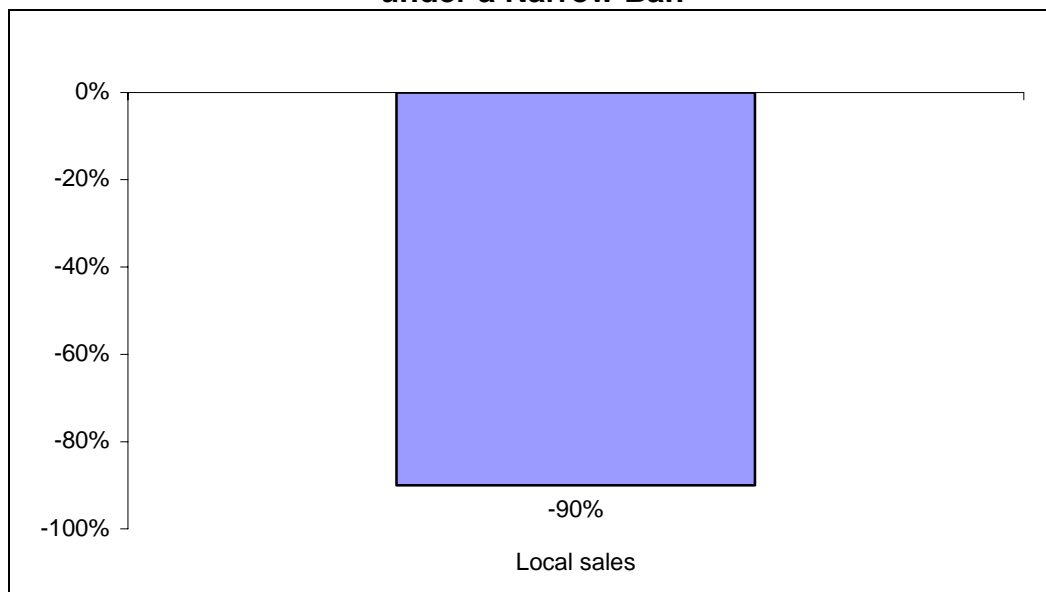
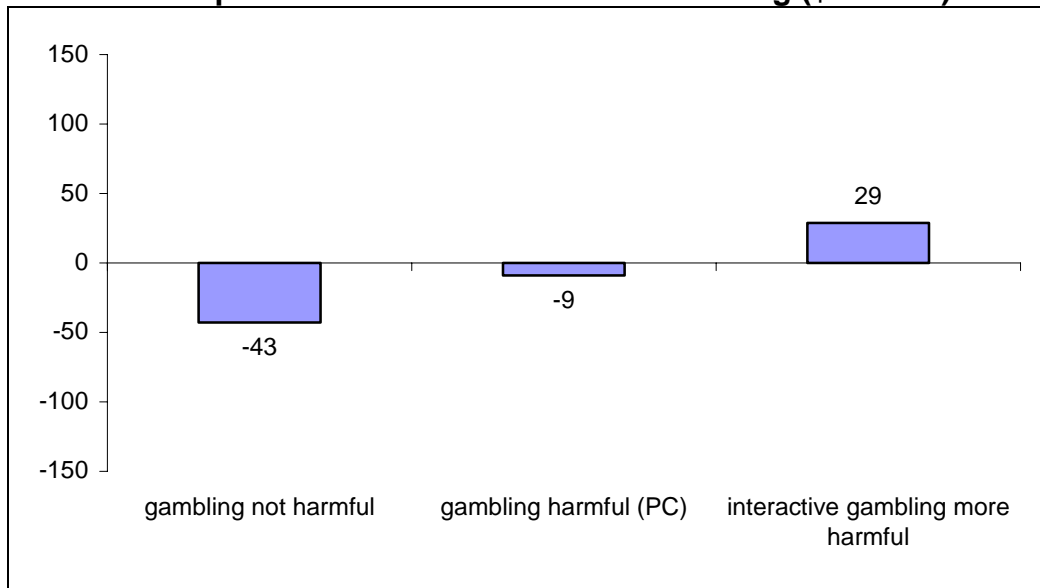


Chart 3.2 summarises the effects of this narrow ban on economic welfare under three alternative assumptions about the level of harm from traditional gambling products and their interactive equivalents. These assumptions were explained in section 1.

Under the extreme assumption that gambling has no specific social costs (“gambling not harmful”), the narrow ban leads to a loss of economic welfare estimated at \$43 million. Under this unrealistic assumption, the narrow ban lowers economic welfare by restricting the choices available to consumers.

