[What is] the estimated economic impact to State tax receipts if electronic gaming machines had a $1 bet limit in the casinos and were removed from hotels and clubs?

Background

- Estimation of the impact on State taxation receipts of:

    1. limiting bets on electronic gaming machines to $1; and
    2. locating them only in casinos,

    is dependent on a number of factors, including the behaviour of players in response to the changes.

    Changes in player behaviour are difficult to predict, and these behaviours affect player expenditure and hence State tax receipts.

- There is no direct research or evidence available relating to the impact on player expenditure of changing the function of an EGM together with its location. However, financial modelling is available that relates to the implementation of a $1 bet limit in isolation.

- This modelling was conducted by the Department of Treasury and Finance in September 2010, and was provided to the House of Assembly Select Committee on the Gaming Control Amendment Bill 2010 ($1 bet limit).

    The data used in that modelling was sourced from the gaming operator, Network Gaming. The extraction and compilation of this data was time and resource intensive for both the operator and the Department.

- The 2010 data:
    - was collected from 651 EGMs operating in hotels and clubs, for the months of July and August 2010. This figure represented 27 per cent of the total 2 380 EGMs that were operating in hotels and clubs at the time. This sample was considered to be an adequate representation for providing indicative estimates of the average bet per spin.
    - indicated that on average, 37 per cent of the revenue from EGMs is generated from bets above $1 per spin with the average bet per spin being $2.20.
    - was limited by a number of factors (discussed below) including that data from casino EGMs was not accessible. Generally, the same technical constraints that applied in 2010 would also apply to data if it was to be extracted today.

Player behaviours, player expenditure and State taxation

As indicated, player behaviours directly influence player expenditure and consequently State tax receipts. In considering player behaviours, we can broadly separate players into four categories:

- those who frequent casinos and gamble:
    1. with per spin amounts above $1;
    2. with per spin amounts of $1 or less; and

- those who frequent hotels and clubs and gamble

    3. with per spin amounts above $1;

    4. with per spin amounts of $1 or less.

To estimate impacts on state taxation the level of player expenditure (by those in class 2 above if 1, 3 and 4 are no longer available) must be determined taking into account the potential substitution behaviours of both hotel and club and casino players.

Modelling complexities

There are inherent complexities in modelling the estimated economic impact to State tax receipts under the proposed conditions. Each of the factors discussed below will influence modelling outcomes.

Player migration from hotel and club venue to the casinos (in response to the removal of hotel and club EGMs)

A number of factors will influence player migration from hotel and club EGM play to casino venues, including:

- the accessibility of the casinos - that is, the distance that hotel and club EGM players would be willing travel to instead attend a casino for EGM play. (Noting that there are currently 96 hotel and club venues offering EGM gaming as compared to two casinos.)

  A number of players in hotels and clubs will be casual gamblers that play EGMs as part of their hotel and club experience; equally, there will be high spending EGM players prepared to travel greater distances to play EGMs.

- the impact of the $1 bet limit on the appeal of EGM gambling (weighed against the accessibility and appeal of alternative forms of gambling, including keno and race wagering/sports betting);

- the attractiveness of the EGM games supplied (taking into account the potential EGM supply implications of introducing $1 bet games); and

- the availability of EGMs for players to use in casinos (there are 1 185 EGMs currently in casinos, 2 500 hotel and club EGMs could transition to the casinos subject to the capacity to accommodate them).

Player responses to a $1 bet limit

The implementation of a $1 bet limit in casinos is expected to result in a net decrease in EGM expenditure. Specifically, EGM players could respond to a $1 bet limit in the following ways:

Possible player response	**Impact on expenditure in casinos**
Continue to play at the new $1 bet limit and spend a similar amount of money by playing over a longer period or play more frequently.	No impact.
Continue to play at the new $1 bet limit, but as a result of the lower bet limit, spend less money over a similar period of time.	Decreased expenditure.

A $1 bet limit makes EGMs unattractive to play, so reduce EGM play (both time and money).	Greater decrease in expenditure.
A $1 bet limit makes EGMs unattractive to play so all players who bet above $1 switch to other forms of entertainment.	Up to 37 per cent reduction (assuming the same share of expenditure as in hotels and clubs).

