

Casinos and the Australian Economy

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Report to the Australasian Casino Association

The Allen Consulting Group

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Preface

This independent report has been commissioned by the Australasian Casino Association (ACA). The ACA is the industry association for casinos located in Australia and New Zealand. All opinions in this report are those of the Allen Consulting Group, and do not necessarily represent those of the ACA.

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Key findings

- Casinos make a significant export contribution to the Australian economy.
 - over 1 million international tourists made 2.4 million visits to Australian casinos in 2007-08. International tourists who visited casinos spent a total of \$4.9 billion during their time in Australia an average of \$4940 per visitor, compared to \$2630 by international visitors not visiting casinos
 - additionally, a group of international visitors known as international VIP program players, spent \$739 million during their visits to Australia in 2007-08. Expenditure associated with these players increased gross domestic product (GDP) by \$84 million. Maintaining this export will raise Australian private consumption by \$1.8 billion over a 10-year period.
- The casino industry has improved Australia's welfare, as measured by social surplus. Social surplus measures benefits to consumers and producers.
 - in 2007-08, the Australian casino industry generated a social surplus of \$3 billion, with the main beneficiaries being casino patrons
 - casinos received a small share of the social surplus, with a negligible amount attributable to the provision of non-gaming services. Non-gaming facilities and services provided by casinos depend upon gaming revenues.
- Casinos are a key provider of tourism infrastructure, including hotels, restaurants and conference facilities that raise Australia's profile as a tourism destination. This infrastructure also supports major international events such as the Australian Grand Prix, the Spring Racing Carnival, and the Hopman Cup.
- The casino industry is highly capital intensive, with casino development a catalyst for urban regeneration in a number of cities.
- Over the next three years Australia's casinos are planning a number of major capital works projects valued at just under \$1.6 billion.
 - these projects will make an important economic contribution to Australia's construction industry, particularly in times of economic uncertainty
 - ongoing casino investment depends upon taxation and regulation certainty.
- Casinos are major employers, with some casinos the largest single site employers in their respective cities.
 - casinos spent \$889 million in 2007-08 employing just under 20 000 staff.
- All Australia's casinos undertake extensive staff training, spending \$9 million on training in 2007-08. Several casinos are Registered Training Organisations.
- Casinos paid 30 per cent of revenues in taxes in 2007-08, totalling \$1.2 billion.
- Casinos operate in a total compliance environment, adhering to casino and gambling specific legislation as well as general legislation.
 - casinos have voluntarily implemented measures to provide a responsible gaming environment, such as hiring staff to promote responsible gaming.

Executive summary

The Australasian Casino Association (ACA) has commissioned the Allen Consulting Group (ACG) to prepare a report on the role of casinos in the Australian economy. This report will inform a submission by the ACA to a Productivity Commission (PC) inquiry into gambling, repeating an inquiry undertaken in 1999.

The 1999 PC inquiry focussed upon the social costs of problem gambling, with limited consideration of the contribution made by casinos to the Australian economy and community. This report focuses upon the contribution made by the casino industry to the Australian economy and community welfare more generally.

This report also considers other economic facets of the Australian casino industry, including regulatory and taxation arrangements, employment and training activities. Comparisons are made between Australia's casino industry and other sectors of the Australian gaming industry, as well as overseas casino industries.

Background to the industry

Australia's casino industry was established in 1973 with the opening of Wrest Point Hobart. Today the Australian casino industry comprises 13 casinos. Many casinos are integrated entertainment complexes, featuring restaurants, conference facilities, and hotels. Casinos are destination venues attracting patrons from far afield, contrasting with the convenience nature of other gaming venues that largely attract local patrons.

Key industry data

In 2007-08, Australia's casinos had over 49.4 million visitors, earning revenues in excess of \$4 billion and employing just under 20 000 staff. Casinos attract the majority of patrons from their city or interstate. The importance of international patrons is growing, with 2.4 million visits made by international tourists to casinos in 2007-08.

Gambling is a key facet of the casino industry, comprising 78 per cent of casino revenues in 2007-08, with the balance of revenues including food and beverage sales, conventions and conferences, accommodation and entertainment.

The contribution of casinos to the Australian economy

Australia's casinos provide entertainment infrastructure on a scale far greater than other venues. In the absence of casinos, it is considered unlikely that this entertainment infrastructure, such as hotels and restaurants, would be provided.

The entertainment infrastructure provided by casinos attracts many international tourists to Australia. These tourists would not have visited Australia, or would have spent less money during their visit, if there were not casinos.

During 2007-08 over 1 million international tourists made 2.4 million visits to Australian casinos. These tourists spent a total of \$4.9 billion, or an average of \$4940 per tourist, during their visits to Australia. This average expenditure is considerably higher than the average expenditure among international tourists who did not visit casinos of \$2630 per tourist.

Expenditure associated with a group of international tourists, known as international VIP program players, totalled \$739 million in 2007-08. This amount comprises \$553 million spent on casino gaming, expenditure by casinos of \$65 million to attract these patrons, and non-casino spending by these players and their entourages totalling \$121 million.

It is estimated that exports and expenditures associated with international VIP program players increased gross domestic product (GDP) by \$84 million in 2007-08 and private consumption by \$225 million. Maintaining these exports at the 2007-08 level is expected to increase private consumption by \$1.8 billion (Net Present Value) over a 10-year period.

Casinos maintain an extensive network of overseas offices to attract international tourists to Australian casinos. These offices, which are predominantly in Asia, direct potential overseas tourists to visit not only casino properties, but also various Australian cities and regions. The overseas tourism marketing facilities provided by casinos support and complement the various state and national tourism bodies.

Benefits and costs of the Australian casino industry

Australia's casino industry makes a significant contribution to Australia's welfare, as measured by social surplus. Social surplus measures the benefits to both consumers and producers, with a social surplus of \$3 billion calculated for 2007-08. This is an upper-bound estimate, not taking into account costs associated with problem gambling. Since the 1999 inquiry no robust Australian research has been undertaken to estimating the costs of problem gambling, such that estimates of the costs of problem gambling in casinos are not included in this report.

Gaming patrons receive the majority of the estimated social surplus, indicating that casinos provide significant enjoyment to their patrons. Casinos receive a small share of the social surplus from providing gaming services, and a negligible share from non-gaming services. This finding highlights that gaming revenues are necessary for casinos to provide non-gaming infrastructure and services.

Broader contribution of casinos

The casino industry makes a broad economic contribution to Australia, with casinos providing valuable tourism infrastructure and employment opportunities for staff.

Investment in tourism infrastructure

Many casinos are at the hub of an extensive tourism network, linking international and domestic tourism. Furthermore, the development of a number of casinos has acted as the catalyst for the urban regeneration of previously run-down areas.

In the three years to June 2011, casinos will undertake major capital work projects totalling just under \$1.6 billion. These projects will make a significant contribution to tourism infrastructure, as well as to Australia's construction industry.

Capital intensity of casino investments

Owners of many of Australia's casinos have overseas investments including in New Zealand, Canada, the United Kingdom and Macau. Investment in Australia has been attracted by a favourable investment climate and robust regulatory regime.

Ongoing investment in casino infrastructure depends upon maintaining a favourable environment. The capital intensity of casinos requires owners to closely monitor their investments to ensure sufficient returns are generated — changes to the regulatory or taxation environment may make ongoing investment no longer viable.

Employment and training opportunities provided by casinos

Casinos are large employers, with two casinos the largest single site employers in their states. The quality of casino employment is reflected in many staff having a long tenure. Extensive training is also provided allowing staff to progress from entry-level positions into management. Such opportunities are not provided on the same scale elsewhere within the hospitality and entertainment sector.

Australia's casinos also provide staff with the skills required to work in gaming and other roles. Many staff do not hold post-schooling qualifications when they join casinos, with the training provided by casinos able to overcome this disadvantage.

Regulation and responsible gambling in casinos

Casino regulation is jurisdiction-specific with each state and territory having its own regulatory authority and legislation. Casinos are subject to casino-specific legislation as well as general regulation including the *Anti-Money Laundering and Counter-Terrorism Financing Act (2006)* and the *Trade Practices Act (1974)*.

Australia's casinos are subject to a stricter regulatory regime than other gaming venues, such as hotels and clubs. However, due to their size and resources, casinos are well placed to comply with, and even surpass, the various regulations and codes.

Casinos have implemented many measures identified in the 1999 PC inquiry to promote responsible gambling. These include hiring staff to promote responsible gambling and operating exclusion programs. In 2007-08, casinos employed 438 staff focussed upon promoting and supporting responsible gambling. Efforts made by casinos to promote responsible gambling are recognised globally — Tabcorp, the operator of four Australian casinos, was named a world leader in the promotion of responsible gambling by the Dow Jones Sustainability Index.

Casino taxation and licensing

Casinos, along with other gaming providers, are one of the highest taxed industries in Australia. In 2007-08, Australian casinos paid a total of \$1.2 billion in taxes to Australian governments, representing 30 per cent of total casino revenues. The largest tax paid by casinos in 2007-08 was gaming taxes, comprising \$552 million.

Casinos pay gaming taxes and GST on table gaming and EGM revenues and many states charge licence fees. Within NSW, Victoria, Queensland and the ACT casinos pay the same tax rate for EGMs as for table gaming. EGM tax rates are higher than table gaming in WA, SA, Tasmania and the NT. Victoria also has a super tax, with NSW, Victoria, Queensland, Tasmania and WA imposing community levies.

Australia's casino taxation rates are generally higher than a range of international jurisdictions, including Canada, New Zealand, South Africa and the major United States markets. However, Australia's tax rates are lower than Macau, where casinos provide the vast majority of all government taxation revenue and are not subject to company tax on profits.

Chapter 1

Introduction

1.1 Background

There are currently 13 casinos located in Australia, providing an extensive range of table and electronic games, as well as non-gaming services and facilities. Australia's casinos vary significantly in scale and scope — some casinos focus on gaming activities, whereas other casinos are integrated entertainment complexes, featuring hotels, restaurants, bars and even golf courses. The services and entertainment offered by casinos attract millions of visitors each year from their city, state, interstate and overseas.

In 1999, the Productivity Commission (PC) reported the findings of a wide-ranging inquiry into Australia's gambling industries (PC 1999). This inquiry took place only a few years after a number of large-scale casinos opened in Australia. The number of casinos in Australia has remained unchanged since 1999, with the industry maturing significantly since that time. In 1999 the average age of an Australian casino was 12 years — it is 22 years in 2009.

1.2 Report objectives

The Australasian Casino Association (ACA) has commissioned the Allen Consulting Group (ACG) to undertake this study identifying the role of casinos in the Australian economy. The study findings will assist the ACA to prepare a submission to a new PC inquiry into gambling. The content of this report has been guided by questions asked by the PC in the inquiry issues paper, particularly those related to economic facets of the casino industry (PC 2008).

A number of Australian studies examining economic aspects of gambling have been undertaken in the previous decade, with few specifically focusing upon casinos. The majority of casino-specific research is from the United States, where there has been significant growth in the number of casinos in recent years.

A number of approaches are taken in this study to examine the role of casinos in the Australian economy. These include:

- the contribution made by casinos to the Australian economy, as measured by Gross Domestic Product (GDP) and aggregate private consumption
- the benefits and costs of the casino industry to Australia, particularly benefits derived by casino customers and operators
- the broader contribution of Australia's casinos through activities including staff training and urban redevelopment.

This study also considers the wide-ranging regulatory, legal and taxation obligations that must be met by casinos. In addition to meeting obligations required for all businesses operating in Australia, casinos must also meet a large number of additional casino-specific taxation and regulatory obligations. These obligations increase the costs faced by casinos, and thereby the costs faced by casino patrons.

1.3 Report structure

The remainder of this report considers the economic impact of casinos in Australia. It is structured as follows:

- Chapter 2 provides an overview of the Australian casino industry
- Chapter 3 reports the findings of research estimating the economic contribution of casinos to the Australian economy
- Chapter 4 estimates the costs and benefits of the Australian casino industry
- Chapter 5 identifies the other ways casinos make a contribution to the Australian economy, such as through staff training and urban regeneration
- Chapter 6 considers the regulatory regime governing casino operations in Australia, along with steps taken by casinos to protect patrons
- Chapter 7 details taxation revenues paid by casinos Australia's casinos, their respective taxation regimes, along with international taxation comparisons.

Chapter 2

The Australian casino industry

Key points

Since Australia's first legal casino opened in 1973 in Tasmania the industry has developed to comprise 13 casinos. Casinos are more than gaming venues, featuring facilities such as restaurants, hotel accommodation and entertainment venues. An overview of the industry indicates that:

- Australia's casinos earned revenues in excess of \$4 billion dollars and employed just under 20 000 staff in 2007-08
- casinos had 49.6 million visitors in 2007-08. Many visitors were from the casino's home city and state, with 2.4 million visits made by international tourists
- the importance of international VIP program players is growing in 2007-08 these patrons provided 18 per cent of casino gaming revenues
- in 2007-08 casinos spent \$889 million on wages and salaries, comprising 41.0 per cent of all operating expenditure
- Australia's casinos plan to spend just under \$1.6 billion on capital expenditure over the next three years — double the investment of the previous three years.

This chapter provides an overview of Australia's casino industry, including ownership, expenditure and revenue trends, patrons and employment, along with the range of services provided by casinos.

2.1 Brief history of the Australian casino industry

The development of Australia's casino industry began in 1973 with the establishment of the Wrest Point Hotel Casino in Hobart, Tasmania. From this point the industry developed gradually, with casinos opening across Australia throughout the 1980s and 1990s, culminating in large integrated entertainment complexes opening in Sydney and Melbourne in 1997. The Australian casino industry operates within the private sector, with tight oversight by government regulatory authorities. Table 2.1 lists the opening year and operator for each of Australia's 13 casinos.

Table 2.1

AUSTRALIA'S CASINOS: OPENING YEAR AND OWNERSHIP

Casino	Opening year	Owner
Wrest Point Hotel Casino (Hobart)	1973	Federal Group
SKYCITY Darwin	1979	SKYCITY Entertainment Group Limited
Lasseters Alice Springs	1981	Lasseters Holdings Limited
Country Club Tasmania (Launceston)	1982	Federal Group
SKYCITY Adelaide	1985	SKYCITY Entertainment Group Limited
Burswood Entertainment Complex (Perth)	1985	Crown Limited
Conrad Jupiters Gold Coast	1985	Tabcorp Holdings Limited
Jupiters Townsville Hotel & Casino	1986	Tabcorp Holdings Limited
Casino Canberra	1992	Casinos Austria International Limited
Christmas Island Casino (closed in 1998)	1993	Not applicable
Crown Melbourne	1994 ^a	Crown Limited
Star City Sydney	1995 ^a	Tabcorp Holdings Limited
Conrad Treasury Casino (Brisbane)	1995	Tabcorp Holdings Limited
The Reef Hotel Casino	1996	Casinos Austria International Limited

Note: ^a Temporary casinos were opened at Crown Melbourne in 1994 and Star City in 1995, with permanent facilities for both casinos opening in 1997.

Source: ACA 2008d

Since the 1999 PC inquiry, Australia's casinos have consolidated their position as major integrated entertainment destinations, building upon their function as a gaming venue. In particular, Australia's casinos have broadened their breadth of non-gaming services and facilities, mirroring international trends in the development of casinos in destinations such as Las Vegas and Macau.

Today, six companies own Australia's 13 casinos. In NSW and Queensland, Tabcorp Group owns Star City Casino in Sydney, along with Conrad Treasury in Brisbane, Conrad Jupiters Gold Coast and Jupiters Townsville. Crown Limited owns Crown Melbourne and the Burswood Entertainment Complex in Perth. Crown Limited also has extensive overseas casino interests including in Macau, Canada and the United Kingdom.

In Tasmania, the Federal Group owns Wrest Point Hotel Casino in Hobart and Country Club Tasmania in Launceston, as well as having exclusive rights to operate table gaming, gaming machines and Keno in Tasmania until 2018. Federal Group also established the Darwin Casino (now SKYCITY Darwin) in 1979 and Lasseters Alice Springs in 1981. These casinos have subsequently changed ownership.

SKYCITY Entertainment Group Limited, a Trans-Tasman public company, has owned SKYCITY Adelaide (previously Adelaide Casino) since 2000 and SKYCITY Darwin since 2004. The company also operates casinos in New Zealand.

Casinos Austria International owns Casino Canberra, its first Australian operation, along with the Reef Hotel Casino in Cairns.

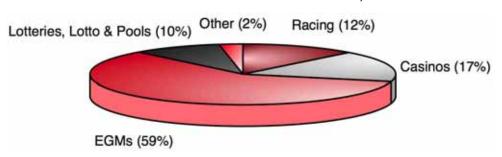
2.2 Overview of the Australian gambling industry

In 2005-06, the majority of gambling expenditure in Australia was upon EGMs located within hotels and clubs, comprising 59 per cent of total gambling expenditure. Casinos comprised 17 per cent of total gambling expenditure in Australia at this time (see Figure 2.1).