Chart 3.2
Annual Effects on Economic Welfare of the Narrow Ban under Different Assumptions about the Harm from Gambling (\$ million)



Under the second assumption that gambling has social costs similar to those estimated by the Productivity Commission (“gambling harmful (PC)”), the narrow ban results in a smaller loss in economic welfare estimated at \$9 million annually. The loss is smaller because taking into account that gambling has social costs goes some way to tipping the balance towards favouring a ban. However, the narrow ban still results in a small loss because it is not well designed as it does not cover imports. Compared with the wider bans, the narrow ban distorts consumer choices by favouring imported over locally-produced interactive gambling. Also it targets interactive gambling but not traditional gambling, although this may be justified once their different tax treatments are taken into account. Both of these issues are considered further in section 3.

Under the third assumption that interactive gambling is more harmful than traditional gambling (“interactive gambling more harmful”), even the poorly-designed narrow ban substantially raises economic welfare. As shown in Chart 3.2, the estimated annual gain is \$29 million annually. It is not surprising that banning interactive gambling but not traditional gambling can be justified if interactive gambling has high social costs that exceed those from traditional gambling.

Table 3.1 expands on the effects of the narrow ban on interactive gambling products shown in Charts 3.1 and 3.2 to include more detailed effects. These include effects on the exchange rate, state GST and gambling tax revenue, employment, GDP at factor cost and consumption.

Total employment and GDP at factor cost are unaffected by the narrow ban. Rather, they are simply re-allocated between industries. Note that GDP at factor cost is not a valid measure of economic welfare.

More detailed results are shown in the Appendix.

Table 3.1
Narrow Ban: Summary of Effects

	Narrow ban
Outputs:	
exchange rate	0.0%
exports (\$m)	-2
imports (\$m)	-2
trade surplus (\$m)	0
gambling tax revenue (\$m)	22
gst revenue (\$m)	6
real GDP at factor cost	0.0%
total employment ('000s)	0.0
real consumption (economic welfare) (\$m):	
- gambling not harmful	-43
- gambling harmful (PC)	-9
- interactive gambling more harmful	29
real GDP at factor cost:	
traditional gambling	1.5%
interactive gambling	-71.6%
other entertainment and recreation	0.1%
other goods and services	0.0%
total	0.0%
real Consumption:	
traditional gambling	1.4%
interactive gambling	-43.1%
other entertainment and recreation	0.1%
other goods and services	0.0%
total	0.0%

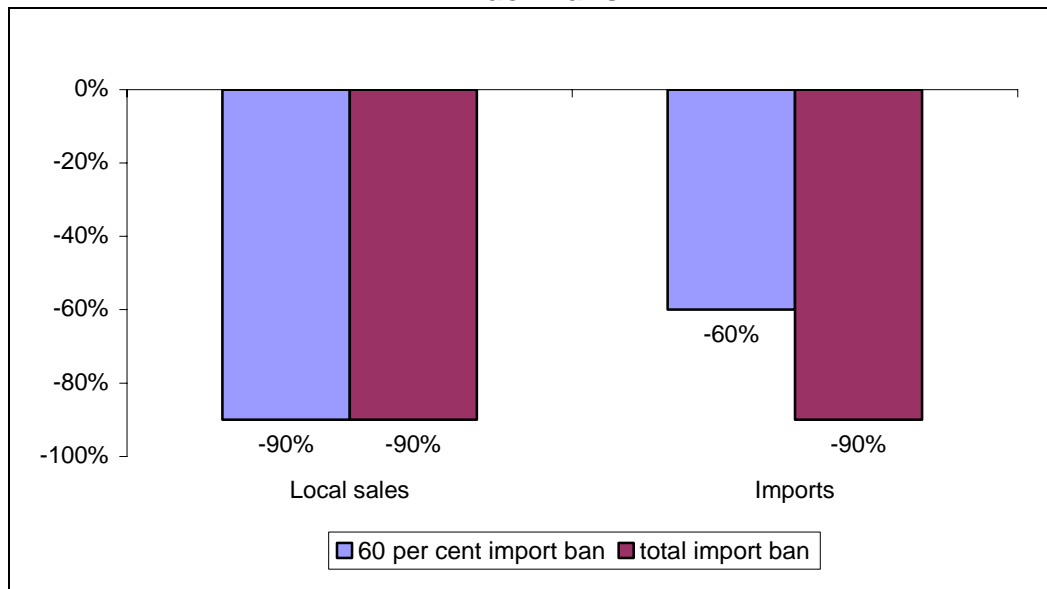
4. The Benefits and Costs of Wider Bans Including Imports

This section outlines the economic effects of extending the ban to imports. This means that all supplies to Australian residents of interactive gambling are banned, irrespective of whether those supplies are produced locally or offshore. However, this wider ban does not cover exports of interactive gambling products. Further extending the ban to exports is considered in section 5.