Substitution to other gambling products offered by hotels and clubs

Substitution of EGM expenditure to other forms of gambling available at venues would result in a decrease in State tax receipts.

Of the 96 hotel and club venues that offer EGM gaming, all venues also operate keno while 72 venues operate UBET wagering terminals. The removal of EGMs from these venues is likely to see a substitution effect with expenditure on EGMs moving to other gambling products, including UBET wagering and keno.

This premise relies on the assumption that these products continue to be available at the 96 hotel and club venues, and that all venues continue to trade after the removal of EGMs. Some venues may become unviable with the loss of EGM revenue resulting in a further downward impact on State tax receipts (this also relates to the potential closure of UBET and Keno outlets although this impact is likely to be minimal).

Taxation rates differ between gambling products, EGM expenditure is taxed at 25.88 per cent of gross profits while keno is taxed at 5.88 per cent of gross profits, and UBET wagering is not taxed at all (but State revenue is determined through a wagering levy not linked to wagering expenditure).

In addition, there is likely to be some substitution to table games at the casinos from players no longer attracted to EGMs due the $1 bet limit at least by regular casino patrons but also by hotel and club patrons who would have played EGMs at higher than $1 per bet. The taxation rate applied to table gaming is 0.88 per cent of gross profits so the shift is expected to be marginal and is not included in modelling calculations.

The supply of Electronic Gaming Machines and games

The replacement of the current range of EGMs with a smaller range limited to $1 bets is expected to impact on the substitution of hotel and club EGM gambling to casino EGM gambling. Overall this is likely to result in a decrease player expenditure and State tax receipts.

Casinos currently offer a wide range of EGMs to attract players; however, Tasmanian EGMs make up 1.8 per cent of the total EGMs in Australia. $1 bet limited games are also either very limited or non-existent.

If Tasmania was to introduce a $1 bet limit without other Australian jurisdictions doing so, manufacturers may find it financially unattractive to develop these EGMs and only develop a small range for the Tasmanian market. EGM players may respond by playing less frequently leading to a reduction in EGM expenditure.

The number of EGMs in casinos

A variation in the number of EGMs in the casino (post removal of EGMs in hotels and clubs) would also impact on total player expenditure and State tax receipts.

There is a state wide cap of 3 680 on EGMs. Of that amount, the number of EGMs in hotels and clubs is capped at 2 500. While the casinos are limited with respect to space in which to operate EGMs, there is no cap on the number of EGMs that may be located within the casinos.

The floor plan of the current casinos could potentially be altered to allow for the relocation of the 2 500 EGMs to the casinos. Alternatively, the casino operator could apply for a new casino licence and build a new casino accommodate the additional EGMs. (This assumes that with a $1 bet limit there is sufficient variety of EGMs available or manufactured to provide 3 680 EGMs with enough diversity to maintain their current appeal to players).

Other considerations

State tax receipts could also be impacted by other factors. For example, payroll tax could be impacted if employment in hotels and clubs was affected by the removal of EGMs (note that this impact would be considered to be marginal at best).

Modelling calculations

Overview

Modelling calculations are based on a number of limited assumptions about player behaviours (discussed below) and as such the outcome of the modelling is indicative only. To illustrate the variability of the outcomes modelling has been completed using a 'high, median and low impact'.

The following calculations have been made to estimate the impact on State tax receipts of the:

1. migration of hotel and club EGM players (and expenditure) to casinos;
2. effect of applying a $1 bet limit, where expenditure would no longer occur; and
3. substitution effect, where player expenditure is transferred to another form of gambling (keno). Two causes for the substitution are considered: movement of EGMs to the casinos (players wish to remain in hotels and clubs to gamble); and the application of the $1 bet limit.

Base figures for EGM player expenditure[1] (for 2015-16) do not include EGM play conducted on the Spirit of Tasmania vessels and are:

- casinos - $75.86 million; and
- hotels and clubs - $114.24 million.

The tax rates applicable to EGM gross profits are 25.88 per cent while keno gross profits are taxed at a rate of 5.88 per cent. State taxation receipts, based on EGM player expenditure is $49.20 million.

In estimating future impacts to State tax receipts from EGMs under a $1 bet limit/casino-only model it is noteworthy that there has been a gradual downward trend in EGM revenue over time. Should this trend continue the impact of the modelled changes would diminish over time.