The composition of total gambling expenditure has changed since 1997-98, with the share of non-casino based EGM expenditure growing from 52 per cent to 59 per cent and casino expenditure decreasing from 20 per cent to 17 per cent in 2005-06. Racing expenditure has also declined from 14 per cent in 1997-98 to 12 per cent in 2005-06 as a share of total gambling expenditure.

Figure 2.1

CASINOS AS A SHARE OF TOTAL GAMBLING EXPENDITURE, 2005-06



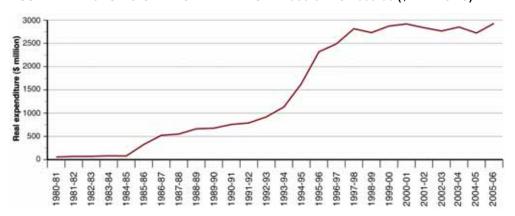
Note: 'Other' comprises Interactive Gaming, Keno, Sports Betting and Minor Gaming. Casinos includes casino-based expenditure on EGMs and table games.

Source: Office of Economic and Statistical Research, Queensland Treasury 2007

The growth of real casino expenditure over the period 1980-81 to 2005-06 exhibits the move from a new to mature industry. In the years 1983-84 to 1997-98 real casino gaming expenditure grew rapidly from \$78.5 million to \$2.8 billion, representing an increase of 34.9 per cent (see Figure 2.2). The opening of 10 casinos was the key driver in expenditure growth over the period 1983-84 to 1997-98. Since 1998-99 casino gaming expenditure has stabilised at around \$3 billion.

Figure 2.2

AUSTRALIAN CASINO GAMING EXPENDITURE 1980-81 TO 2005-06 (\$ MILLIONS)



Note: The expenditure displayed in Figure 2.2 is in 2005-06 dollars.

Source: Office of Economic and Statistical Research, Queensland Treasury 2007

2.3 Casinos — much more than gaming venues

Although gaming is a key focus of Australia's casinos, they also offer a range of non-gaming facilities. In 2007-08, casinos featured 1525 gaming tables and 12 257 EGMs. Non-gaming facilities included 3797 hotel rooms, 82 restaurants and 92 bars (ACA 2009a). Casinos also provide entertainment infrastructure such as banquet facilities and theatres.

Australian casinos as destination venues

Australian casinos are considered destination venues that encourage pre-determined decisions to travel to play games or undertake a range of non-gaming activities.

A destination venue provides some barriers to the consumption of gaming products, with a degree of effort required. Destination venues involve a premeditated decision to travel to the venue, often over a significant distance.

Destination casinos contrast markedly with other gaming venues, such as hotels and clubs. Hotels and clubs are considered to be convenience venues, providing facilities a consumer may encounter during their daily activities, leading to an impulse decision to gamble. These venues often have a high accessibility to consumers and few barriers to consumption.

The research evidence suggests that casinos promote intent and considered choice, as opposed to an impulse-based decision to gamble that may be encouraged by convenience venues (Young et al 2007).

Range of games provided in casinos

Casinos offer a wide range of games to patrons. Apart from Casino Canberra, all Australian casinos operate EGMs in addition to table gaming, keno and TAB. Private gaming, group gaming, tournaments and VIP gaming are offered in some casinos. A non-exhaustive list of table games offered in Australian casinos is provided in Box 2.1.

Box 2.1

CASINO TABLE GAMES AVAILABLE IN AUSTRALIAN CASINOS

Aruze Blackjack Four Card Poker
Baccarat (and Mini Baccarat) Poker

Big Wheel Pontoon

Blackjack Roulette (and Rapid Roulette)
Caribbean Stud Sic Bo (and Rapid Sic Bo)
Casino War Three card poker
Craps Vegas Star Baccarat
Pai Gow Vegas Star Blackjack

Matchmaker Vegas Star Boulette

Source: Consultation with various casinos

Breadth of non-gaming activities and facilities provided by casinos

All of Australia's casinos provide a wide range of non-gaming activities and facilities available both to gaming patrons and the general public. In many cases members of the general public make use of casino facilities without even setting foot on the gaming floor. It is this characteristic that makes casinos integrated entertainment complexes, providing numerous entertainment opportunities in a diverse range of settings.

Restaurants and fine dining

Many of Australia's casinos feature world-class restaurants that are regularly rated highly in restaurant guides. Key examples include Bistro Guillaume and Nobu at Crown Melbourne, Marco Polo Dining Cellar Martini Bar at Conrad Treasury, and the Astral Bar and Restaurant at Star City. The new Crown hotel, which is currently under construction, will feature a restaurant operated by the international restaurateur, Gordon Ramsay.

Hotels and accommodation

The majority of Australia's casinos feature world-class hotels, comprising a total of 3797 rooms in 2007-08. This number is set to increase significantly in the near future with Crown Melbourne developing a third hotel of 658 rooms, and Star City to develop a new hotel of 250 rooms. The new hotel at Crown Melbourne will be Australia's largest hotel, bringing the total number of rooms at Crown Melbourne to 1600.

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VIP gaming is also known as 'high roller' gaming.

Entertainment infrastructure

A number of Australia's casinos feature entertainment infrastructure attended by many members of their local communities. Key examples include the Lyric Theatre at Star City, the Burswood Dome at the Burswood Entertainment Complex and the Palladium at Crown Melbourne. Consultation with these casinos has indicated that these facilities would not have been developed if not for the establishment of a casino.

Over 3 million patrons have visited the Lyric Theatre at Star City since opening in 1997, seeing musicals such as the Rocky Horror Show, Miss Saigon and Phantom of the Opera, and international touring artists such as Michael Crawford, Julio Iglesias and Tony Bennett.

The Burswood Dome has a total seating capacity for up to 20 000 people. The Burswood Dome hosts international touring artists visiting Perth, sporting events and conventions. During 2007-08 performers at the Burswood Dome included artists as diverse as Christina Aguilera, Bob Dylan and Justin Timberlake.

Finally, the Palladium at Crown Melbourne is a grand ballroom capable of sitting up to 1500 guests for a banquet. There is no other equivalent facility in Melbourne. The Palladium is frequently used for televised events, such as the Logie Awards, Brownlow Medal, and the Allan Border Medal.

Conferences and conventions

In 2007-08 casinos hosted 2276 conventions and conferences, attracting in excess of 358 720 attendees. In excess of 150 of these events were international conventions or conferences, attracting attendees from around the world.

Table 2.2

CONVENTIONS AND CONFERENCES

	2006-07	2007-08
Attendees	216 630	358 720
Number of conventions a	and conferences	
International	121	154
National	498	574
Local	1381	1548
Total	2000	2276

Source: ACA 2008b & ACA 2009a

As an example of the breadth of conferences held at Australian casinos, the following are a sample of those held at Jupiters Townsville during 2007-08:

- International Pacific Marine Conference
- International Youth Coastal Conference
- International Zinc Conference
- Queensland Mining Health & Safety Conference

- Local Government Managers Association Conference
- Unity In Diversity.

Each of these conferences was at least 3 days duration, with over 300 delegates in attendance.

Other public events and entertainment

A number of casinos also provide free entertainment to the public, with Crown Melbourne providing the gas flame brigades along the Yarra River, and free shows in the Atrium such as the Christmas Spectacular and Chinese New Year show. The Burswood Entertainment Complex also hosts a two-day hawkers' bazaar as part of Chinese New Year celebrations. A number of casinos own and operate golf courses for the benefit of guests, some of which are accessible to local residents.

Community contributions

Local communities

Casinos also contribute to their local communities, providing funding to community groups, cultural and sporting events and charity. In 2007-08 casinos contributed \$10.9 million, which included \$4.6 million for sponsorship of cultural and sporting events, and \$1.8 million to charities (ACA 2009a).

Organisations benefiting from casino support in 2007-08 include the Flinders Medical Centre Foundation, Cancer Council Queensland, the Salvation Army, Make a Wish Foundation and Westmead Children's Hospital, to name a few.

Casinos also provide in-kind support to community organisations and charities, such as donating accommodation and facilities for use in fundraising activities.

Community benefit levy

Some states impose a community benefit levy on casinos in addition to taxes. In 2007-08 these levies generated \$33 million from casinos.

2.4 Casino patrons

The number of patrons of Australia's casinos increased from 41 million in 2002-03 to 49.6 million in 2007-08, growing steadily each year. The majority of casino patrons are from the same state as the casino — in 2007-08 42.3 million home city and state residents visited casinos, followed by 4.9 million interstate patrons, and 2.4 million international patrons (see Table 2.3). The number of visits by international and interstate patrons highlights the important linkages between casinos and the tourism industry. It should be noted that these numbers represent individual visits to casinos — it is commonplace for individuals to visit a casino several times throughout the year, with each of these visits counted separately by casinos.

The larger Australian casinos were respondents to the Australian Bureau of Statistics Tourism Marketing Survey last conducted in 2005-06, recognising that casinos are important participants in the Australian tourism industry.

Table 2.3

CASINO PATRONS (MILLIONS)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
City/State	35.2	35.3	37.7	38.7	41.6	42.3
Interstate	4.3	5.2	5.6	5.7	4.2	4.9
International	1.5	1.8	2.0	2.2	2.3	2.4
Total	41.0	42.3	45.3	46.6	48.1	49.6

Note: Data may not add exactly due to rounding.

Source: ACA 2008b, ACA 2009a

Casino patrons from the same city or state typically treat casinos as a destination venue. Due to the travel time often required, trips to the casino are typically planned well in advance, with dining and other entertainment usually featuring in addition to gaming.

2.5 Casino employment

Casinos employed 19 737 staff Australia in 2007-08, making a substantial contribution to employment in each state and territory (see Table 2.4). The magnitude of employment at casinos is reflected in Crown Melbourne and the Burswood Entertainment Complex being the largest single site employers in Victoria and WA respectively.

The largest occupation category in casinos is licensed gaming staff. Approximately 60 per cent of casino staff are employed on a full-time basis, 17 per cent on a part-time basis, and the remaining 23 per cent employed on a casual basis.

Table 2.4

EMPLOYMENT BY OCCUPATIONAL GROUPING, 2007-08

Occupational grouping	Number of staff
Licensed gaming staff	7882
Chefs, Bar, Waiters and Kitchen Staff	5442
Managers and Administrative staff	3592
Security and surveillance staff	1131
Housekeeping and cleaning staff	1214
Other Staff	476
Total	19 737

Source: ACA 2008b, ACA 2009a

Staff training is an important aspect of casino employment, with 18 821 casino staff participating in training in 2007-08. Casinos employed 142 staff to provide training at a cost of \$9 million (ACA 2009a). Six casinos are registered training organisations (RTOs), providing nationally recognised training. Staff members undertaking training in RTO casinos receive a qualification as part of the Australian Qualifications Framework (DEEWR n.d).

2.6 Casino revenues and expenditure

Revenues

Casino revenues grew at an average rate of 5.2 per cent per annum over the period 2002-03 to 2007-08, increasing from \$3.1 billion to \$4.0 billion (see Table 2.5).

In 2007-08, gaming activities comprised 78.2 per cent of total revenue, followed by food and beverage sales. It is notable that gaming revenues have grown at a slower rate (4.6 per cent per annum) than most other revenues such as accommodation (11.3 per cent per annum) and entertainment (10.8 per cent per annum). The slower growth in casino revenues suggests that this casino activity is maturing, whereas other activities, such as accommodation, exhibit much potential for future growth.

Table 2.5

CASINO REVENUES (\$ MILLION)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average growth ^a
				<u> </u>			growth
Gaming	2530.6	2637.5	2631.0	2858.6	2878.5	3167.8	4.6%
Food & beverage	357.2	355.2	399.9	427.8	451.6	465.7	5.4%
Accommodation	131.3	161.2	181.7	202.0	206.6	224.2	11.3%
Rent & leasing	29.9	22.8	22.9	28.1	24.6	22.2	-5.8%
Entertainment	30.9	36.9	23.7	23.2	43.2	51.5	10.8%
Other, including parking & retail	65.3	63.5	68.4	77.9	71.7	117.3	12.4%
Total	3145.2	3277.1	3327.6	3617.6	3676.2	4048.7	5.2%

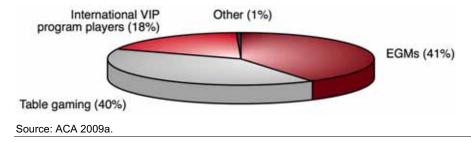
Note: ^a Compound average growth rate over period 2002-03 to 2007-08. Data may not add exactly due to rounding. Source: ACA 2008b, ACA 2009a

Casinos receive the vast majority of their revenues from three gaming activities — EGMs, table games, as well as international VIP program players ('high rollers').

In 2007-08, revenues from EGMs comprised 41 per cent of total casino gaming revenue (\$1299 million). Table gaming revenue made up 40 per cent of casinos gaming revenue (\$1271 million) and international VIP program players comprised 18 per cent of revenue (ACA 2009a). Figure 2.3 shows the distribution of casino gaming revenue by gaming activity for 2007-08.

Figure 2.3

A CLOSER LOOK AT CASINO GAMING REVENUE — 2007-08



Operating expenditure

Wages and salaries consistently represent the biggest casino expenditure item reported in Table 2.6. In 2007-08 casinos spent \$889 million in wages and salaries, comprising 42.0 per cent of all operating expenditure.

Table 2.6

OPERATING EXPENDITURE (\$ MILLION)^a

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average growth ^b
Wages and salaries	711.7	752.2	766.9	830.4	849.3	888.8	4.5%
Labour on costs	124.3	158.2	156.3	158.7	167.7	197.6	9.7%
Utilities	45.2	45.1	46.1	53.6	52.5	54.9	4.0%
Repairs and maintenance	60.8	43.7	54.1	57.5	61.6	55.1	-1.9%
COGS – food and beverage	111.0	129.3	134.3	152.5	167.3	172.2	9.2%
Other costs	426.6	384.6	448.9	458.1	645.2	749.7	11.9%
Total	1479.6	1513.1	1606.6	1710.8	1943.6	2118.4	7.4%

Note: ^a Excluding depreciation, amortisation, interest and taxes. ^b Compound average growth rate over period 2002-03 to 2007-08. Data may not add exactly due to rounding.

Source: ACA 2008b, ACA 2009a

Capital expenditure

Australian casinos spent \$825 million on capital works in the three years ending 30 June 2008. Over the next three years capital expenditure is forecast to be nearly double this amount, at \$1.6 billion. Of this future expenditure, \$451 million will be spent on the expansion of facilities, with \$951 million to be spent on redevelopments and refurbishments. This capital expenditure will contribute substantially to employment in the Australian construction industry. Further analysis of casino capital expenditure is provided in section 5.1.

Table 2.7

TOTAL CAPITAL EXPENDITURE (\$ MILLION)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Next 3 years
Expansion of facilities	88.7	72.8	32.8	98.7	71.4	139.3	451.3
Redevelopments, refurbishments	54	29.7	32.8	67.2	96.7	121.1	951.0
Other capital expenditure	36.8	59.8	80.6	46.7	122.7	61.0	165.9
Total	179.5	162.3	146.2	212.6	290.8	321.4	1568.3

Note: Figures for the next 3 years include the Star City redevelopment, Crown Melbourne renovations and hotel development, and Burswood Entertainment Complex upgrade and expansion. Data may not add exactly due to rounding.

Source: ACA 2008b, ACA 2009a

Chapter 3

The contribution of casinos to the Australian economy

Key points

The international evidence suggests that the contribution made by casinos to economic activity largely depends upon the extent of casino revenues generated from tourists. The available research suggests that casinos have not led to the displacement of jobs in non-casino facets of the leisure and hospitality sector. In the Australian context it is found that:

- over 1 million international tourists made 2.4 million visits to Australian casinos in 2007-08
- international tourists who visited Australian casinos spent a total of \$4.9 billion, or an
 average of \$4940 per tourist, during their visits to Australia. This average expenditure
 is considerably higher than the average expenditure among international tourists who
 did not visit casinos of \$2630 per tourist

Gaming expenditures by international VIP program players totalled \$553 million in 2007-08. It is estimated that casinos spent a further \$65 million to attract these players and their entourages, who are estimated to have spent \$121 million in Australia on non-casino goods and services.

- it is estimated that exports to international VIP program players increased gross domestic product (GDP) by \$84 million in 2007-08 and private consumption by \$225 million
- maintaining exports to international VIP program players at the 2007-08 level is expected to increase Australia's private consumption by \$1.8 billion (Net Present Value) over a 10- year period.

This chapter reviews the Australian and international evidence on the contribution made by casinos to local, regional and national economies, as ultimately measured in the national accounts. The results of economic modelling examining the economic contribution made by international VIP program players to Australia are also reported.

3.1 How casinos contribute to the Australian economy

There is a growing literature, largely from overseas, examining how casinos make a contribution to state or national economies. This literature identifies four different ways casinos *directly* contribute to GSP or GDP:

- gaming tourists from interstate or overseas who participate in casino gaming
- import substitution (comprising casino expenditure by residents who would otherwise travel to casinos elsewhere)
- capital inflow

• consumer benefits (from increased competition raising the value of gaming provided to consumers, such as through improved quality of service).