The effectiveness of the ban on imports may depend on how it is implemented. To take that into account, there are two scenarios for banning imports, a “60 per cent import ban” and a “total import ban”.

The assumed changes in the volume of local sales of locally produced and imported interactive gambling products under each scenario are summarised in Chart 4.1.

Chart 4.1
Assumed Change in Local Sales & Imports of Interactive Gambling under Wider Bans



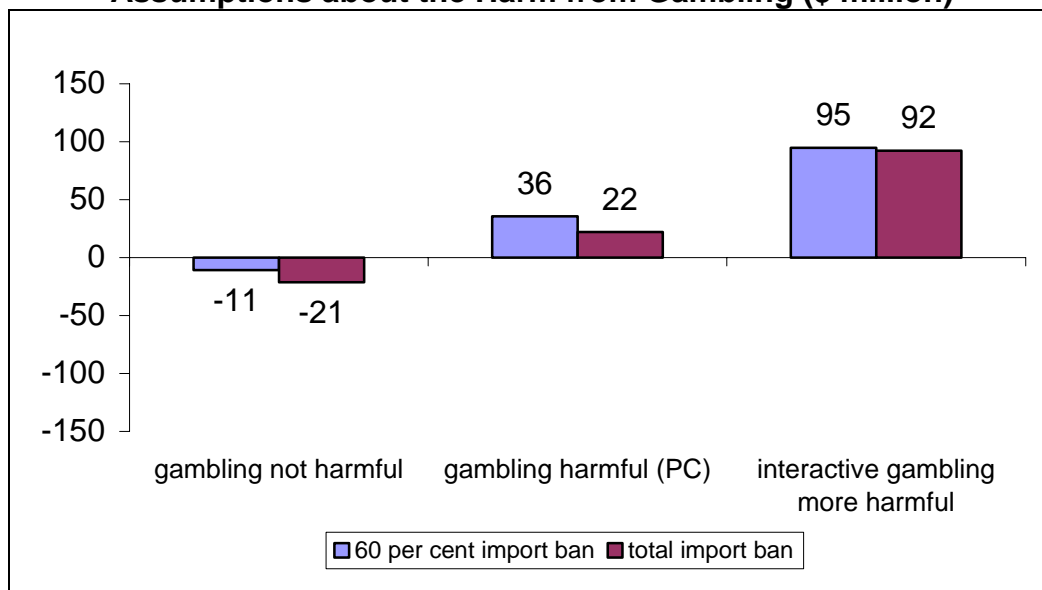
For the reason explained in section 2, the assumed falls under an effective ban are 90 per cent rather than 100 per cent.

As shown in Chart 4.1, like the narrow ban, the wider ban results in a 90 per cent fall in the volume of local sales of locally-produced interactive gambling products. Imports of interactive gambling products are cut by 60 per cent under the “60 per cent import ban” and 90 per cent under the “total import ban”.

Chart 4.2 summarises the effects of this wider ban on economic welfare under three alternative assumptions about the level of harm from traditional gambling products and their interactive equivalents. These assumptions were explained in section 1.

Under the extreme assumption that gambling has no specific social costs (“gambling not harmful”), the wider ban leads to a loss of economic welfare estimated at \$11 million to \$21 million, depending on the effectiveness of the import ban. Under this unrealistic assumption, the wider ban lowers economic welfare by restricting the choices available to consumers.

Chart 4.2
Annual Effects on Economic Welfare of the Wider Ban under Different Assumptions about the Harm from Gambling (\$ million)



Under the second assumption that gambling has social costs similar to those estimated by the Productivity Commission (“gambling harmful (PC)”), the wider ban results in a significant gain in economic welfare estimated at \$22 million to \$36 million annually depending on the effectiveness of the import ban.

Banning interactive gambling while not banning traditional gambling does not treat both forms of gambling in a neutral way, but this may be justified if gambling has social costs and there are differences between the two forms of gambling.

One difference is that interactive gambling is taxed lightly whereas traditional gambling is taxed heavily. On the imports side, interactive gambling completely escapes Australian gambling taxes. On the local production side, interactive gambling is prone to tax competition between states because a provider can operate from any state and provide services Australia-wide. Thus most interactive gambling sites are licenced in states with low gambling taxes, such as the Northern Territory or Tasmania, or states which offer specific tax breaks to interactive gambling e.g. the ACT applies a lower tax rate to interactive casinos than to its traditional casino.