1 Player expenditure is sometimes referred to as gaming revenue (ie the total amount wagered less the total amount won by people who gamble) and taxation is calculated on this figure. The figures used are sourced from the Tasmanian Liquor and Gaming Commission Annual Report 2015-16.

1. Modelling calculations

Calculations	Low impact model	Median impact model	High impact model
1. Migration of player expenditure to casinos	80 per cent of hotel and club EGM player expenditure within a 50 kilometre radius of a casino will be spent at that casino[2]. *(This represents a migration of 62.5 per cent of hotel and club player expenditure to the casinos)* 10 per cent of hotel and club player expenditure outside the 50 kilometre radius will migrate to the casinos. (*Note that this figure is solely based on providing a tolerance buffer outside the 50 kilometre radius). It is expected that some EGM players will save up money and visit the casinos on a less frequent basis than a hotel or club.*	70 per cent of hotel and club player expenditure within a 50 kilometre radius of a casino will be spent at that casino. 5 per cent of hotel and club player expenditure outside of the 50 kilometre radius will migrate to the casinos.	60 per cent of hotel and club player expenditure within a 50 kilometre radius of a casino will be spent at that casino; 2.5 per cent of hotel and club player expenditure outside of the 50 kilometre radius will migrate to the casinos.

[2] This percentage is based on the assumption that former hotel and club EGM players that played EGMs at hotels up to a 50 kilometre radius of a casino would now be willing to travel that distance to play EGMs in casinos. The calculation also assumes that players would continue to perform EGM play in the same manner.

Calculations	Low impact model	Median impact model	High impact model
2. $1 bet limit	10 per cent of the total amount of EGM bets placed over $1 will no longer be spent *(noting that according to 2010 data 37 per cent of player expenditure EGMs is from bets placed over $1.* *In addition, the remaining expenditure for bets currently over $1 will continue to be spent but over a greater period of time.)*	25 per cent of the total amount of EGM bets placed over $1 will no longer be spent.	50 per cent of the total amount of EGM bets placed over $1 will no longer be spent.
3. Substitution of gambling products	90 per cent of hotel and club player expenditure that has not moved to the casinos (refer calculation 1) will be expended as keno gambling in hotels and clubs. 75 per cent of the expenditure lost due to the $1 bet limit (refer Calculation 2) is now spent on keno in either hotels and clubs, or the casinos.	50 per cent of hotel and club player expenditure that has not moved to the casinos (refer Calculation 1) will be expended as keno gambling in hotels and clubs. 50 per cent of the expenditure lost due to the $1 bet limit (refer Calculation 2) is now spent on keno in either hotels or clubs, or the casinos.	25 per cent of hotel and club player expenditure that has not moved to the casinos (refer Calculation 1) will be expended as keno gambling in hotels and clubs. 25 per cent of the expenditure lost due to the $1 bet limit (refer Calculation 2) is now spent on keno in either hotels or clubs, or the casinos.

1. ***Modelling outcomes player expenditure***

Estimated player expenditure	**Low impact model**	**Median impact model**	**High impact model**
1. Player expenditure at casinos (after player migration);	$137 272 770	$127 990 441	$119 779 151
2. $1 bet limit; (bets no longer made after the introduction of a $1 bet limit); and	-$5 079 92 ⇩	-$11,839 115 ⇩	-$22 159 143 ⇩
3. Player expenditure substituted into other available gambling products.	$51 363 400	$36 979 655	$23 122 657

2. ***Modelling outcomes State taxation receipts***

State taxation	**Low impact model**	**Median impact model**	**High impact model**
1. Effect of player migration to EGM play in casinos on State tax (tax rate of 25.88%) receipts.	$35 526 193	$33 123 926	$30 998 844
2. Effect of bets no longer made on intro of $1 bet limit on State tax (tax rate of 25.88%) receipts.	-$1 314 469	-$3 063 963	-$5 734 786
3. Effect of substitution of gambling products) on State tax (tax rate of 5.88%) receipts.	$3 020 168	$2 174 404	$1 359 612
Net State taxation revenue - adjusted for changes in player expenditure.	$37 231 892	$32 234 367	$26 623 670
Estimated reduction in State revenue	**$11 968 741** ⇩	**$16,966 266** ⇩	**$22 576 963** ⇩