In addition to these *direct* methods that casinos may contribute to economies, there may also be a number of *indirect* methods, such as additional employment. Furthermore, casinos provide consumers with a benefit not recorded in GDP or GSP, referred to as consumer surplus. Consumer surplus is examined at length in Chapter 4.

A point of debate in the literature is the extent to which casinos largely visited by domestic casino patrons make a contribution to *national* economies. It is argued that in the absence of a casino, funds spent by domestic casino patrons would be spent on other hospitality and leisure services, thus having a similar impact upon economic activity. This point ignores that casinos may enhance competition in both the gaming and non-gaming sectors, and attract investment capital for casino development. Furthermore, the scale of casinos allows them to provide employment opportunities not possible among smaller employers in the hospitality industry, such as training, development and career progression.

3.2 Components of the casino contribution to the economy

Much of the literature on the contribution made by casinos to economic activity is from overseas, particularly the United States. There is little Australian literature examining this topic.

Tourism

Importance of tourism to Australia

Tourism is a major export industry for Australia. In 2007-08 5.2 million international tourists visited Australia, with a Total Inbound Economic Value of \$24.1 billion (TRA 2008). TIEV is a measure developed by Tourism Research Australia, and is calculated using data on total trip expenditure by inbound tourists to Australia and is benchmarked to ABS data (TRA 2008). It should be noted that TIEV is not GDP — the GDP generated from tourism is likely to be somewhat lower than the estimated TIEV due to crowding out, such as changes in the terms of trade and investment.

The importance of tourists to the Australian economy is further highlighted by the fact that in 2006-07 the tourism industry employed 482 000 people (ABS 2008).

Between 1990 and 2007, the strongest tourist growth was from the Middle East (up 13.4 per cent), Asia-Pacific region (up 10.2 per cent), Southeast Asia (up 11.8 per cent) and Northeast Asia (up 10.5 per cent). Tourists from Southeast Asia and China comprise the majority of international VIP program players in Australian casinos. Visitors from Japan, New Zealand, the UK and other European countries, whilst having the greatest numbers of visitors to Australia, report very low levels of expenditure on entertainment and gambling (TRA 2008).

As an example of the importance of Asian tourists to Australian casinos, Table 3.1 details that Asian tourists spend considerably more on gambling than the average tourist. For example, an estimated 12.9 per cent of tourists from China to Australia spent money on gambling in 2007-08 – this share is not significantly different to the average for all tourists of 12.6 per cent. However, Chinese tourists spending money on gambling spent an average of \$350, which is 1.8 times greater than the \$191 average for all tourists spending money on gambling. Tourists from other Asian countries such as Indonesia, Malaysia and Singapore also make above average gambling expenditures.

Table 3.1

TOURIST EXPENDITURE UPON GAMBLING, 2007-08

	Gambling tourists	Expen	diture
	(per cent of total)	Gambling tourists	Multiple of total
Asia			
Japan	9.5	\$137	0.7
Hong Kong	11.3	\$238	1.2
Singapore	13.2	\$342	1.8
Malaysia	12.2	\$360	1.9
Indonesia	9.4	\$342	1.8
Taiwan	17.8	\$269	1.4
Thailand	10.0	\$229	1.2
Korea	18.7	\$327	1.7
China	12.9	\$350	1.8
India	6.6	\$423	2.2
Other Asia	7.5	\$318	1.7
Europe			
United Kingdom	12.7	\$134	0.7
Germany	6.3	\$63	0.3
Scandinavia	9.0	\$178	0.9
France	5.4	\$111	0.6
Italy	10.6	\$198	1.0
Netherlands	6.8	\$220	1.2
Switzerland	8.3	\$156	0.8
Other Europe	11.6	\$146	0.8
Other			
New Zealand	17.8	\$101	0.5
USA	10.9	\$193	1.0
Canada	13.7	\$95	0.5
Other countries	9.1	\$220	1.2
Total	12.6	\$191	1.0

Source: Allen Consulting Group analysis using TRA 2008

Separate research has identified that an even larger share of tourists visit casinos while in Australia, even though they may not spend funds on gaming. For example, it is estimated that 1 million international tourists visited casinos in 2007-08, or 19.4 per cent of all tourists, during their time in Australia (TTF 2009).

Casinos advise that many international tourists visiting their complexes, particularly Asian tourists, were attracted to Australia by the presence of casinos. Many other tourists not necessarily attracted to Australia by casinos, spend additional money during their visit to Australia as a result of the opportunities presented by casinos.

Analysis of the anticipated economic impact of the two casinos opening soon in Singapore has also found that visitors from certain countries, particularly mainland China, are significant gamblers. This analysis drew upon the Macau experience, where approximately 80 per cent of visitors from Mainland China, and half that percentage of tourists from other countries, visited a casino during their visit (Kinoshita 2004).

Importance of tourism to casinos

Jurisdictions that are able to become net exporters of gambling services — by attracting a high proportion of their customers from outside the region — will be able to generate considerably greater incremental local economic benefits than those jurisdictions whose casinos cater predominantly to local clientele.

Eadington 1998, p 188

There is wide agreement in the literature that the contribution made by a casino to economic activity is determined by the composition of casino patrons. The greater the number of tourists among casino patrons, particularly from overseas, the greater the contribution the casino is likely to make to economic activity.

The following can be used to classify casinos on the basis of their role in attracting tourists:

- local service the casino services only local residents
- import substitution the casino services local residents who would otherwise have travelled elsewhere to play casino games
- tourism destination the casino exports casino services to tourists who travel specifically to gamble at a casino (AIGR 2000).

Many of Australia's casinos fit into the last category as tourist destinations, with tourists contributing a significant proportion of casino revenues from both gaming and non-gaming activities.

Casinos are a destination for international tourists, with casinos located in each of Australia's capital cities along with tourist destinations such as Cairns, Alice Springs and the Gold Coast. Both in Australia and internationally, casino development has largely focussed upon attracting tourists, through both gaming activities, and other leisure and entertainment activities (AIGR 2000).

The most direct way a casino may attract tourists is by targeting individuals who are already keen casino players. These tourists would otherwise travel to other casinos, either within Australia or overseas.

Casinos may also attract tourists by raising the profile of a city as a sophisticated destination, including as a venue for conventions and functions (Buultjens 2006). A direct example is the gas brigades at Crown Melbourne, which are used in Victorian Government tourism promotions. The vast range of tourist infrastructure offered by casinos, including hotels, restaurants, bars and conference facilities, may also attract tourists.

Casino operators also provide their patrons with a range of facilities and tourist experiences at different physical locations. For example, one of Australia's casino operators, the Federal Group, is a large tourism operator in its own right within Tasmania. Federal Group has a portfolio of six tourist ventures including casinos at Wrest Point Hotel Casino and Country Club Tasmania, along with a new facility under construction. It is commonplace for patrons of Federal Group casinos to also visit other Federal Group properties during their stay in Tasmania. Similarly, Crown Melbourne operates an international-class golf course, Capital Golf Course, which is a drawcard for international VIP program players.

The importance of tourists to economic development is highlighted by the experience of the Caesars Windsor casino in Ontario, Canada. Owned by the Government of Ontario and operated by Harrah's Entertainment, this casino is located adjacent to Detroit, Michigan on the Detroit River. On opening in 1994, approximately 80 per cent of casino revenues were from Michigan citizens, with this expenditure considered a Canadian export (Eadington 1998).

Casinos feature prominently in a number of large integrated resorts under development across Southeast Asia with a combined value of in excess of US\$40 billion. These resorts comprise casinos along with other tourism infrastructure, and will be located in countries including Singapore, South Korea, the Philippines and Vietnam. Indeed, casino development underpins much of the future tourism strategy of these countries.

The target market for these new integrated resorts will be both international VIP program players and general tourists from the Asian region, particularly Mainland China. This market comprises a large segment of Australia's international casino patrons (GamblingCompliance 2009).

Gaming expenditure by tourists

International tourists, particularly international VIP program players, contribute a relatively large share of gaming revenues at Australian casinos. In 2007-08, international VIP program players accounted for 17.5 per cent of total casino gaming revenues (see Table 3.2).

Table 3.2

CASINO REVENUES FROM INTERNATIONAL VIP PROGRAM PLAYERS

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average growth ^a
Revenue (\$ million)	462.1	461.4	312.6	382.5	475.8	552.9	3.7%
Per cent of total gaming revenues	18.3%	17.5%	11.9%	13.4%	16.5%	17.5%	

Note: a Compound average growth rate over period 2002-03 to 2007-08.

Source: ACA 2008b, ACA 2009a

Non-gaming expenditure by international tourists

International tourists attracted to Australia by casinos may also spend significant funds on non-casino activities outside casino complexes, with one researcher noting that:

Where new gaming opportunities attract high numbers of tourists, expenditure in related industries can also increase.

Buultjens 2006, p.166

For example, many nightclubs in close proximity to Crown Melbourne reported increased trade due to an overflow from the crowded casino when it first opened (Buultjens 2006).

Consultations with Australian casinos have confirmed this observation, with international VIP program players and their entourages known to spend sizeable amounts on non-gaming activities while in Australia. Exposing Australia to international VIP program players has the potential to lead to significant exports of a wide range of non-gaming goods and services. This potential is recognised by governments, such as the Victorian Government in its 10 Year Tourism and Events Industry Strategy (DIIRD 2006).

Capital Inflow

The development of casinos also generates significant capital inflow into local areas and states. The capital intensity of casino development, and thus capital inflow, differentiates casinos from other gambling venues such as hotels and clubs (Walker 2007a).

Again research on the effects of capital inflow due to legalised gambling is scarce. Conceptually this effect is the same as labour inflow, thus increasing the productive capacity of an area (Walker 2007a). Some research suggests that the expansion of casinos simply reduces the capital in other industries. However, it is considered that the industry providing the greatest benefit to consumers will be the most likely to expand and succeed in the long run.

This issue is particularly pertinent in the Australian context, where a number of casino operators also have casino investments overseas. If these operators did not consider Australia to be an attractive casino investment destination, they would move their funds overseas.

Consumer benefit from increased competition

Casinos provide a range of significant benefits to consumers, which may then lead to a contribution to economic activity.

Firstly, casinos are often bundled with other markets, typically comprising restaurants, hotels and live entertainment. Casinos therefore increase competition in local restaurant and hotel markets (creating pressure for price decreases or quality increases), which in turn creates additional consumer surplus, or additional value to the consumer in choosing to consume casino products.

Secondly, competition also creates increased product choices for consumers, known in economic terms as the 'variety benefit' (Walker 2007a).

Research findings

A number of studies have been undertaken both in Australia and overseas examining the contribution made by casinos to economic activity, or facets of economic activity such as employment. Relevant findings from a selection of studies are detailed below.

Relationship between casino legalisation and economic activity

Only one study has been identified that examines whether casino activity *causes* economic activity and growth. This study examines the impact of casino legalisation in the United States (USA) on state-level economic development over the period 1991 to 2005. The key finding was that casino legalisation did not have a significant impact on economic growth at the state level, for the *average* state in the USA.

Although this study found that casino gambling had initial positive growth effects, these dissolved over time, such that no long-term growth effects from legalising casino gambling were found for the *average* state. Despite this finding for the *average* state in the USA, the authors suggest that casinos cause economic growth in those states attracting significant numbers of interstate casino tourists, such as Nevada and New Jersey (Walker & Jackson 2007).

Relationship between casinos and employment

Much research into the economic impact of casinos has focussed on the question of whether the opening of a casino leads to an increase in employment.

When a casino opens it requires a wide range of employees, including gaming staff, chefs, waiters, cleaners, and security staff. Depending upon local economic conditions, casino employment may lead to a reduction in local unemployment, or even attract staff from interstate or other parts of a state.

A number of studies have examined the relationship between casinos and local employment, with local casino employment found to contribute to overall economic activity (Morse & Goss 2007, Garrett 2004).

Analysis also from the United States examines whether the opening of casinos is linked to changes in the total number of people employed in the leisure and hospitality sector within individual states, particularly within the non-casino leisure and hospitality sector. This analysis uses an economic geography measure called the location quotient (LQ). A LQ less than 1.0 indicates that the state has a lower share of employment than the nation in the leisure and hospitality sector (exclusive of casino employment). An LQ greater than 1.0 indicates that a state has a higher share of employment than the nation in the leisure and hospitality sector (exclusive of casino employment).

Table 3.3 reports the estimated LQs for each state in the USA containing casinos — data was unavailable for Nevada and New Jersey, as well as states containing 'racinos'.²

A racino is a combined race track and casino.

Overall, the analysis suggests that the introduction of casinos in the United States did not lead to the displacement of employment in the non-casino leisure and hospitality sector — rather there was an increase in the total LQ from 0.93 to 0.96. In the states of Colorado, Iowa and South Dakota, the LQ fell, indicating that casinos appear to have drawn jobs from non-casino leisure and hospitality firms. However, for the remaining casino states, casinos appear to have not drawn jobs from other leisure and hospitality firms. Instead casinos appear to have increased the share of employment in non-casino leisure and hospitality firms (Morse & Goss 2007).

Table 3.3

LEISURE AND HOSPITALITY LOCATION QUOTIENTS FROM THE UNITED STATES

State	Year casino opened	LQ before Casinos	LQ for 2005
Colorado	1991	1.21	1.14
Illinois	1991	0.87	0.93
Indiana	1995	0.89	0.94
Iowa	1991	0.91	0.90
Louisiana	1993	0.83	0.89
Michigan	1998	0.95	0.97
Mississippi	1992	0.33	0.80
Missouri	1994	0.99	1.00
South Dakota	1989	1.12	1.07
All casino states		0.93	0.96

Note: Location Quotient (LQ) = per cent of state employment in leisure and hospitality, divided by, per cent of national employment in leisure and hospitality.

Source: Morse & Goss 2007, p. 58.

The available research examining whether opening a casino leads to an increase in employment only focuses upon the *quantity* of employment. Not considered in the available literature is the related issue of the *quality* of employment provided by casinos — this is an issue requiring further research. Metrics representing *quality* of employment include wages, conditions, training and development, as well as promotion opportunities.

Australia's casinos have advised that they strive to be employers of choice in their region, providing employees with an employment experience exceeding that provided within other sectors of the hospitality industry. For example, many casinos advise that they pay salaries above the norm for various occupations, with the size of casinos allowing them to provide extensive training and career pathways. The employment strategy of casinos largely reflects an understanding that individuals will choose to work for employers they consider provide them with the 'best' employment experience. This issue is examined further in Chapter 5.

3.3 Estimating the economic contribution of casinos to Australia

The magnitude of the economic contribution made by casinos, as recorded in GDP, is largely driven by the extent of casino-based international tourism. In other words, casinos that are highly dependent upon international tourists for their revenues make a larger economic contribution than casinos largely relying upon local residents. The exception to this finding would be whether patrons would instead travel to other casinos in the absence of a casino.

The evidence that casinos dependent upon domestic residents make a small economic contribution should not be interpreted as indicating that such casinos provide no benefit. Rather, as highlighted later in Chapter 4, by virtue of their decision to attend a casino, individual casino patrons derive a greater benefit from attending a casino than may be derived from alternative activities. Furthermore, these casinos provide valuable employment opportunities for local staff.

Exports associated with two types of international patrons of Australian casinos are examined in further detail below. The first group comprises 'general' international tourists who spent money in Australian casinos. In 2007-08, this group comprised 1 million tourists who made 2.4 million visits to Australian casinos (TTF 2009).

The second group of tourists is international VIP program players. Australian casinos compete internationally for these players, also referred to as 'high rollers'. These players are known to turnover very large sums of money during their visits to a casino.

Economic contribution made by 'general' international tourists attending casinos

In 2007-08, 1 million international tourists made 2.4 million visits to Australian casinos. Expenditure by international tourists is considered an export of tourism-related goods and services. Casinos do not collect data on casino expenditure by 'general' international tourists.

Analysis by the Tourism and Transport Forum (TTF) estimates that international tourists visiting casinos spent a total of \$4.9 billion in 2007-08, or an average of \$4940 per tourist, during their visits to Australia. This average expenditure is considerably higher than average expenditure by international tourists who did not visit casinos of \$2630 per tourist (TTF 2009). This finding indicates that tourists attending casinos are likely to spend significantly more money during their time in Australia than tourists not attending casinos.

International VIP program players and the Australian casino industry

Of the international tourists attracted to Australia by casinos, there is a group known as international VIP program players (i.e. 'high rollers'). It is widely accepted that these players would not travel to Australia if there were not any casinos.

Australian casinos compete with casino destinations such as Macau, Las Vegas and London, for international VIP program players.

Revenues from international VIP program players

In 2007-08, international VIP program players contributed \$553 million in casino gaming revenues to Australian casinos.

The total value of casino gaming stakes made by international VIP program players in 2007-08 was in excess of \$32 billion. The stakes made by these patrons on individual games can run into many thousands of dollars. Accordingly, these patrons typically play casino games in suites away from the main gaming floor. This separation from the main gaming floor makes it possible for casinos to comply with the different tax rates in place for international VIP program players.