For example, the Northern Territory does not impose any tax on casino gambling over and above GST. Previously it imposed a casino tax of 8 per cent, but this has been fully

absorbed into the GST. It is no coincidence that the largest casino gambling web-site, Lasseter's, is situated in the Northern Territory.

In theory the best way of dealing with the concessional tax treatment of interactive gambling compared with traditional gambling would be to eliminate the tax concessions. This would require unifying gambling tax rates across the country, across both types of gambling, and across local-provided and imported supplies, but there are many obstacles to this and there is no sign of it happening. Assuming interactive gambling has social costs, a ban provides a "second best" way of responding to the artificial encouragement given to interactive gambling by its concessional tax treatment.

Under the third assumption that interactive gambling is more harmful than traditional gambling ("interactive gambling more harmful"), the wider ban substantially raises economic welfare. As shown in Chart 4.2, the estimated annual gain is \$92 million to \$95 million annually, depending on the effectiveness of the import ban. It is not surprising that banning interactive gambling but not traditional gambling can be justified if interactive gambling has high social costs that exceed those from traditional gambling.

If interactive gambling is to be banned, the ban should extend to imports. Comparing Chart 4.2 with 3.2 shows that, whatever assumption is made about the social costs of gambling, the outcome for economic welfare is always higher under a wider ban that includes imports, than under the narrow ban, which is confined to local companies providing interactive gambling in Australia. Compared with the wider bans, the narrow ban distorts consumer choices by favouring imported over locally-produced interactive gambling.

As a final observation on Chart 4.2, a 60 per cent imports ban is better for economic welfare than a 100 per cent imports ban. This result reflects a more general point. The arguments against interactive gambling lead to the conclusion that there are greater benefits from severely restricting its supply to Australian residents than from banning it totally.

A ban on interactive gambling will also help shore up state revenue. Interactive gambling sites are concentrated in the smaller states — Tasmania, the ACT and the NT — which offer low tax rates for interactive gambling. These sites will in part attract gambling dollars away from the mass markets for traditional gambling in the larger states. This will result in a significant net loss in state gambling tax revenue.

By averting this leakage from high-taxed traditional gambling, an interactive gambling ban will boost state gambling tax revenue. The wider the ban, the larger the boost. As shown in Table 4.1, the annual gain in gambling tax revenue ranges from \$34 million to \$42 million, depending on the effectiveness of the import ban.

Table 4.1 expands on the effects of the wider ban on interactive gambling products shown in Charts 4.1 and 4.2 to include more detailed effects. These include effects on the exchange rate, state GST and gambling tax revenue, employment, GDP at factor cost and consumption. More detailed results are shown in the Appendix.

Total employment and real GDP at factor cost are unaffected by the wider ban. Rather, they are simply re-allocated between industries. Note that GDP at factor cost is not a valid measure of economic welfare.

Table 4.1
Wider Bans: Summary of Effects

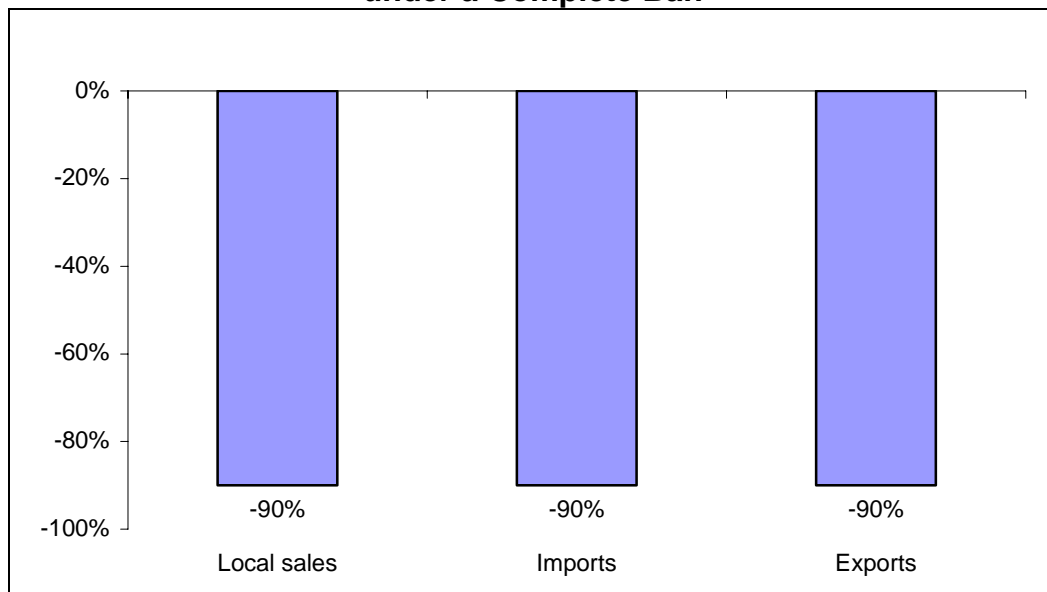
	60 per cent import ban	Total import ban
Outputs:		
exchange rate	0.0%	0.0%
exports (\$m)	-108	-163
imports (\$m)	-109	-164
trade surplus (\$m)	0	1
gambling tax revenue (\$m)	34	42
gst revenue (\$m)	12	14
real GDP at factor cost	0.0%	0.0%
total employment ('000s)	0.0	0.0
real consumption (economic welfare) (\$m):	0	0
- gambling not harmful	-11	-21
- gambling harmful (PC)	36	22
- interactive gambling more harmful	95	92
real GDP at factor cost:		
traditional gambling	2.5%	3.2%
interactive gambling	-71.6%	-71.6%
other entertainment and recreation	0.3%	0.3%
other goods and services	0.0%	0.0%
total	0.0%	0.0%
real Consumption:		
traditional gambling	2.4%	3.1%
interactive gambling	-74.0%	-90.0%
other entertainment and recreation	0.3%	0.3%
other goods and services	0.0%	0.0%
total	0.0%	0.0%

5. The Benefits and Costs of a Complete Ban Including Imports and Exports

This section outlines the economic effects of further extending the ban to exports. This means that all supplies of interactive gambling by local companies are banned, irrespective of whether those supplies are destined for local or foreign markets. In addition, as in the previous section, there is a total ban on imports. This constitutes a complete ban on interactive gambling.

The assumed changes are summarised in Chart 5.1.

Chart 5.1
Assumed Changes in Local Sales, Imports & Exports of Interactive Gambling under a Complete Ban



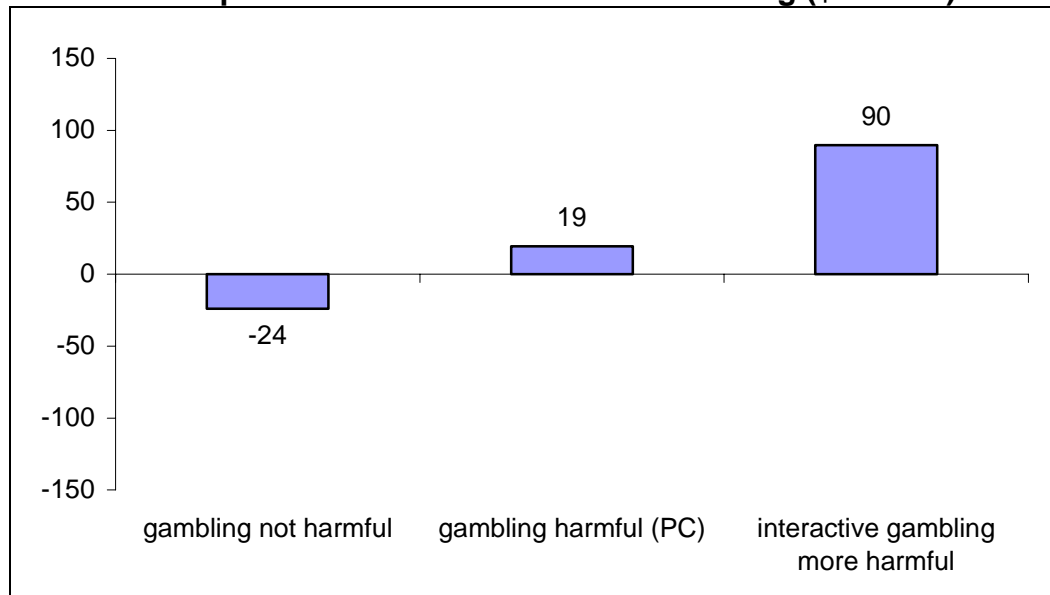
As shown in Chart 5.1 the complete ban results in a 90 per cent fall in the volume of local sales of locally-produced interactive gambling products, imports of interactive gambling products, and exports on interactive gambling products.

For the reason explained in section 2, the assumed falls under an effective ban are 90 per cent rather than 100 per cent.

Chart 5.2 summarises the effects of this complete ban on economic welfare under three alternative assumptions about the level of harm from traditional gambling products and their interactive equivalents. These assumptions were explained in section 1.

Under the extreme assumption that gambling has no specific social costs (“gambling not harmful”), the complete ban leads to a loss of economic welfare estimated at \$24 million. Under this unrealistic assumption, the complete ban lowers economic welfare by restricting the choices available to consumers.