International VIP program players often bring an entourage of several persons to Australia. Casinos have advised that these tourists often spend significant funds in non-casino activities such as retail shopping, dining and sightseeing. These players may also spend funds on health care, real estate and education (e.g. university for children, and language schools). It is conservatively estimated that non-casino expenditure by international VIP program players and their entourages totalled \$121 million in 2007-08.

Costs associated with attracting international VIP program players

Casinos spent approximately \$65 million to attract international VIP program players to Australia in 2007-08. This expenditure includes the costs associated with providing complementary accommodation and food, as well as gaming staff, marketing and travel costs. For example, Crown Melbourne has two corporate jets that bring international VIP program players to Australia.

Casinos also spend additional monies on casino marketing offices located overseas. Promotional activities by overseas marketing offices also raise the profile of Australia as a tourist destination among overseas residents who do not play casino games. As this expenditure is made overseas, it is not included in the \$65 million.

Estimating the economic contribution of international VIP program players

A general equilibrium (GE) model of the Australian economy, the MONASH Multi-regional Forecasting (MMRF) model, is used to estimate the wider economic benefits that international VIP program players bring to the Australian economy. MMRF is able to estimate GDP, employment, the balance of trade, and output and employment effects for all industries in the economy. More detailed information on the MMRF model is provided in Appendix B.2.

Inter-industry effects occur because every industry is linked to every other industry, either directly or indirectly (e.g. the casino industry purchases food for its restaurants, with the food industry linked to the transport industry etc).

Modelling scenarios

Estimating the contribution made by international VIP program players to the Australian economy requires estimation of how their removal would lead to a change (or 'shock') to Australian economic activity from 'business-as-usual'. These 'shocks' are then incorporated into a computable general equilibrium (CGE) model to estimate the combined impact upon the Australian economy.

Drawing from the information collected from a survey of Australian casinos (ACA 2009a), a CGE modelling 'shock' has been developed. This 'shock' comprises the removal of casino gaming expenditures by international VIP program players. In 2007-08, these expenditures totalled \$553 million.

The 'shock' is incorporated into the CGE model by reducing the export of casino gaming services by \$553 million (Scenario 1 in Table 3.4). Casino gaming is part of the 'Other services' sector in the MMRF CGE model.

Another two scenarios are also considered. Scenario 2 builds upon scenario 1 to also consider the incremental expenditure undertaken by casinos to attract and service international VIP program players. This incremental expenditure is estimated to have been \$65 million in 2007-08.

Scenario 3 comprises scenario 2, plus the impact of expenditure by international VIP program players on non-casino goods and services. Specific data on this expenditure has not been identified, with a conservative assumption on expenditure per international VIP program player made. This non-casino expenditure is estimated to total \$121 million. Given that international VIP program players often bring an entourage of several people and are known to be very wealthy, it is quite likely that this estimated expenditure is significantly less than the actual amount.

Table 3.4

CGE MODELLING SCENARIOS

Scenario	Description	Specific shock
1	Removal of international VIP program players, and associated expenditure, from the Australian economy	Reduction in export of casino gaming services by \$553 million
2	As for Scenario 1, plus removal of expenditure by casinos to attract and service international VIP program players	As for Scenario 1, plus reduction in incremental casino expenditure associated with attracting international VIP program players (\$65 million)
3	As for Scenario 2, plus impact of removing non-casino expenditure by international VIP program players	As for Scenario 2, plus removal of export of additional goods and services consumed by international VIP program players and their entourage (\$121 million)

Source: Allen Consulting Group

Economic modelling results

The results of the economic modelling (Scenario 1) are presented in Table 3.5. The Scenario 1 results are used to extrapolate results for Scenarios 2 and 3.

Under scenario 1, the export of casino services to international VIP program players is estimated to have contributed a total of \$62.7 million to GDP in 2007-08. The export of international gaming services is also estimated to increase private consumption by \$168.5 million.

The reason that casino services exports of \$553 million leads to a GDP increase of 'just' \$62.7 million is because of responses in the economy. Some industries (such as those that sell inputs to the casino industry) are winners, but the output of some industries contracts. This is principally because the export shock causes the exchange rate to appreciate, and so industries that sell much of their output overseas (such as in the mining sector) lose some competitiveness. Thus total export volumes rise by less than casino exports. Imports also rise, because of the appreciation of the exchange rate.

The disturbance to the economy created by exports of casino services to foreigners leads to a reallocation of production patterns among and between industries. This reallocation is shown in Table B.1 in Appendix B.

It can also be seen from Table 3.5 that there is a fall in aggregate investment of \$62.3 million. This should not be seen as a bad thing. Rather, it reflects the pattern of industry output reallocation. The fall in investment occurs because output generally expands in industries that are not capital-intensive, and contracts in industries that are capital-intensive.

The important point is that output in the economy as a whole expands, as a result of the export of casino services to international VIP program players. This leads to a rise in living standards more generally, as shown by an increase in the real wage rate and private consumption. The modelling results also finds a very small rise in employment, but not too much should be made of this — it reflects a change in the composition of economic output and differences in hours worked in different sectors of the Australian economy.

Table 3.5 also shows that aggregate private consumption rises by much more than GDP. The reason for this result is that one of the effects of the reduction in non-casino exports is a rise in Australia's terms of trade (i.e. the cut back in these exports leads prices to increase). The rise in export prices contributes positively to Australia's national income, and this in turn leads to more consumption spending. This is important as consumption spending is a good measure of national welfare or well being.

Table 3.5

CONTRIBUTION OF INTERNATIONAL VIP PROGRAM PLAYERS TO THE AUSTRALIAN ECONOMY, 2007-08 (2008 PRICES): SCENARIO 1

	Deviation from base case values	
-	Per cent	\$ million
Component of GDP		
Real private consumption	0.03	\$168.5 million
Real investment	-0.02	-\$62.3 million
Real government consumption (state)	0.00	\$0.0 million
Real government consumption (federal)	0.00	\$0.0 million
International export volumes	0.01	\$18.7 million
International import volumes	0.03	\$58.1 million
Real GDP	0.01	\$62.7 million
Other economic variables		
Employment (hours)	0.00	
Employment (persons)	0.03	2900
Capital stock	-0.02	
Real wage rate	0.05	
CPI	0.00	
National terms of trade	0.06	
Appreciation of the real exchange rate	0.07	
Real Gross National Product	0.02	

Note: Data may not add exactly due to rounding.

Source: CoPS 2009

State and territory level results for scenario 1 are presented in Table 3.6, detailing the change in both real GSP and employment. The largest gains occur in NSW and Victoria, whereas GSP declines in some other states, especially Queensland and Western Australia. These declines mainly reflect the negative effect upon the mining sector in those states. Benefits these states derive from international VIP program players are offset by other effects. Changes to employment in the states and territories follow changes in GSP.

Table 3.6

CONTRIBUTION OF INTERNATIONAL VIP PROGRAM PLAYERS TO THE AUSTRALIAN ECONOMY, STATE AND TERRITORY RESULTS: SCENARIO 1

	Deviation from base case values					
	Rea	al GSP	Emplo	yment		
	Per cent change	Output	Per cent change (hours)	('000 persons)		
NSW	0.03	\$123.1 million	0.03	1.7		
VIC	0.04	\$113.5 million	0.06	1.5		
QLD	-0.03	-\$73.8 million	-0.01	-0.2		
SA	0.00	\$3.4 million	0.00	0.0		
WA	-0.08	-\$120.8 million	-0.04	-0.4		
TAS	-0.02	-\$4.0 million	-0.01	0.0		
NT	-0.05	-\$7.4 million	0.05	0.1		
ACT	0.13	\$28.9 million	0.1	0.2		
Total	0.01	\$62.7 million	0.00	2.9		

Note: Data may not add exactly due to rounding.

Source: CoPS 2009

Drawing from the CGE modelling results for scenario 1, estimates for both scenario 2 and 3 have been developed. These estimates were generated by increasing the scenario 1 results by the relative increase in shock size. Under scenarios 2 and 3 expenditure associated with international VIP program players generates additional GDP of \$70 million and \$84 million respectively (see Table 3.7).

Table 3.7

CONTRIBUTION OF INTERNATIONAL VIP PROGRAM PLAYERS TO THE AUSTRALIAN ECONOMY: SCENARIOS

	Per cent change			(Change (\$ m)		
_	Scenario			Scenario			
	1	2	3		1	2	3
Real private consumption	0.03	0.03	0.04		168.5	188.3	225.0
Real investment	-0.02	-0.02	-0.02		-62.3	-69.7	-83.3
Real government consumption (state)	0.00	0.00	0.00		0.0	0.0	0.0
Real government consumption (federal)	0.00	0.00	0.00		0.0	0.0	0.0
International export volumes	0.01	0.01	0.01		18.7	20.9	25.0
International import volumes	0.03	0.03	0.03		58.1	64.9	77.6
Real GDP	0.01	0.01	0.01		62.7	70.1	83.8
Change in private consumpti	ion over	10 years	(NPV) ^a		1365.8	1526.5	1824.6

Note: a discount rate of 5 per cent. Data may not add exactly due to rounding.

Source: CoPS 2009

The cumulative change in real private consumption of maintaining the 2007-08 level of international VIP program players for a ten-year period is also reported in Table 3.7 (applying a discount rate of 5 per cent).

Under scenario 1, there is a cumulative increase in private consumption associated with casino gaming exports of \$1366 million over a ten-year period. Under scenarios 2 and 3, there is a higher estimate of cumulative private consumption, comprising an increase of \$1526 million and \$1825 million respectively.

In summary the export of casino services to international VIP program players has a substantive positive effect on Australia's economic welfare.

Chapter 4

Benefits and costs of the Australian casino industry

Key points

Benefit-cost analysis (BCA) is an important analytical tool for decision-making. BCA was used extensively by the PC during the 1999 inquiry, where a focus was placed on the social costs of problem gambling.

The 1999 PC analysis largely took a consumer perspective, not considering the perspective of producers. There were also problems associated with the PC analysis of the National Gambling Survey (NGS). Finally, there is debate over the definition of social cost applied by the PC. A social cost is a cost that reduces the aggregate level of societal wealth.

Estimates of the social surplus (or net benefit) of the Australian casino industry have been developed. These estimates find that:

- the Australian casino industry generated a social surplus of \$3 billion in 2007-08
- the majority of the social surplus is received by casino gaming consumers and only a small portion of the social surplus is associated with the non-gaming services
- casino operators receive a negligible share of the social surplus from non-gaming activities. This finding shows that it is important to consider casinos as a whole comprising both gaming and non-gaming services. In the absence of casino gaming, it is considered unlikely that the range of non-gaming services available at casinos would be provided in their current form.

A lack of suitable data on the prevalence of problem gambling in casinos, and the associated costs, has prevented costs associated with problem gambling in casinos being incorporated into the social surplus estimate. This is an issue requiring further research.

This chapter considers the available evidence on the social benefits and costs of casinos, both in Australia and internationally.

There is much debate on the appropriate methodology for measuring the social benefits and costs of casinos. The 1999 PC inquiry made methodological in-roads into estimating the social benefits and costs of gambling. However, there were some weaknesses in the PC approach, which are identified in this chapter.

Finally, estimates are developed of the social benefits and costs of the Australian casino industry. Due to a lack of appropriate data on the prevalence of problem gambling and associated costs, no attempt has been made to estimate the social costs of problem gambling among casino patrons. This is an issue that the PC may wish to pursue in the current inquiry.

4.1 The role of benefit-cost analysis

Benefit-cost analysis (BCA) is typically used to inform decision-making by governments, such as a decision to build a road, or to amend legislation. This form of analysis is particularly useful when traditional financial measures, such as profit or taxation revenue, are considered inappropriate. Rather, BCA is used to identify and value the range of social benefits and costs imposed by an action or policy.

A key feature of any BCA is the perspective taken in the analysis. For example, a BCA of casino gaming could take a number of perspectives, including:

- casino gaming patrons
- gaming and non-gaming casino patrons
- casino patrons and their families
- casino operators
- casino patrons and operators
- government.

The choice of perspective determines the benefits and costs that are included in the BCA, and thus influences the analysis findings.

The notion that a BCA should only consider *social* benefits and costs is an important one. The 'standard' economic approach identifies relevant social benefits and costs as where there is a change in the aggregate wealth (or welfare) of society (Boardman et al 2001). The actual practice of BCA of gambling often deviates from this 'standard' approach, typically through focusing almost exclusively upon gambling consumers and including costs that do not represent changes in aggregate social wealth.

BCA can also be used to assess the social surplus (or net social benefit) of an industry through considering the perspective of both consumers and producers. This approach is applied in section 4.4 of this chapter, to estimate the social surplus of the Australian casino industry.

4.2 Findings in previous Productivity Commission inquiry

The 1999 PC inquiry report featured analysis of the social benefits and costs of legalised gambling in Australia (PC 1999). The PC analysis has been identified in the literature as being very detailed and as giving 'a meticulous explanation of the economic perspective on social benefits and costs' (Walker 2007a, p. 133).

However, the PC findings with respect to casinos are problematic. These problems relate to both the conceptual methodology used by the PC for the BCA, and the use of the National Gambling Survey (NGS) to estimate the benefits and costs of casino gambling.

Methodology used by Productivity Commission in 1999 inquiry

The methodology used by the PC in 1999 is summarised in Table 4.1. The perspective taken by the PC was to largely consider the consumer perspective, with no consideration of the producer perspective.

METHODOLOGY USED IN PRODUCTIVITY COMMISSION 1999 REPORT TO ESTIMATE BENEFITS AND COSTS OF GAMBLING Table 4.1

Category	Summary Description	Inclusions
Costs		
Financial Costs	Debts and bankruptcies of problem gamblers	Only bankruptcies estimated. Other components identified but not measured include bounced cheques and bankruptcy.
Effects on productivity and employment	Reduced productivity and employment by problem gamblers	Estimation of productivity loss at work (from reduced time at work, quality of work, and cooperation with colleagues and employer, promotion prospects, concentration, confidence/trust). Estimated earnings loss, employee job search, and staff replacement costs.
Legal system costs	Use of legal system by problem gamblers	Estimated costs of police incidents, court cases and prison costs. These are costs from problem gamblers that commit an offence, and their use of the legal system (police, courts, prison).
Personal and family impacts	Emotional distress, mental illness, and relationship impacts	Estimated costs of emotional distress, mental illness, attempted suicide and relationship breakdown.
Treatment costs	Gambling counselling services	Estimated costs of government funded counselling services. Also identified, but not estimated, included costs of treatment provided by voluntary and non-government funded agencies.
Consumer loss for problem gamblers	Gambling spending by problem gamblers from which they get no value	Annual spending for moderate and severe problem gamblers, loss for moderate and severe problem gamblers.
Benefits		
Consumer surplus for recreational gamblers	Difference between what consumers pay to gamble, and how much they value gambling	Estimated consumer surplus for recreational gamblers.
Taxes, licences and community contributions	Additional taxes, licences and community contributions from gambling	Tax revenue paid by recreational, moderate and severe gamblers, estimated revenue from tourist spending.
Source: PC 1999.		

A range of benefits and costs were identified and quantified by the PC. Costs identified by the PC included financial costs associated with debts and bankruptcies, legal system costs, and treatment costs. Conversely, benefits were identified as being the consumer surplus attained by recreational gamblers, taxes, licences and other community contributions.

The attempt by the PC to estimate costs has been recognised as being 'arguably the most competent of the studies that have so far attempted to quantitatively estimate the social costs of problem gambling' (Eadington 2004, p. 193). However, there are some limitations associated with the PC approach.

Limitations of consumer perspective

As noted above, the PC largely took a 'consumer perspective' in its BCA of gambling. This approach did not record benefits received by gambling providers. In a social BCA, it is appropriate to consider the perspective of both producers and consumers — to not do so is likely to result in a limited perspective being provided in the analysis. Furthermore, the PC methodology only considered gambling services provided by casinos and other providers. This approach disregarded the fact that many casino patrons consume many goods and services other than gaming at casinos, including dining, music and other forms of entertainment.

Definition of social costs

A number of economists have questioned aspects of the definition of social costs applied by the PC. In particular, the PC included 'internalised' costs (costs borne only by the individual problem gambler), such as absenteeism, productivity loss and being dismissed from work. Walker (2007b) and Eadington (2003) argue that 'internalised' costs should be excluded from social cost estimates.

Application of National Gambling Survey in benefit-cost analysis

The PC relied extensively upon the specially commissioned National Gambling Survey (NGS) to provide a range of parameters for the BCA. This survey had a relatively small number of casino patrons as respondents, who played either table or electronic games. The low number of casino patrons among respondents meant that casino-specific estimates for table games had a wide confidence interval.

No estimates were reported comparing results for EGM players in casinos to those in other venues. Such a comparison is important, with it likely that the destination nature of casinos results in their being a lower rate of irresponsible gambling in these venues, compared to more convenient EGM venues such as hotels and clubs.