Chart 5.2
Annual Effects on Economic Welfare of a Complete Ban under Different Assumptions about the Harm from Gambling (\$ million)



Under the second assumption that gambling has social costs similar to those estimated by the Productivity Commission (“gambling harmful (PC)”), the complete ban results in a significant gain in economic welfare estimated at \$19 million annually. The reasons for this are similar to those discussed in section 4. That is, assuming interactive gambling has social costs, a ban provides a “second best” way of responding to the artificial encouragement given to interactive gambling by its concessional tax treatment.

Under the third assumption that interactive gambling is more harmful than traditional gambling (“interactive gambling more harmful”), the complete ban substantially raises economic welfare. As shown in Chart 5.2, the estimated annual gain is \$90 million annually. It is not surprising that banning interactive gambling but not traditional gambling can be justified if interactive gambling has high social costs that exceed those from traditional gambling.

Comparing Chart 5.2 with Chart 4.2 shows there is no benefit to national economic welfare from including exports in the ban, as in the complete ban. This is because exports of interactive gambling do not impose any social costs on Australian residents. However, in considering whether to allow exports of interactive gambling, the Australian government may need to take into account the views of foreign governments about whether interactive gambling should be available in their countries.

Table 5.1 expands on the effects of the complete ban on interactive gambling products shown in Charts 5.1 and 5.2 to include more detailed effects. These include effects on the exchange rate, state GST and gambling tax revenue, employment, GDP at factor cost and consumption.

Total employment and GDP at factor cost are unaffected by the complete ban. Rather, they are simply re-allocated between industries. Note that GDP at factor cost is not a valid measure of economic welfare.

The change in local sales, imports and exports resulting from a complete ban shown in Chart 5.1 will feed through to a change in the production of both interactive and traditional forms of gambling as shown below in Chart 5.3.

Chart 5.3
Effects on the Production of Interactive and Traditional Gambling under the Complete Ban

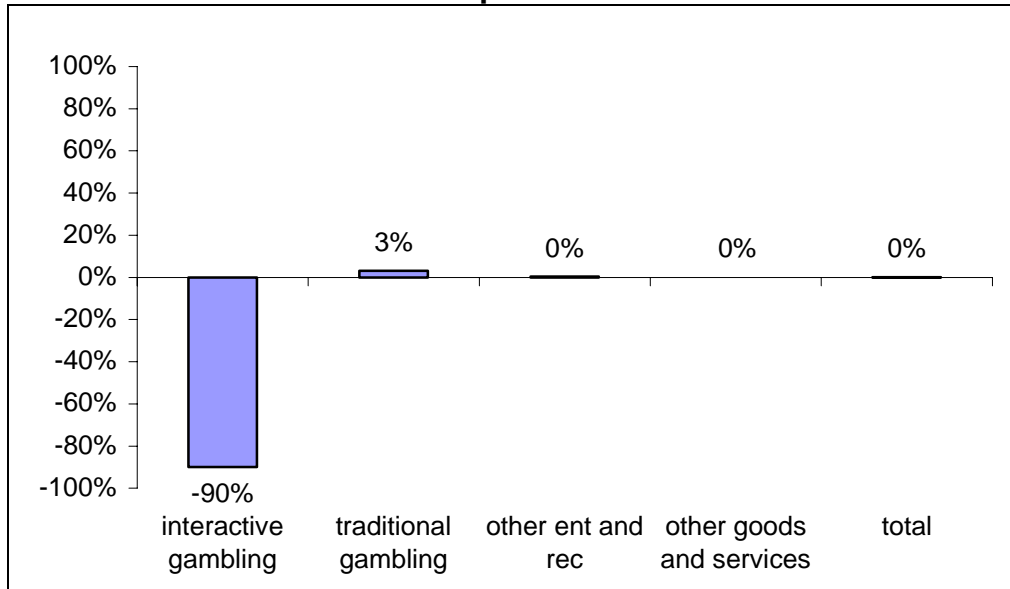


Chart 5.3 shows that the complete ban leads to a substantial fall in production of interactive gambling products of 90 per cent. This fall is in line with the fall in local sales, imports and exports of interactive gambling products.

The rise in production of traditional forms of gambling of 3 per cent is the result of substitution away from interactive gambling products towards traditional gambling products as a result of the complete interactive gambling ban. Although the percentage movements in production shown in Chart 5.3 for both interactive and traditional gambling are vastly different, the absolute dollar values are similar due to the larger relative size of the traditional gambling industry.

As shown in Chart 5.3, the complete ban had no effect on total economy-wide production. This is the result of the production loss in the interactive gambling industry being balanced by production gains in the traditional gambling and other entertainment and recreation industries.

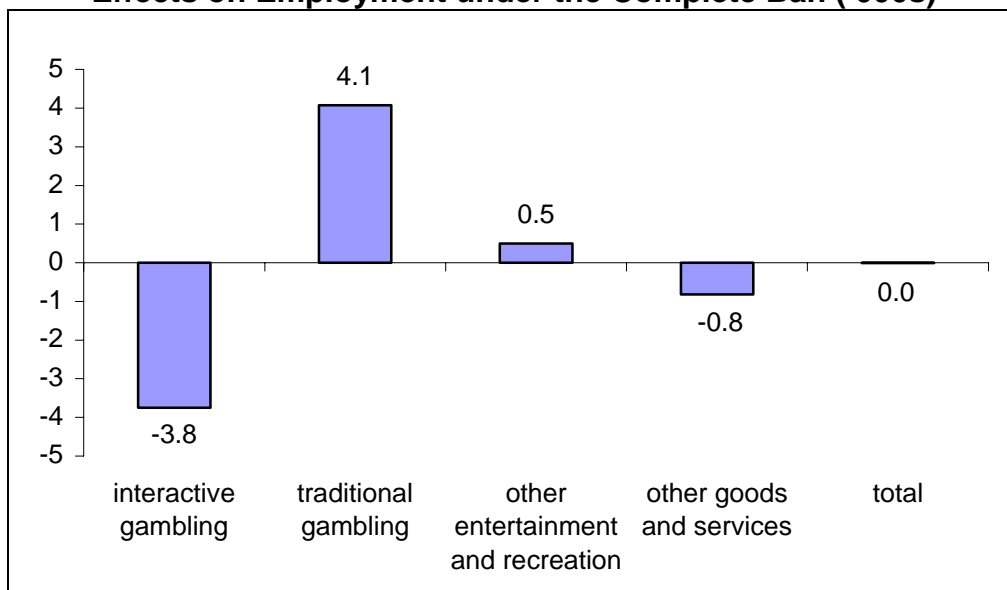
Similarly a complete ban on interactive gambling will reduce employment in the interactive gambling industry, with the extent of the reduction depending on the nature of the ban. For example, Chart 5.4 shows a loss of 3,800 jobs from the interactive gambling industry under the complete ban, but this result is subject to two important qualifications.

First, this job loss is hypothetical. It compares a situation where the interactive gambling industry is banned with a situation where it is allowed to grow to a mature industry with about 4,000 jobs. At its present formative stage, there are few people employed in the Australian interactive gambling industry, and the actual jobs loss from imposing a ban now may be one or two hundred, not thousands.

Second, and more importantly, this job loss is offset by job gains in other industries, particularly traditional gambling. This reflects a more general point that unemployment levels in Australia depend on the efficiency of the Australian labour market, not industry policy issues such as whether or not interactive gambling is banned.

That is, industry policy affects the industry mix of jobs, not the total number of jobs, which depends on labour market policies. Industry policies need to be judged on their effects on economic welfare, as in the above assessment of the various banning options.

Chart 5.4
Effects on Employment under the Complete Ban ('000s)



Finally, the import and export bans obviously do result in lower trade flows. For example, Table 5.1 shows that the value of exports and imports are both down by about \$170 million. However, none of the scenarios show a significant effect on the trade balance. This is because, in the long-term, the real exchange rate adjusts to achieve a sustainable trade balance. Further, export and import values are not measures of economic welfare. The banning options need to be assessed against their effects on economic welfare as in the discussion above.

Table 5.1 expands on the effects of the complete ban on interactive gambling products shown in Charts 5.1-5.4 to include more detailed effects. These include effects on the exchange rate, state GST and gambling tax revenue, employment, GDP at factor cost and consumption. More detailed results are shown in the Appendix.

Table 5.1
Complete Ban: Summary of Effects

	Complete ban
Outputs:	
exchange rate	0.0%
exports (\$m)	-169
imports (\$m)	-170
trade surplus (\$m)	1
gambling tax revenue (\$m)	42
gst revenue (\$m)	14
real GDP at factor cost	0.0%
total employment ('000s)	0.0
real consumption (economic welfare) (\$m):	0
- gambling not harmful	-24
- gambling harmful (PC)	19
- interactive gambling more harmful	90
real GDP at factor cost:	
traditional gambling	3.2%
interactive gambling	-90.0%
other entertainment and recreation	0.3%
other goods and services	0.0%
total	0.0%
real Consumption:	
traditional gambling	3.1%
interactive gambling	-90.0%
other entertainment and recreation	0.3%
other goods and services	0.0%
total	0.0%