For example, the evidence from New Zealand suggests that casinos have a lower rate of irresponsible gambling than convenience venues. In New Zealand 12.5 per cent of EGMs were located in casinos in 2007, whereas of all EGM players calling the Gambling Helpline in 2007, 10.8 per cent indicated that their primary gambling medium was casino-based EGMs. Only 4.2 per cent of all callers indicated that their primary gambling medium was casino table games. Furthermore, casino expenditure in New Zealand accounted for 23 per cent of total gambling expenditure in 2007, compared to 15 per cent of all callers to the Gambling Helpline who indicated that their primary gambling venue was a casino (Gambling Commission 2008, Ministry of Health 2008, Department of Internal Affairs 2008).

Many of the estimates presented by the PC did not report confidence intervals, instead only reporting point estimates. Confidence intervals are the range where the 'true' value lies when a repeated sample is undertaken. For example, a 95 per cent confidence interval is the interval where, in a repeated sample, the 'true' value lies 95 per cent of the time.

The information on the NGS reported in PC (1999), has been used to estimate confidence intervals for problem gambling prevalence and harm incidence rates by gambling mode and frequency of playing (see Table 4.2).

Table 4.2

PROBLEM GAMBLING PREVALENCE AND HARM INCIDENCE RATES BY GAMBLING MODE AND FREQUENCY OF PLAYING, WITH ESTIMATED 95 PER CENT CONFIDENCE INTERVAL^a

	SOGS 5+	SOGS 10+	HARM
	%	%	%
All players			
EGM players (all venues)	4.67 (4.01-5.33)	0.76 (0.49-1.03)	4.09 (3.47-4.71)
Racing	4.46 (3.64-5.28)	0.74 (0.41-1.07)	3.8 (3.05-4.55)
Instant scratch tickets	2.83 (2.36-3.3)	0.39 (0.21-0.57)	2.34 (1.91-2.77)
Lotteries	2.75 (2.34-3.16)	0.34 (0.2-0.48)	2.42 (2.04-2.8)
Casino table games	6.12 (4.65-7.59)	1.06 (0.45-1.67)	4.67 (3.39-5.95)
Other commercial games	5.6 (4.67-6.53)	0.92 (0.54-1.3)	5.02 (4.14-5.9)
All commercial gambling	2.55 (2.21-2.89)	0.41 (0.27-0.55)	2.22 (1.91-2.53)
Weekly players			
EGM players (all venues)	22.59 (18.21-26.97)	3.77 (1.97-5.57)	14.79 (11.24-18.34)
Racing	14.72 (10.78-18.66)	3.1 (1.29-4.91)	11.45 (7.97-14.93)
Instant scratch tickets	5.49 (3.76-7.22)	1.32 (0.47-2.17)	5.9 (4.11-7.69)
Lotteries	2.48 (1.92-3.04)	0.35 (0.14-0.56)	2.44 (1.89-2.99)
Casino table games	23.84 (5.16-42.52)	8.03 (0-18.87)	15.63 (0.5-30.76)
Other commercial games	13.31 (9.69-16.93)	2.3 (0.79-3.81)	8.05 (5.23-10.87)
All commercial gambling	4.62 (3.95-5.29)	0.88 (0.59-1.17)	3.48 (2.9-4.06)
Regular non-lottery	15.36 (12.94-17.78)	2.79 (1.75-3.83)	10.7 (8.68-12.72)

Note: ^a The relevant share of adults is the percentage of adults who play in the relevant categories. For example, 10.3 per cent of adults had participated in casino table games in the previous year at the time of the 1999 *National Gambling Survey*, but only 0.25 per cent gamble weekly or more on casino table games. Non-lottery excludes both lotto type products and instant scratch tickets.

Source: PC 1999, Table 6.15, p. 6.54. Confidence intervals estimated by the Allen Consulting Group.

The confidence interval estimates reported in Table 4.2 suggest there is a strong likelihood that the 'true rate' of problem gambling may be quite different to the point estimates reported by the PC.³ For example, the 95 per cent confidence interval for the percentage of weekly casino table players reporting a SOGS score of five or greater is estimated to be between 5.2 and 42.5 per cent. This is a large range, given that the point estimate was 23.8 per cent. Large confidence intervals are also found for other estimates of problem gambling by weekly casino table gamers.

The large confidence intervals reported in Table 4.2 are a consequence of what is known as small cell size — only a relatively small number of survey respondents have a specified characteristic. In this case, it is estimated that only 0.25 per cent of survey respondents (population weighted) played casino table games weekly, of which an even smaller percentage had SOGS scores suggesting they were problem gamblers. Similar problems exist for other NGS analysis reported by the PC in the 1999 report.

It is doubtful whether these very large confidence intervals could be overcome if the NGS is repeated — a very large increase to the sample size would be required. It is understood that the PC is considering 'pooling' the results of various gambling surveys undertaken in recent years, instead of repeating a national survey. This may assist in partially alleviating the small cell size problem.

4.3 Literature and methodological developments since 1999

A number of studies examining the benefits and costs of gambling have been undertaken in both Australia and overseas since the 1999 PC inquiry. Among these studies, particularly those undertaken in Australia, very few focus exclusively upon casino gaming.

A weakness underpinning research in this field, both in Australia and overseas, is a lack of consensus on the methodology for BCA. Indeed, at the 2008 NCRG Conference on Gambling and Addiction in Las Vegas, a session on the benefits and costs of gambling highlighted these problems as:

- inconsistent methodologies, particularly in what constitutes a social cost
- the intensely political nature of research in this field
- lack of quality data limiting the value and accuracy of BCA estimates (NCRG 2008).

Defining social costs

As noted above, there is considerable debate in the literature regarding what constitutes a social cost of gambling for inclusion in a BCA.

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The confidence intervals reported in Table 4.2 assume that the NGS was a Simple Random Sample (SRS), and is likely to be an under-estimate. The 'true' confidence interval is influenced by the survey design, sample size, population size, and the point estimate itself.

Walker (2007a and 2007b) identifies that social cost definitions applied in gambling research are not always consistent with economic theory – a social cost should result in a decrease in the aggregate level of wealth to society. For example, resources used to address problem gambling are considered a social cost as these resources are no longer available for other purposes. Continuing with this social cost example, Walker considers that welfare payments, along with unemployment benefits, bankruptcy, debts, debt loss and theft, should not be considered social costs and are instead transfers.

Likewise, Eadington (2004) argues that internalised social costs, such as missed work, should not be considered social costs to society. A related difficultly is isolating the effect of gambling per se on a range of behaviours and social outcomes, such as bankruptcy, financial distress and mental illness.

Diversity of research on benefits and costs of casino gaming

A number of articles and books have been published examining aspects of the benefits and costs of casino gaming. A small selection of this research is summarised below. This selection is not necessarily representative, instead providing an indication of the range of research.

A conscious decision has been made not to report the quantitative findings of these various BCA studies identified below. Each study uses different methodologies and data sources, making comparisons misleading. A common theme in the range of literature on this topic is that the availability of robust data is a major constraint on research into the benefits and costs of casino

Social costs of casinos depend upon their use

Grinols (2004) argues that the extent of social costs from casinos depends on the use of the casino. For example, in Las Vegas and Atlantic City, where casinos primarily serve tourists, gambling creates employment and increases in revenues. However, in mid-west and southern America where casinos primarily attract local consumers, Grinols argues that gambling may cause a net loss to the community. It is also suggested that casino operators remove funds from local economies, leaving local taxpayers to meet the social costs of problem gambling. The findings in Grinols (2004) were subject to a two-page critique in Walker (2007a) — the majority of social costs identified by Grinols were considered by Walker to be wealth transfers and costs to individual gamblers.

Likewise, Eadington (1998) concludes that the benefits and costs to society of casinos depend on how much gaming revenue is generated through tourism — the larger proportion of revenue from tourists the greater the economic contribution (see Chapter 3).

Effect of casinos on local areas

Koo et al (2007) finds that casinos do not have a negative economic effect in the local areas in which they operate. Statistical analysis across three American states with casinos found no significant negative changes in unemployment, bankruptcy or crime rates after casinos opened.

4.4 Social surplus of Australian casinos

Building upon the research identified above, this section reports the findings of a BCA of the Australian casino industry. In contrast to much of the research discussed above, which uses the 'consumer' perspective, original analysis undertaken specifically for this report uses the social perspective. The key difference between the social and consumer perspective is that casino producers are also included.

This approach estimates the 'social surplus' of the casino industry. The social surplus measures how much better off society is from the casino industry, considering the perspective of both consumers and producers. All goods and services produced by casinos are included in this analysis, thus including hotel accommodation, dining, and other non-gaming entertainment. These non-gaming activities are included as their provision is considered conditional upon gaming activities.

Methodology

The social surplus of the casino industry is defined as the sum of what is referred to in economics as consumer surplus and producer surplus. Estimates of social surplus should also include any positive or negative externalities that are not recorded in any of these three surplus measures. Social surplus is akin to the social welfare attained by society from a good or service.

Consumer surplus

The consumer surplus attained by casino patrons is the difference between what the patron pays for 'casino services' and what they would have been prepared to pay, according to the (estimated) demand function for casino services. Put another way, if consumers obtain a service more cheaply than the price they were prepared to pay, then they receive a benefit equal to the difference between the two prices.

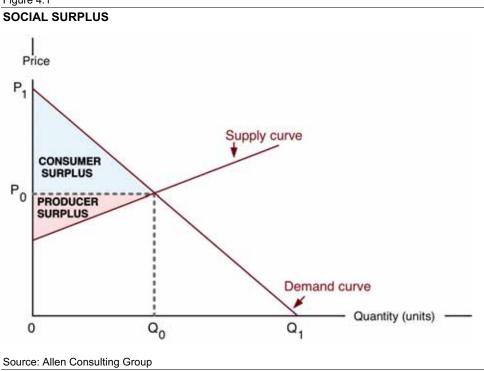
Producer surplus

The producer surplus received by the casino industry is the amount by which producers benefit from selling a good at a higher price than they would be willing to sell for.

Graphical explanation of social surplus

Consumer surplus and producer surplus are displayed diagrammatically in Figure 4.1. Consumer surplus is the blue shaded area, whereas producer surplus is the pink shaded area. The slope of the demand curve influences the magnitude of the consumer surplus. P_0 is the market price for casino services, whereas Q_0 is the quantity of 'units' of casino services provided at the market price.

Figure 4.1



Estimating social surplus

As noted above, social surplus is defined as the sum of consumer surplus and producer surplus. Estimates of consumer surplus and producer surplus are provided below.

Externalities and third-party effects are excluded from this analysis, particularly those associated with problem gambling. The decision to not include costs associated with problem gambling was taken due to a lack of robust data on the prevalence of problem gambling among casino patrons, and the associated costs. This is an issue requiring further research — the Australian research efforts of the past decade have not sufficiently built upon the previous PC inquiry findings.

Consumer surplus

Estimates of consumer surplus are developed using information on the total revenues received by casinos from patrons (i.e. patron expenditure), and the number of patrons. This information is combined with details on the price elasticity of demand for casino gaming services — the price elasticity of demand is a significant factor in the size of consumer surplus from a good or service.

The price elasticity of demand is the percentage change in the quantity demanded of a good following a one per cent price increase. For example, a price elasticity of -1 means that a one per cent price increase is expected to reduce demand by one per cent.

A review of the literature has identified estimates of the price elasticity of demand for casino gaming ranging from -0.75 to -1 (Thalmeimer & Ali 2003, Landers 2008). A price elasticity of demand of -0.75 implies that a one per cent price increase is expected to reduce demand by 0.75 per cent.

Estimates of the consumer surplus from casinos are reported in Table 4.3. Consumer surplus estimates for gaming services are developed using a price elasticity of demand of -0.75, -0.87 and -1, resulting in estimates of consumer surplus of \$2112 million, \$1821 million and \$1584 million respectively.

Separately, estimates are reported in Table 4.3 of the consumer surplus associated with non-gaming services provided by casinos, including hotel accommodation, dining and other entertainment. Only those services owned and operated by casinos are included in the analysis — excluded from the analysis are non-casino owned businesses leasing space from casinos, such as restaurants and retail shops. Assuming a price elasticity of demand of -1, it is estimated that the consumer surplus from non-gaming services provided by casinos is \$440 million.

These estimates include all services provided by casinos, including those consumed by international VIP program players and other international tourists.

Table 4.3
ESTIMATES OF CONSUMER SURPLUS, 2007-08 (\$ MILLION)

		Gaming		Non- gaming		Total	
Price elasticity	-0.75	-0.87	-1	-1	-0.75	-0.87	-1
Consumer surplus (\$m)	2112	1821	1584	440	2552	2261	2024

Note: Consumer surplus has been estimated using data on total revenue received by casinos in 2007-08 (\$3168 million for gaming services, and \$881 million for non-gaming services), and the quantity of services provided, as measured by patron numbers.

Source: Allen Consulting Group analysis of ACA 2009a

Producer surplus

Producer surplus is calculated by the formula *Total revenue* less *Total variable costs*. Variable costs are those costs that vary on the basis of the number of casino patrons.

Estimates of producer surplus are provided in Table 4.4. These estimates were developed using financial data collected in a survey of Australia's 13 casinos, with separate estimates developed for gaming and non-gaming activities (ACA 2009a).

Total costs in this analysis are defined as operating expenditure, excluding depreciation, amortisation, interest and taxes. This definition thus excludes any capital or related costs.

Fixed costs were estimated by fitting a cost curve to the total cost data, using the number of casino patrons as the quantity variable. This analysis estimated that the 'average' fixed costs for casino gaming activities were approximately \$1.1 million in 2007-08, with the fixed costs of casino non-gaming activities estimated to be \$1.2 million. Multiplying these estimates by 13 generates an estimate of total fixed costs of \$14 million for gaming activities and \$16 million for non-gaming activities.

Producer surplus from gaming activities in 2007-08 was estimated to be \$835 million, with producer surplus from non-gaming activities estimated to be approximately zero at -\$57 million. Total producer surplus from both gaming and non-gaming activities is estimated to be \$778 million.

The very small estimated producer surplus for non-gaming activities highlights that casinos should be considered as an entire package providing both gaming and non-gaming services. In the absence of gaming activities and thus revenues, the range of other services provided by casinos, such as accommodation and entertainment, would most likely not be provided.

Table 4.4

ESTIMATES OF PRODUCER SURPLUS, 2007-08 (\$ MILLION)

Formula	Variable	Gaming	Non-gaming	Total
а	Total Revenue	3168	881	4049
b	Total Operating expenses ^a	1291	827	2118
С	Total Fixed Costs	14	16	30
d	Licence Fees	20	0	20
е	Taxes	1076	127	1202
f = b - c - d + e	Total variable costs	2333	938	3271
e = a - f	Producer Surplus	835	-57	778

Note: ^a Operating expenses excluding depreciation, amortisation, interest and taxes. Data may not add exactly due to rounding.

Source: Allen Consulting Group analysis of ACA 2009a

Social surplus

Table 4.5 reports the estimated social surplus from both gaming and non-gaming services provided by casinos.

The total social surplus from all casino activities in 2007-08 is estimated to be \$3039 million. Just over 74 per cent of the estimated social surplus is received by casino patrons, of which the majority (60 per cent) is received by casino gaming patrons. Of the total social surplus, \$2655 million (87 per cent) is associated with casino gaming, with the balance of \$384 million (13 per cent) associated with nongaming casino services.

This finding confirms overseas research finding that the greatest gain to be made from legalisation of casino is the improvements in welfare attained by casino patrons themselves from undertaking an activity they enjoy.

Table 4.5

SOCIAL SURPLUS FROM AUSTRALIAN CASINOS, 2007-08

	Gaming	Non-gaming	Total
Consumer surplus	\$1821 million ^a	\$440 million	\$2261 million
Producer surplus	\$835 million	-\$57 million	\$778 million
Social surplus	\$2655 million	\$384 million	\$3039 million
Distribution of social surplus (per cent of t		f total)	
Consumer surplus	59.9 %	14.5 %	74.4 %
Producer surplus	27.5 %	-1.9 %	25.6 %
Social surplus	87.4 %	12.6 %	100.0 %

Note: ^a Using price elasticity of demand of -0.87. Data may not add exactly due to rounding.

Source: Allen Consulting Group

Externalities

Externalities associated with the casino industry are not included in the above analysis, such that the social surplus reported in Table 4.5 is an upper-bound estimate.

It is likely that externalities associated with the casino industry are mostly negative, predominantly comprising costs associated with problem gambling among casino patrons. A lack of suitable data did not allow the costs of problem gambling among casino patrons and associated externalities to be estimated.

This issue requires further research in the Australian, and specifically casino, context. There are significant methodological and measurement challenges associated with developing robust estimates of the costs of problem gambling. The PC may well wish to consider this issue further as part of the current inquiry.