**Appendix:
Interactive Gambling Ban — Detailed Effects**

	Narrow ban	60 per cent import ban	Total import ban	Complete ban
Outputs:				
exchange rate	0.0%	0.0%	0.0%	0.0%
exports (\$m)	-2	-108	-163	-169
imports (\$m)	-2	-109	-164	-170
trade surplus (\$m)	0	0	1	1
gambling tax revenue (\$m)	22	34	42	42
gst revenue (\$m)	6	12	14	14
real GDP at factor cost	0.0%	0.0%	0.0%	0.0%
total employment ('000s)	0.0	0.0	0.0	0.0
real consumption (economic welfare) (\$m):				
- gambling not harmful	-43	-11	-21	-24
- gambling harmful (PC)	-9	36	22	19
- interactive gambling more harmful	29	95	92	90
real GDP at factor cost:				
trad. wagering	3.8%	4.6%	5.1%	5.1%
int. wagering	-73.3%	-73.4%	-73.4%	-90.0%
trad. casino	2.7%	4.8%	6.3%	6.3%
int. casino	-70.7%	-70.7%	-70.7%	-90.0%
trad. EGM	0.5%	1.0%	1.4%	1.4%
int. EGM	-37.4%	-37.4%	-37.5%	-90.0%
trad. lotteries	1.4%	3.5%	4.9%	4.9%
int. lotteries	-84.1%	-84.1%	-84.1%	-90.0%
other entrec	0.1%	0.3%	0.3%	0.3%
other	0.0%	0.0%	0.0%	0.0%
total	0.0%	0.0%	0.0%	0.0%
Employment ('000s):				
trad. wagering	0.8	0.9	1.1	1.1
int. wagering	-1.4	-1.4	-1.4	-1.7
trad. casino	0.7	1.2	1.5	1.5
int. casino	-1.4	-1.4	-1.4	-1.8
trad. EGM	0.4	0.8	1.0	1.0
int. EGM	0.0	0.0	0.0	-0.1
trad. lotteries	0.1	0.3	0.4	0.4
int. lotteries	-0.1	-0.1	-0.1	-0.2
other entrec	0.2	0.4	0.5	0.5
other	0.8	-0.6	-1.6	-0.8
total	0.0	0.0	0.0	0.0

	Narrow ban	60 per cent import ban	Total import ban	Complete ban
Local sales of local production:				
trad. wagering	3.8%	4.6%	5.1%	5.1%
int. wagering	-90.0%	-90.0%	-90.0%	-90.0%
trad. casino	2.7%	4.8%	6.3%	6.3%
int. casino	-90.0%	-90.0%	-90.0%	-90.0%
trad. EGM	0.5%	1.0%	1.4%	1.4%
int. EGM	-90.0%	-90.0%	-90.0%	-90.0%
trad. lotteries	1.4%	3.5%	4.9%	4.9%
int. lotteries	-90.0%	-90.0%	-90.0%	-90.0%
other entrec	0.1%	0.3%	0.3%	0.3%
other	0.0%	0.0%	0.0%	0.0%
total	0.0%	0.0%	0.0%	0.0%
Imports:				
int. wagering	3.7%	-60.0%	-90.0%	-90.0%
int. casino	2.7%	-60.0%	-90.0%	-90.0%
int. EGM	0.5%	-60.0%	-90.0%	-90.0%
int. lotteries	1.4%	-60.0%	-90.0%	-90.0%
other	0.0%	0.0%	0.1%	0.0%
total	0.0%	-0.1%	-0.1%	-0.2%
Exports:				
int. wagering	-48.4%	-48.4%	-48.5%	-90.0%
int. casino	-45.8%	-45.9%	-45.9%	-90.0%
int. EGM	-20.8%	-20.9%	-21.0%	-90.0%
int. lotteries	-60.1%	-60.1%	-60.1%	-90.0%
other	0.0%	-0.1%	-0.1%	-0.1%
total	0.0%	-0.1%	-0.1%	-0.1%
Consumption:				
trad. wagering	3.8%	4.6%	5.1%	5.1%
int. wagering	-79.0%	-85.9%	-90.0%	-90.0%
trad. casino	2.7%	4.8%	6.3%	6.3%
int. casino	-46.8%	-75.1%	-90.0%	-90.0%
trad. EGM	0.5%	1.0%	1.4%	1.4%
int. EGM	-8.9%	-62.9%	-90.0%	-90.0%
trad. lotteries	1.4%	3.5%	4.9%	4.9%
int. lotteries	-25.8%	-68.3%	-90.0%	-90.0%
other entrec	0.1%	0.3%	0.3%	0.3%
other	0.0%	0.0%	0.0%	0.0%
total	0.0%	0.0%	0.0%	0.0%