Chapter 5

Broader contribution of Australia's casinos

Key points

The casino industry makes a broad contribution to Australia. Indeed:

- the development of a number of Australia's casinos has acted as the catalyst for urban regeneration in their respective cities
- casinos play a key role in their home city and regional communities, providing valuable tourism and entertainment infrastructure
- casinos are planning a number of major capital works projects in the following three
 years, totalling just under \$1.6 billion. These projects will make an important
 economic contribution to Australia's construction industry, particularly in times of
 economic uncertainty
- casinos are large employers, to the extent that in some cities the casino is the largest single site employer
- casinos also make a social contribution through employing staff from disadvantaged groups, including Indigenous persons and people with a disability.

This chapter considers the broader contribution made by the casino industry to the Australian economy and society more generally. The chapter builds upon analysis of the contribution made by casinos to the Australian economy in Chapter 3, and the benefits and costs of the Australian casino industry identified in Chapter 4. Of particular interest are activities undertaken by casinos to develop the human capital of casino staff, along with the urban regeneration of local areas.

5.1 Casino construction, redevelopment and urban regeneration

Urban regeneration

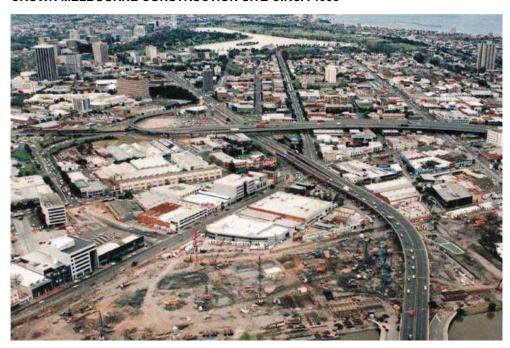
A number of Australia's casinos are located in previously run-down urban industrial areas, with casino development providing a catalyst for wide ranging urban regeneration. Key examples include Star City and Crown Melbourne, which are both located on former industrial sites close to their respective CBDs in Sydney and Melbourne. Furthermore, the site of the Burswood Entertainment Complex was originally a rubbish tip on the outskirts of Perth's CBD.

Crown Melbourne

As an example of the extent of urban regeneration contributed by casino development, Figure 5.1 displays the site of Crown Melbourne during the construction phase. Dilapidated factories and warehouses formerly occupied the Crown Melbourne site.

Figure 5.1

CROWN MELBOURNE CONSTRUCTION SITE CIRCA 1995



Source: Crown Limited

Figure 5.2

CROWN MELBOURNE AND SOUTHBANK PRECINCT CIRCA 2005



Source: Crown Limited

Following the opening of Crown Melbourne on its present location in 1997, a number of landmark projects have been undertaken in the Southbank precinct. This development can be seen in Figure 5.2, including the construction of the 92-story Eureka Tower.

Today the Southbank precinct accommodates numerous new buildings, thousands of office workers, and a number of high-rise apartment developments. There are also a large number of restaurants and entertainment facilities clustered close to Crown Melbourne, including the Melbourne Aquarium, Melbourne Recital Centre, and the new Melbourne Convention Centre (under construction).

Star City

Star City is also located on a former industrial site, with development of this casino acting as a catalyst for much development in Pyrmont, west of the Sydney CBD. The vacant land visible in the foreground of Figure 5.3 is now fully developed, with the completed casino complex displayed in Figure 5.4.

Figure 5.3
STAR CITY CONSTRUCTION SITE CIRCA 1995



Source: Star City

Figure 5.4
STAR CITY CIRCA 2005



Source: Star City

Preservation of historic buildings

Two of Australia's casinos, Conrad Treasury Casino and SKYCITY Adelaide, are located in historic government buildings. Conrad Treasury Casino and the accompanying Hotel Conrad are located in the Treasury and Lands Administration Buildings in the centre of Brisbane (see Box 5.1). SKYCITY Adelaide is located in the Adelaide Railway Station, which was built in the mid 1920s. Prior to being redeveloped as casinos these buildings were in a run-down state.

Box 5.1

REDEVELOPMENT OF A HISTORIC BUILDING: CONRAD TREASURY CASINO

The Treasury and Lands Administration Buildings previously housed all the Queensland Government executive offices. The Treasury building originally opened in 1889 with the Land Administration building opening in 1905.

In the early 1990s these buildings were no longer considered suitable for government use, with public funds unavailable for their redevelopment. This led to the buildings being sold and then undergoing a two-year transformation to reopen in 1995.

There are ongoing efforts to preserve these buildings with a progressive conservation program developed. This program is focussed on reducing the rate of stone decay and improving public safety, along with improving the overall appearance of the heritage buildings.

Source: Conrad Treasury Brisbane

Future capital works projects

In 2007-08 Australian casinos spent \$321.5 million on capital works. Over the next three years a number of Australia's casinos have substantial capital works programs, totalling just under \$1.6 billion. These projects are largely aimed at enhancing the range of non-gaming services provided to patrons, particularly accommodation, restaurant dining and conference facilities (ACA 2009a).

Details of the three largest projects either underway or commencing soon, are detailed below, involving Crown Melbourne, Star City and SKYCITY Darwin. Consultation with these casinos has indicated that these developments are considered vital for maintaining a 'competitive' edge, and remaining an attractive destination for both domestic and international patrons.

Burswood Entertainment Complex

The capital works program at Burswood Entertainment Complex continues with a \$95 million upgrade and expansion of the main casino facilities including additional restaurants and the expansion of the nightclub. The Main Gaming Floor project is due for completion towards the end of 2010.

A further \$60 million is expected to be invested to upgrade the 402 hotel rooms and suites at the InterContinental Hotel.

In addition to improving customer facilities there is an ongoing programme to upgrade Burswood's 23 year old support facilities including offices, kitchens, stores and staff amenities (Consultation with Burswood Entertainment Complex).

Crown Melbourne

The capital works program at Crown Melbourne includes spending an estimated \$300 million on a new hotel, which is being built on the casino site but adjacent to the new Melbourne Convention Centre. Crown has worked with the Victorian Government and the Melbourne Convention Centre to ensure that the new hotel will complement the Victorian Government investment in the Convention Centre. The Victorian Government expects the new Melbourne Convention Centre to generate significant economic benefits for Victoria.

The new Crown hotel will have 658 rooms – bringing the total number of hotel rooms available in the Crown complex to 1600 rooms (including those of Crown Towers and Crown Promenade), and is scheduled to open in 2010. Crown Melbourne estimates that the new hotel will accommodate 340 000 guests per annum, including 100 000 from overseas (Crown Casino n.d).

Crown Melbourne also has plans for developing new conference facilities including 50 exhibition booths, 7 state of the art conference-meeting rooms and an 800-seat Plenary Hall. The new facilities will also feature a new retail centre, accommodating international brands making their Australian debut. The conference, convention and retail facilities are expected to cost \$40 million (Crown Casino n.d).

There will also be a substantial upgrade of Crown Towers at an estimated cost of \$65 million, with an additional \$140 million to be spent on refurbishing the main gaming floor including live entertainment venues, on-floor restaurants and new lighting and colour schemes (Crown Casino n.d).

SKYCITY Darwin

SKYCITY Darwin is currently investing \$90-100 million on capital works, including a tropical resort next to the casino. The resort will include accommodation, entertainment and recreational facilities.

Designs for the resort include an initial 26 villas, in addition to the 120 hotel rooms currently available at the casino. The resort is due to be opened in 2011 (Parker 2008).

SKYCITY Darwin has recently completed a \$30 million expansion and refurbishment of the casino. This development included refurbishing the main gaming floor, as well as adding a new Italian restaurant, bar and VIP gaming area overlooking Mindil beach (ACA 2009a).

Star City, Sydney

Tabcorp Holdings Ltd will spend \$475 million on transforming the Star City Casino into a world-class entertainment destination with improved gaming and entertainment facilities, a new hotel and an expanded restaurant and bar. The redevelopment will take place over the next two years.

The redevelopment will include re-orientating the casino to 'embrace' Sydney Harbour and building a new 250 room 5 star hotel next door to the casino. The expanded complex will also offer up to 30 restaurants and bars, a new retail centre, expanded ballroom and conference facilities and a re-developed gaming floor (Star City n.d).

Implications of future capital works projects

As detailed above, very sizeable capital works projects are being undertaken across Australia's casino industry. These developments will have a positive economic impact upon the construction industry, particularly during this current period of uncertainty surrounding future construction activity caused by the global financial crisis.

Capital intensity of casinos

To attract home city and state, interstate and international patrons, casinos must provide world-class gaming and non-gaming facilities. Indeed, successful bidders for casino licences across Australia were typically required to offer not just world-class gaming facilities, but also an extensive range of world-class non-gaming facilities. These non-gaming facilities include hotels, restaurants, bars, nightclubs, theatres and much more.

Accordingly, much of the ongoing capital investment by Australian casinos is not aimed at *expanding* capacity, but rather at renewing and enhancing *existing* facilities, ensuring world-class facilities are provided on an ongoing basis. The ongoing provision of world-class non-gaming facilities is highly capital intensive while having a relatively low return on investment. Thus, casinos require their gaming operations to generate sufficient returns to meet the costs of providing both gaming and non-gaming services and facilities. In contrast, many other gaming operators do not face the same stringent requirements for providing world-class facilities, and often install EGMs on premises with limited non-gaming facilities.

The parent companies of many of Australia's casinos have investments in overseas countries including New Zealand, Canada, the United Kingdom and Macau. These parent companies closely monitor their investments, ensuring that adequate returns are generated. Changes to the regulatory or taxation environment may make previously sound Australian investments no longer attractive, with funds instead invested overseas. Hence, ongoing investment in Australian casino infrastructure is dependent upon Australia maintaining an attractive operating and regulatory environment.

5.2 Casinos as providers of entertainment infrastructure

As detailed throughout this report, many of Australia's casinos are integrated entertainment complexes, providing fine dining, live music and shows, and bars and nightclubs. A number of Australia's casinos provide entertainment infrastructure not available elsewhere in their respective cities.

Burswood Entertainment Complex: Burswood Dome and Theatre

The Burswood Entertainment Complex features the Burswood Dome, an enclosed entertainment, sports and special events venue, and the Burswood Theatre. These two facilities are unique in Perth, a point reflected in the range of events held in both venues.

The Burswood Dome has a total seating capacity for up to 20 000 people, hosting international touring music artists, sporting events and conventions. During 2007-08 performers at the Burswood Dome included international artists as diverse as Christina Aguilera, Bob Dylan and Justin Timberlake. The Hopman Cup, an international tennis championship, is an annual feature at the Burswood Dome.

The 2300 seat Burswood Theatre also hosted a diverse range of performers in 2007-08, including the Footy Show, Alice Cooper, John Williamson and the musical Miss Saigon. Many schools also held events at the Burswood Theatre during 2007-08.

Star City: Lyric Theatre

A key entertainment facility in Star City is the Lyric Theatre, which plays host to musicals, theatre, opera and ballet. Over three million patrons have attended shows in the Lyric Theatre since the casino complex opened in 1997. The theatre seats in excess of 2000 patrons, filling a void in the Sydney entertainment industry following the demolition of the Regent Theatre in 1989.

Musicals featured in the Lyric Theatre in recent years include the Rocky Horror Show, Miss Saigon, Mamma Mia, Phantom of the Opera and Priscilla, Queen of the Desert. International touring artists performing at the Lyric Theatre have included Michael Crawford, Julio Iglesias and Tony Bennett.

Crown Melbourne: Palladium and The Palms at Crown

Crown Melbourne features the Palladium, a grand ballroom capable of sitting up to 1500 banquet guests. There is no other equivalent facility in Melbourne. The Palladium is frequently used for televised events, such as the Logie Awards, Brownlow Medal, and the Allan Border Medal. Musical artists who have performed at the Palladium include Elton John, Celine Dion, Whitney Houston, Jerry Lewis, Tom Jones and Andrea Bocelli.

In contrast, The Palms at Crown features a multi-layered auditorium seating 800 guests. A recent redevelopment of this facility has improved sound and provided uninterrupted views of the performance stage. Musical artists performing at The Palms have included Guy Sebastian and Jimmy Barnes, and the musical Buddy.

5.3 Human capital development by casinos

All casinos in Australia provide on-the-job training for many positions – especially for dealers and inspectors of table games, security officers, food and beverage attendants and surveillance operators. Off-the-job training is also provided for many positions including chefs, gaming shift managers, pit bosses, security shift managers, dealers and general managers.

Many of Australia's casinos have reported experiencing staff shortages across a number of professions, particularly within food, hospitality and table gaming. Casinos are taking pro-active steps to address these shortages, through the recruitment and subsequent training of otherwise unskilled staff (ACA 2009b).

A large number of staff employed and subsequently trained by casinos are either early school leavers, or do not hold any post-schooling qualifications. The training provided by casinos to these previously unskilled staff differs markedly to opportunities provided by other employers, particularly within the hospitality sector.

Training requirements

Training is compulsory for many casino positions, covering service and supply of alcohol, table gaming, gaming and safety and security. Along with training specific to their position, employees also undertake First Aid/CPR training, anti-money laundering training, responsible gaming and illegal and undesirable activity awareness training (ACA 2009b). Much of this training is a regulatory requirement, as identified in Chapter 6.

Achievement of formal training qualifications

Casinos also support staff in achieving additional qualifications during the course of employment. In 2007-08 casinos supported 194 staff to complete a Certificate I or II, 738 staff to complete a Certificate III or IV, 65 to complete a VET diploma and 41 to complete a university degree. In 2007-08 casinos employed 1707 apprentices, the majority being in food and beverage services (ACA 2009b). This estimate only includes staff directly employed by casinos, excluding, for example, staff employed in restaurants operating on the casino premises, but with non-casino owners.

Training staff and activity

Casinos employed 142 staff to deliver employee training in 2007-08. In excess of 565 000 training hours were provided in 2007-08 to 18 821 staff. Casinos report that direct training expenditure in 2007-08 was \$9.0 million, with this figure only partly capturing the value of on-the-job training received by staff (ACA 2009b).

Case study 1: Crown Melbourne

Crown Melbourne operates its own college ('Crown College') to provide ongoing training for staff. The college provides both operational and development training and is offered to all employees on a rolling calendar model. Training is delivered by professional or external trainers, with the college an important strategy for supporting career progression and staff retention (ACA 2009b).

In 2008, Crown Melbourne implemented a Leadership Development Program aimed at developing employees dealing with customers in the areas of supervision and leadership. Crown Melbourne also won a 2008 Ministerial award for Excellence of Employers of Australian Apprentices. Crown Melbourne chef apprentices were also recognised at the Capaldi apprentice challenge – a competition for the Victorian apprentices (Crown Ltd 2008).

Case study 2: Federal Group

As a significant employer of chefs in Tasmania, the Federal Group (the operator of both casinos in Tasmania), established an innovative program named Mise En Place. The objective of this program is to attract, develop and retain staff. Mise En Place is a two phase program, conducted in partnership with the Tasmanian Government tourism and hospitality training provider. Participants complete a 12-week experiential program, combining both on and off-the-job skill development, providing skills and industry experience.

The second phase of the program offers a fast track apprenticeship including placements across the range of properties operated by the Federal Group in Tasmania. The Federal Group advises that this program has enhanced retention and workforce development of chefs. The Mise En Place program has been recognised at the highest levels winning the Tasmania Training Award in 2007 and being a finalist in the 2007 Australian Training Awards (Advice from Federal Group).

Quality of casino training

The quality of training provided by Australia's casinos is exemplified by many gaming staff travelling to work at other casinos, both within Australia and overseas. Many staff working in non-gaming casino roles, such as hospitality, are also actively recruited by other employers in the hospitality sector. Further reflecting the quality of casino staff training, SKYCITY Darwin was recently awarded the 2009 National Tourism Award for Tourism Education & Training.

Casino training activities contrast markedly with other sectors. In 2001-02, only 41 per cent of employers in the 'Accommodation, Cafes and Restaurants' sector provided structured training, with 86 per cent providing unstructured training (ABS 2003). In comparison, all of Australia's casinos provide structured training to their employees.

5.4 The role of casinos as an employer

In 2007-08, Australia's casinos employed just under 20 000 staff. Numerous staff have worked with the same casino for many years, with, for example, many staff joining casinos opening in the mid-1990s still working with the same casino today.

Casinos provide competitive wages and conditions so that they are considered attractive employers. Finally, casinos have taken a number of steps to make a community contribution through employing persons from a disadvantaged background, including Indigenous persons and people with a disability.

Staff retention

Across all of Australia's casinos the average length of service (ALOS) in 2007-08 is 5 years. The ALOS varies significantly across occupations, with casino management staff having an ALOS of 8 years, whereas the ALOS for floor staff is 4 years. It is not uncommon for casino staff to start in a junior position, and progress over several years. This situation is highlighted by Australia's oldest casino, Wrest Point in Hobart, which has the highest ALOS across all staff at 7 years.

Wages and conditions

Many of Australia's casinos are experiencing difficulties in recruiting staff across a range of occupations. Recruitment difficulties are particularly acute in hospitality occupations, such as cooks and chefs, where skills are easily transferable. As a tool for both attracting and retaining staff, many casinos have advised that they provide competitive remuneration packages, with a number of casinos paying wages above the market average.

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Structured training comprises training activities which have a specified content or predetermined plan designed to develop employment related skills and competencies. In contrast, unstructured training comprises training activities which do not have a specified content or predetermined plan.

Employing staff from disadvantaged communities

Australia's casinos have taken a number of steps to employ staff from disadvantaged backgrounds, including Indigenous and disabled persons. In 2007-08, Australia's casinos reported employing 71 Indigenous persons and 44 persons with a disability. Indicating the diversity of casino staff, casinos employed 1965 persons from a non-English speaking background in 2007-08.

As a case in point, Crown Melbourne has been working with the Brotherhood of St Laurence and Mission Australia to develop and operate the Crown Access Program. The Crown Access Program helps job seekers having difficulty gaining skilled employment due to personal circumstances, including early school leavers, long-term unemployed and people returning to work after a long break. Current participants comprise six West African refugees, who are working in the Crown Promenade Hotel as Room Attendants while completing a Certificate I in Work Preparation at Crown College.

The Burswood Entertainment Complex is also working with disadvantaged communities to provide sustainable employment opportunities. Two significant programs implemented over the past 18 months involve the following partners:

- a pre-release centre for low-security women prisoners, with the objective of reintegrating participants into the community and employment
- working with the Liquor Hospitality and Miscellaneous Union and the Sudanese community, to develop work ready skills for employment in the hospitality industry.

The two casinos owned by Crown Limited — Crown Melbourne and the Burswood Entertainment Complex — have also signed up to the Australian Employment Covenant designed to create sustainable job opportunities for Indigenous Australians.

Chapter 6

Regulation and responsible gambling in casinos

Key points

The regulation of Australian casinos is state and territory specific, with casinos subject to a stricter regulatory regime than other gaming venues, such as hotels and clubs. However, due to their size and resources casinos are well placed to comply with the various legislation and codes. Some key points regarding casino regulation include:

- twenty-four hour security and surveillance are the most labour intensive regulatory activities, while reporting requirements utilise the most expenditure
- casinos are subject to Commonwealth legislation such as the Anti-Money Laundering and Counter-Terrorism Financing Act (2006) and the Trade Practices Act (1974).

Casinos have voluntarily implemented measures to provide a responsible gambling environment, including:

- hiring and training staff for the specific purpose of promoting responsible gambling
- assisting patrons to liaise with external support services.

This chapter identifies actions taken to ensure the integrity of casino gaming and to promote responsible gambling.

State and territory legislation requires casinos to undertake a large number of actions to promote a responsible gaming environment. Each Australian jurisdiction has a regulator responsible for ensuring that casinos comply with legislation. Compliance requirements are extensive, ranging from specifying qualifications required of gaming staff, to undertaking 24-hour monitoring of gaming activities. Casinos are also subject to Commonwealth legislation, specifically the *Anti-Money Laundering and Counter-Terrorism Financing Act (2006)*.

Casinos themselves have undertaken a wide range of actions to promote responsible gambling. In many cases these casino actions have been pro-active, ameliorating the need for additional government regulation and programs.

6.1 Defining responsible gambling

The issue of responsible and problem gambling has been discussed extensively in the past decades. A greater understanding has given rise to better, more effective mechanisms to promote responsible gambling and minimise problem gambling. It is widely accepted that a responsible gambling environment is conducive to responsible gambling. This type of environment is typically achieved by regulation aimed at supporting consumers to make informed decisions about their gambling activity (QCOSS 2008, DOJ 2008).

The majority of gamblers participating in a responsible gambling environment can be categorised as recreational gamblers. Recreational gamblers are unlikely to experience negative impacts from gambling activities, with the decision to gamble made after weighing up the expected costs and benefits (South Australian Centre for Economic Studies 2008, Walker 2007a).

6.2 Government regulation of casinos

Each Australian state and territory government has specific regulatory requirements for their casinos. Accordingly, each jurisdiction has a regulatory authority responsible for monitoring the operation of games, equipment, rules and operating hours as well as compliance with applicable laws. Table 6.1 details the casino regulators and casino specific legislation in each state and territory.

Table 6.1

CASINO REGULATORS AND LEGISLATION BY STATE AND TERRITORY

	Regulators	Primary legislation
Victoria	Victorian Commission for Gambling Regulation (VCGR)	 Gambling Regulation Act 2003 Casino (Management Agreement) Act 1993 Casino Control Act 1991
NSW	Casino Liquor and Gaming Control Authority	Casino Control Act 1992
Queensland	Queensland Office of Gambling Regulation (QOGR) Queensland Gaming Commission	Gaming Machine Act 1991 Casino Control Act 1982
WA	Gaming and Wagering Commission of Western Australia	Casino (Burswood Island Agreement) Act 1985Casino Control Act 1984
SA	Office of the Liquor and Gambling Commissioner (OLGC) Independent Gambling Authority (IGA)	Casino Act 1997
NT	Racing, Gambling and Licensing Division, Department of Justice	Gaming Control Act
Tasmania	Tasmanian Gaming Commission	Gaming Control Act 1993
ACT	ACT Gambling & Racing Commission	Gambling and Racing Control Act 1999 Garding Control Act 2000
Australia	Australian Transaction Reports and Analysis Centre (AUSTRAC)	 Casino Control Act 2006 Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (AML-CTF Act)

Source: Allen Consulting Group

Some Australian states and territories have rules regarding the number of casino licensees per state. In NSW for instance, the Casino Control Act indicates that only one casino may operate within the state.

In general, the role and powers of casino regulators are progressively enhanced on an ongoing basis. This includes an increase in oversight powers, along with police powers relating to crime prevention and detection.

Casinos are also subject to legislation beyond that specific to casinos and gambling. For example, casinos are required to comply with broader obligations including Commonwealth legislation such as the *Anti-Money Laundering and Counter-Terrorism Financing Act (2006)*, the *Trade Practices Act (1974)* in regards to advertising, the *Privacy Act (1988)*, the *Proceeds of Crime Act (2002)*, the *Corporations Act (2001)*, as well as the Listing Rules imposed by the Australian Stock Exchange.

Comparative analysis of Australian casino legislative requirements

Casinos have several responsibilities to comply with legislative requirements, including in the following areas:

- interaction with patrons, the community and law enforcement agencies
- physical gaming environment
- financial transactions facilities
- exclusion (voluntary and involuntary)
- advertising requirements
- licensing staff members
- anti-money laundering
- protection of individual privacy rights
- prevention of criminal influence.

Although state and territory regulations have slight differences, the overarching themes and application are similar.

Casino interaction with patrons and the community

Casinos are required to operate in consideration of their local communities. For instance, casinos train staff to be able to assist customers experiencing difficulties with their gambling, undertake complaints resolution procedures and comply with the requirements of the *Privacy Act (1988)*. Furthermore, casinos aim to ensure that children are not left outside casinos unattended and that minors do not enter gaming floors.

Casinos are also involved in their local communities, interacting closely with local councils, community groups and environmental agencies.

Physical gaming environment

All casinos are expected to operate a responsible physical gaming environment, including the provision of adequate lighting and clocks visible to patrons. Casinos also strictly enforce the Responsible Service of Alcohol and encourage customers to take breaks in play.

All of Australia's casinos are subject to limits on the number of EGMs they operate. In all states and territories except for WA, the majority of EGMs are located in non-casino gaming venues. In WA, EGMs are located only within the Burswood Entertainment Complex. Table 6.2 shows EGM distribution in Australia by state and territory.

Table 6.2

EGM DISTRIBUTION BY STATE AND TERRITORY 2007-08

	Total EGMs in jurisdiction	Current number of EGMs in casinos	Percent of EGMs in casinos
NSW	105 500	1498	1.4
Victoria	30 000	2500	8.3
Queensland	47 465	3429	7.2
Western Australia	1750	1750	100.0
South Australia	13 884	960	6.9
NT	1988	840	42.2
Tasmania	3680	1280	34.8
ACT	5200	0	0
Australia	209 467	12 257	5.9

Source: ACA 2009a, FaHCSIA 2008.

Financial transaction facilities

Casinos provide financial transaction facilities in a way that promotes responsible gambling, including:

- ATMs are placed in safe and secure locations outside the gaming footprint of the casino
- limiting the amount of cash that can be withdrawn from ATMs (ACA 2008a)
- restricting casinos from providing credit for the purpose of gambling.

Exclusion

All casinos offer exclusion programs for patrons who indicate that they have a gambling problem and request assistance.

Casino staff are trained to assist patrons exhibiting behavioural difficulties to connect with qualified gambling counselling services in the event that such behaviours may be linked to difficulties with their gambling. These patrons are made aware of the self-exclusion process as an option available to them.

All casinos have in place procedures to enforce self-exclusion. When a self-excluded patron is found on a casino premises they are requested to leave the casino and the matter is reported to the relevant regulatory authority.

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Except for international VIP program players

Patrons excluded from casinos, either voluntarily or involuntarily, are ineligible to receive gaming advertising.

As at 30 June 2008, approximately 16 000 patrons had been excluded from Australian casinos, the majority being self-exclusions (ACA 2009a).

Patrons who self-exclude from casinos are unable to return unless they have first demonstrated they have received appropriate counselling. For example, at Burswood Entertainment Complex and Crown Melbourne, self-excluded patrons wishing to re-enter the casino must satisfactorily complete a detailed interview with a qualified staff member.

Advertising requirements

Casinos abide by a range of requirements regarding the advertising of gaming. Advertising requirements are outlined in casino and gaming-related legislation, within casino Codes of Conduct, the Advertising Code of Ethics, and are also underpinned by other legislation such as the *Trade Practices Act (1974)*. These requirements include not to:

- mislead patrons on the likelihood of winning
- advertise gambling as a reasonable strategy for financial betterment
- advertise gambling as the sole activity available at the casino
- target groups at risk of irresponsible gambling, including not sending promotional material to excluded patrons.

Casinos must also:

- advertise limitations and conditions where applicable
- promote the Responsible Service of Alcohol
- promote responsible gaming.

Casinos also feature responsible gambling messages as part of all gambling advertising and promotions.

Licensing and training staff members

All casino staff require a probity check, including executives, gaming room staff, food and beverage staff and even contractors. A large number of casino employees must also obtain a gaming licence. Casino staff holding positions of influence must apply for a special employee licence. This licensing process is required by regulation to ensure the probity of casinos.

Obtaining an employee licence involves an application process and payment of a licence fee. Table 6.3 shows selected state and territory licence fees for staff licences. All gaming staff are required to undertake problem gambling training as part of their induction, with certain staff members, such as senior employees and some supervisors, undertaking more in-depth training. Training is provided both in person and on-line.

Table 6.3

CASINO EMPL	OYEE LICENCE FEES BY STATE AND TERRITORY	
	Type of employee licence	Fee (\$)
Victoria	New gaming industry employee licence	132.20
	New gaming industry employee licence where applicant currently holds a casino special employee licence	44.10
	Renewal of gaming industry employee licence	55.10
	Replacement of gaming industry employee licence	22.00
Queensland	Casino Employee Licence	383.00
	Casino Key Employee Licence	732.00 ^a
NT	Key Licence	250.00
	Standard Licence	100.00
	Trainee Licence	100.00
Tasmania	Casino management and security (initial)	236.80
	Casino management and security (renewal)	153.60
	Casino operative (initial)	236.80
	Casino operative (renewal)	153.60
	Licensed premises gaming operative (initial)	236.80
	Licensed premises gaming operative (renewal)	153.60
	Upgrade	115.20
	Replacement licence	25.60
ACT	Approval of casino employee licence	130.00
	Replace a casino employee licence	49.00
	Renewal of a casino employee licence	36.00

Note: ^a fee is \$383.00 if employee already holds a casino employee licence. ^b fee is \$305.00 if employee already holds a casino employee licence.

Change prescribed functions of a casino employee licence

Source: State and Territory casino regulations

Casino Employee Licence

Casino Key Employee Licence

Other requirements

WA

In addition to the requirements detailed above, casinos are also required to operate within responsible gambling parameters. Furthermore, casinos must operate in a fair and transparent manner, practice cultural sensitivity by providing problem gambling material in other languages and remain sensitive to the needs of the local community.

Anti money laundering

Australia's casinos are subject to the *Anti-Money Laundering and Counter-Terrorism Financing Act 2006* (the Act), which promotes procedures to further mitigate and manage the risk of money laundering in casinos. The Act applies most directly to the financial and gambling sectors and bullion dealers.

49.00

230.00

405.00^b

This legislation was implemented to raise Australia's money handling practices to international standards in dealing with anti-money laundering (AML). International standards for anti-money laundering are set by the Financial Action Taskforce on Money Laundering (FATF). The role of the Australian Transaction Reports and Analysis Centre (AUSTRAC) has also been expanded to encompass responsibility for monitoring and enforcing compliance with the Act.

Casinos, bookmakers, online gambling service providers, hotels and clubs are affected by the Act, with all requiring a compliance program. However, the cash-dependent nature of casinos means that the legislation has had a greater impact upon casinos than other gambling venues. Activities excluded from the Act include lottery games such as instant 'scratchies', Keno, Powerball and Lotto.

Australian casinos have been proactive in responding to the Act, including working collaboratively to develop a 'template' program addressing the various legislative requirements. The AML template program was developed with input from all Australian casinos to ensure that they apply 'best practice' in their specific contexts.

The Act requires casinos to implement a range of procedures including customer identification, record keeping and transaction reporting to AUSTRAC. Under certain circumstances casinos are also required to undertake actions including risk assessment of designated services and customer identification (see Box 6.1).

Box 6.1

CUSTOMER IDENTIFICATION REQUIREMENTS IN CASINOS

Casino patrons are required to be identified if they:

- purchase or redeem gaming chips of an amount of \$10 000 or more in cash
- make a bet of \$10 000 or more or are paid \$10 000 or more in cash
- are paid out winnings of \$10 000 or more in cash for a game played on a gaming machine
- · open or operate an account with a casino
- exchange currency at the casino, when greater or equal to \$1000 in cash.

Source: Commonwealth of Australia 2009

Casinos are required to monitor individual cash transactions on a risk basis. A strong focus is placed on identifying transactions that may necessitate further examination, and on identifying risks associated with individual customers. Details of all transactions considered to fall within the scope of the Act are provided to AUSTRAC, including large cash transactions and suspicious matters. In 2007-08, casinos made approximately 78 000 reports to AUSTRAC.

Casinos are also required to respond to requests for information by statutory authorities undertaking a range of investigations. This reporting creates an additional regulatory burden for casinos but also contributes to society as a whole. For example, information provided by casinos may assist investigations by Centrelink, the Australian Taxation Office and police agencies, into criminal matters such as welfare fraud and tax evasion.

Casinos (and other affected businesses) incur a range of costs as a consequence of compliance with the Act. In addition to each casino being required to prepare and implement an AML-CTF program, casinos must also appoint an AML-CTF Compliance Officer. Furthermore, the Act requires senior casino management to oversight fulfilment of the requirements of the Act and gaming staff to undertake risk awareness training.

Burden associated with meeting regulatory requirements

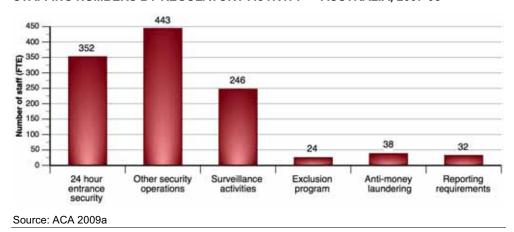
The legislation governing Australia's casinos requires the operation of a total compliance environment. That is, each casino is responsible for maintaining the correct physical environment, providing the appropriate training for staff and implementing reporting and record keeping measures. Casinos incur significant costs complying with the range of regulations governing their operation.

Staffing associated with regulatory requirements

Among those casino staff hired specifically to meet regulatory requirements, the largest single group are security staff, particularly those involved in providing 24-hour entrance security. A particular focus of security staff, along with video surveillance staff, is monitoring persons entering the casino for intoxication, ensuring neither minors or excluded persons do not enter the casino and monitoring individual games (ACA 2009a). These various activities safeguard the integrity of gaming operations and associated assets, ensuring the safety and welfare of patrons and staff. Figure 6.1 displays staffing numbers by regulatory activity in Australian casinos.

Figure 6.1

STAFFING NUMBERS BY REGULATORY ACTIVITY — AUSTRALIA, 2007-08



A large number of staff are also responsible for meeting a range of reporting and compliance requirements, including reporting to regulatory agencies. A number of staff also undertake surveillance activities, with individual table games video recorded to both ensure the integrity of games, and to provide evidence if there is a dispute.

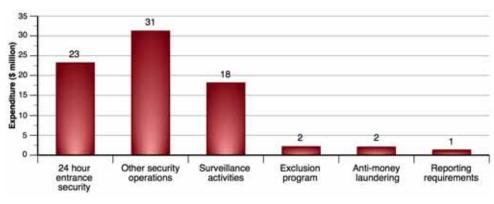
Casinos use their own staff to report on some security activities reducing the burden upon regulators and other enforcement agencies, as well as assisting in raising public confidence in regulators. For example, Crown Melbourne currently self-reports all entries of minors onto the gaming floor.

Expenditure on regulatory activities

A survey of Australian casinos has found that the single largest compliance-related expenditure is security operations (excluding 24-hour security), costing \$31 million in 2007–08 (ACA 2009a). Figure 6.2 shows total expenditure by regulatory activity in Australian casinos.

Figure 6.2

TOTAL EXPENDITURE BY REGULATORY ACTIVITY — AUSTRALIA. 2007-08



Source: ACA 2009a

Casino regulation compared to other gambling venues

The casino industry is regulated more stringently than other forms of gambling (including licensed hotels and licensed clubs) and other industries more generally.

Key differences between the regulation of casinos and gaming in hotels and clubs includes casinos being subject to:

- on-site supervision of all day-to-day operations by government inspectors
- approval being required for all changes to day-to-day casino operations such as EGM movements, floor layouts and procedures
- extensive licensing regime for casino employees, including police checks
- casino specific legislative frameworks being administered by a regulator in each state and territory.

The regulatory differences between casinos and other venues are considered appropriate on the basis of the complexity, size and magnitude of gaming limits within each casino. For example, casino operations are typically characterised by:

- large numbers of customers, with some casinos reporting up to 20 000 visitors per day at peak trading times
- a wide variety of gaming options including table gaming, EGMs and network gaming (e.g. Keno and TAB)

- higher price points for customers to engage in gaming activity in some casino table games the minimum stake is \$10 000
- sophisticated surveillance and security facilities
- a wide range of leisure, entertainment and accommodation facilities
- higher standards of operator and employee probity, systems sophistication and supporting operations infrastructure
- a public perception of a high level of risk.

These characteristics of casinos provide a policy rationale for the application of much regulation. Issues of particular concern to policy makers include problem gambling, protecting consumer interests, exclusion of criminal influence, protection of government revenues, and ensuring a high standard of probity among operators.

Despite casinos being subject to a more stringent regulatory environment than other gaming venues, the scale and scope of casinos makes them highly effective in implementing a responsible gaming environment. For example, casino staff typically have more training than staff in other gaming venues. Specific skills employed by casino staff include assisting gamblers experiencing difficulties, connecting patrons with appropriate services and imposing involuntary exclusions.

This aspect of human interaction forms a key distinction between casinos and other gambling locations in terms of responsible gaming. Casinos take a proactive attitude to responsible gaming, with staff able to provide an immediate intervention if necessary. Intervention is less likely to occur in other gaming venues. Furthermore, the commitment of casinos to the enforcement of self-exclusion before or in the absence of legislation, confirms this proactive response.

Casinos also have the resources to provide responsible gambling information in more languages than other gaming venues, and as such, may interact with the community on responsible gambling issues more effectively.

Finally, the strong security presence at casinos, particularly at entrances, gives rise to a greater ability than other gaming venues to protect against minors or excluded persons entering. Casinos also have the power to refuse access, with these powers most commonly used to deny access to intoxicated persons.

A new phenomenon: Poker tournaments and pokerdomes

Poker tournaments and 'pokerdomes' are a relatively new gaming mode on the Australian gambling scene. Poker is played in both licensed and unlicensed venues, with two national poker leagues — the Australian Poker League and the National Poker League — coordinating tournaments across Australia. OzPokerTours organises and coordinates 'pokerdomes' in two locations in NSW. Players are awarded prizes, points and monetary winnings for performance in these games. These new gambling forms are highly accessible to gamblers as they are localised and advertised online, thus representing a form of convenience gambling.

It is understood that in many cases outside casinos unlicensed staff operate poker tournaments and pokerdomes, with limited surveillance and security provided. Furthermore, this form of gaming is not subject to gaming taxation. This situation contrasts markedly with the level of regulatory oversight of casinos. In recent times some states, including NSW, have moved towards developing guidelines that may allow the game to be played legally. There is also debate on the extent to which poker is a game of skill or chance (Nettleton 2008).

Irrespective of the resolution of this issue, casinos are considered to provide a more responsible environment for gamblers. This is achieved through patron monitoring by trained staff, and the operation of a total compliance environment.

6.3 Promotion of responsible gambling by casinos

In Australia the gaming industry is seen as having a 'duty of care to protect their patrons from the harmful consequences of problem gambling' (Delfabbro et al 2007, p. 9). Casinos themselves have enhanced their contribution towards harm minimisation by voluntarily implementing measures to promote a responsible gambling environment.

Actions by casinos to promote responsible gambling

Casinos have initiated a range of measures to provide a responsible gambling environment and to minimise problem gambling. In 2007-08, casinos employed a total of 438 FTE employees to promote and support responsible gambling (ACA 2009a). All casino staff undertake training in the Responsible Service of Alcohol and gaming, with additional training undertaken depending on their area of work. Of particular note is the positive response from casinos to findings in the 1999 PC inquiry, with over 200 responsible gambling initiatives implemented since 1999 (ACA 2008c). Key casino initiatives to promote responsible gambling include:

- partnerships with counselling services such as Lifeline, the Salvation Army, Amity, GABA, Relationships Australia, Anglicare, Break Even, Gambling Help WA and Wesley Gaming Counselling Services
- Crown Melbourne operates a Responsible Gambling Support Centre staffed with Responsible Gaming Liaison Officers, a chaplain and two registered psychologists. The Burswood Entertainment Complex has a similar facility with three employees, including a registered psychologist and a social worker
- SKYCITY Adelaide and Darwin casinos operate a host responsibility program, with each casino having a staff member responsible for managing early intervention, problem gambling and alcohol management programs
- third party exclusion programs in some states an extension of the involuntary exclusion program that allows family members or other third parties to apply to exclude a gambler
- support for Responsible Gambling Awareness Week
- programs that allow players to set themselves time and expenditure limits for EGM activity (ACA 2008c).

In addition to the above examples, most other casinos have staff whose sole focus is the promotion and oversight of responsible gambling within casinos. Australia's casinos also support research into gambling behaviours and problem gambling. In 2008, casinos assisted Southern Cross University to conduct a research project on gambling, with a number of casino Codes of Conduct making a commitment to support further research into responsible gambling and problem gambling prevention (ACA 2008c).

More broadly, casino industry actions to promote responsible gambling have focussed upon increasing consumer knowledge about gambling responsibly and encouraging other gambling industry members to do likewise.

Casinos have also made an effort to improve the ability of consumers to make informed decisions and to stay in control of their actions. Hing (2006) notes that this has involved education, specifically, alerting consumers to the risks using problem gambling warnings — 'bet with your head, not over it', and 'your best bet is one you can afford'. In addition, consumers can elect to undergo voluntary monetary limits and restrictions, or in more extreme circumstances, voluntarily self-exclude themselves from the casino.

The efforts made by Australian casinos to promote responsible gambling has been recognised globally, with Tabcorp, the operator of four Australian casinos, named by the Dow Jones Sustainability Index as a world leader in the promotion of responsible gambling (Tabcorp Holdings Limited 2008). Crown Melbourne has also been recently identified by the Victorian Government as a world leader for its comprehensive approach to responsible gambling. Indeed the Responsible Gambling Support Centre operated at Crown Melbourne has led to the development of similar centres across eight provinces of Canada (VCGR 2008).

Casino expenditure on promoting and supporting responsible gambling

Casinos have been proactive in promoting and supporting responsible gambling as indicative of their expenditure for this purpose over the past 3 years. In 2007-08 Australian casinos spent \$2.7 million in total on promoting and supporting responsible gambling, increasing expenditure from \$2.4 million in 2005-06.

Chapter 7

Casino taxation and licensing

Key points

Casinos pay taxes to Commonwealth, state/territory and local governments in the form of casino specific taxes and general taxes. Today's current tax environment is such that:

- implementation of the GST has formed the major change to casino taxation since 1999
- casinos in all states and territories are liable for gaming tax on table gaming and EGM revenues, with most states and territories imposing a licence fee on casinos. The specific conditions of casino tax regimes are typically casino specific
- Australia's casino taxation rates are high when compared to Canada, New Zealand, South Africa and major United States markets. However, Australia's tax rates are lower than casino taxation rates in Macau, where casinos do not pay company tax on profits
- the United States, Canada and South Africa have a similar casino taxation environment to Australia in that casinos are subject to state, or province specific taxes that can be contrasting in nature.

This chapter outlines and compares the casino tax regimes and licensing arrangements of each Australian state and territory government and identifies the differences between casinos and other gaming venues. An international overview of five jurisdictions is also provided.

7.1 Government revenue from casinos

In 2007-08 casinos paid a total of \$1.2 billion in taxes to the Commonwealth, state/territory and local governments. In addition to paying the general taxes levied by the various levels of government on all businesses, casinos pay a number of gaming-specific taxes. General taxes paid by casinos include the Goods and Services Tax (GST), company tax and payroll tax, to name a few.

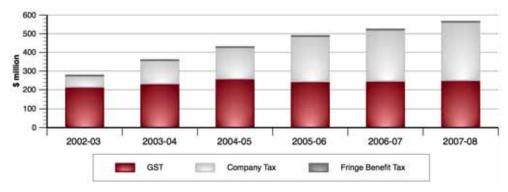
Casinos, along with other gaming providers, are one of the most highly taxed industries in Australia. In 2007-08, casinos paid 30 per cent of all their revenues in tax. Few industries pay as much of their revenues in taxation, with the possible exception of tobacco, alcohol and luxury cars. The source of the large tax burden faced by the casino industry is the requirement to pay gaming taxes, licence fees and community levies, in addition to the general taxes paid by all Australian businesses.

Commonwealth taxes

The GST and company tax are the two Commonwealth taxes consistently paid in the largest proportion by casinos. The GST contribution has been relatively consistent over the past 6 years while the company tax contribution has risen substantially, from \$59.7 million in 2002-03 to \$312.0 million in 2007-08, representing an increase of 422 per cent over 6 years. Figure 7.1 shows the casino contribution to Commonwealth taxes from 2002-03 to 2007-08.

Figure 7.1

CASINO PAYMENT OF COMMONWEALTH GOVERNMENT TAXES (\$ MILLIONS)



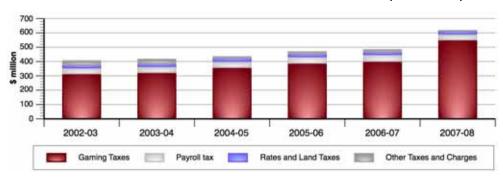
Source: ACA 2009a

Local and state taxes

Gaming taxes comprise the majority of the casino contribution to local and state governments. In 2007-08 gaming taxes represented 89.6 per cent of the total casino tax contribution to state and territory governments. The size of this contribution has grown from \$316.2 million in 2002-03 to \$552.2 million in 2007-08. Payroll tax represents the next largest casino contribution to local and state taxes. Figure 7.2 shows a time series of casino contribution to local and state taxes from 2002-03 to 2007-08.

Figure 7.2

CASINO PAYMENT OF LOCAL AND STATE GOVERNMENT TAXES (\$ MILLIONS)

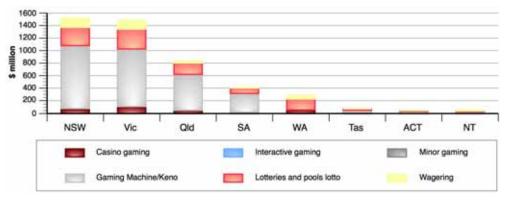


Source: ACG Survey, 2009

Casinos make up a relatively small proportion of total state and territory gambling revenue, compared to state and territory revenues from other gambling venues and mediums. In 2005-06, Crown Melbourne in Victoria paid the largest amount of tax, \$113.7 million and Burswood Entertainment Complex in WA paid the largest proportion of state gambling taxes at 26.2 per cent in 2005-06. Figure 7.3 shows state and territory government gambling revenue by gambling type for 2005-06.

Figure 7.3

STATE AND TERRITORY GOVERNMENT REVENUE BY GAMING TYPE 2005–06



Note: Casino gaming estimates include all gaming within casinos. Gaming machine/Keno comprises gaming outside casinos.

Source: Office of Economic and Statistical Research, Queensland Treasury 2007

7.2 Current casino taxation arrangements

This section outlines and compares the casino tax environment in each state and territory as at January 2009. Key differences between jurisdictions include how taxes are imposed upon international VIP program players compared with regular player casino table gamers.

Table gaming and EGMs

All states and territories levy a tax on casino table gaming and EGM gaming revenues. Commercial table games can only be played within casinos in Australia, with the exception of poker. For example, in NSW free-to-play poker tournaments are held in hotels, clubs and 'pokerdomes'. In Victoria poker may be played legally outside casinos provided only costs are recovered.

EGMs are available in gaming venues outside casinos (such as hotels and clubs) in most states and territories. Some jurisdictions may also licence community or charitable organisations to operate casino games solely for fund raising.

Broadly speaking, there are three different ways that table gaming tax is applied to casino gaming revenues:

- marginal tax rate scale
- flat tax rate
- additional super tax.

EGM tax rates are equal to the table gaming tax rate within most states and territories. NSW, Victoria, Queensland, and the ACT impose the same tax rate on EGM gaming revenues as for table gaming. In WA, SA, Tasmania and NT, taxation of gaming revenues derived from EGMs is set at a higher level than table gaming.

Jurisdictions use a range of terminology when specifying the gaming tax base, using terms such as 'net gaming revenue' or 'gross gaming revenues'. However, in all cases the tax base is gaming revenues comprising total player loss minus total player winnings. Table 7.1 and Table 7.2 contain the tax rates on casino table gaming and EGMs in casinos. These tax rates are notional tax rates incorporating the GST.

Marginal tax rate scale

Both NSW and Tasmania levy a marginal tax rate scale that varies on the basis of gross gaming revenue. The NSW rates range from 22.13 per cent to 47.13 per cent in 2008-09, with the base rate projected to rise annually to reach 25.5 per cent in 2012-13. NSW is the only jurisdiction to apply a marginal tax scale on table gaming.

Tasmania's current tax rate applies only to EGMs and has two levels, for gross gaming revenues under \$35 million and for gross gaming revenues equal to or greater than \$35 million.

Flat tax rate

Casinos in Victoria, Queensland, ACT, WA and the NT (SKYCITY Darwin only)⁷ are subject to a flat tax according to player characteristics. These jurisdictions charge a higher tax rate on gaming revenues from regular players than on revenues from international VIP program players.

SA, Tasmania and the NT (Lasseters Casino only) apply a flat tax to table gaming. In SA and the NT the tax revenue base is gross revenue from table gaming. In Tasmania the revenue base is specified as gross profit, however the definition specified in the *Gaming Control Act 1993 (Tasmania)* is the same as gross revenue.⁸

Victoria and SA impose a flat tax rate on EGM gaming revenues similar to their table gaming tax. Casinos in the NT also pay a flat rate.

As with table gaming tax, states and territories differ in their approaches to EGM tax. WA, Queensland and the ACT impose EGM tax according to player characteristics, charging higher rates for regular players than international VIP program players.

Revenue from taxes on international VIP program players

In 2007-08, taxes on international VIP program players collected \$56.2 million.

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Overall average casino rates are 24.1 per cent in the 2008 financial year, 24.5 per cent in the 2010 financial year, 36.5 per cent in the 2012 financial year and 27.5 per cent in the 2017 financial year. These averages assume normalised net revenue of \$541.4 million in the 2007 financial year and no indexation of the tax bands (Tabcorp Holdings Limited 2007a).

Applies only to table gaming revenue.

Gross revenue is the total sales/income from the primary business activity. Gross profit is Net Sales minus Cost of Goods Sold.

Super tax

Victoria imposes a super tax on table gaming revenue, with different rates applying according to player characteristics. Crown Melbourne is subject to a super tax of 1 per cent per each \$20 million of gaming revenue from regular players above \$500 million up to a maximum of 20 per cent on player loss over \$880 million. For international VIP program players, the casino is required to pay a super tax of 1 per cent for each \$20 million of gaming revenues over \$160 million, up to a maximum of 12.25 per cent on gaming revenues over \$380 million.

EGM taxes in non-casino venues

EGM tax rates for casinos differ to the rates imposed on clubs and hotels in each state and territory. In the majority of states, EGM gaming revenues are subject to the highest tax rates in hotels, followed by clubs, and then by casinos. However in most jurisdictions, the EGM tax rates imposed on hotels and clubs are marginal progressive tax rates based on gaming revenues such that some venues will pay lower rates of tax than casinos.

Exceptions to this trend include WA, which has no EGMs other than within the casino. Table 7.2 details the current gaming machine taxes in each state and territory. It is understood that tax rates are higher in convenience EGM venues such as hotels and clubs as they are likely to experience higher rates of problem gambling.

Comparisons between casinos and other gambling modes should not be made solely on the basis of tax rates. Rather, comparisons should consider the full range of financial transfers from casinos to government, including taxes, licence fees and community benefit levies.

Other taxes and charges imposed on casinos

Some states and territories impose other taxes on gaming in casinos that are not categorised in the previous sections. These include the reintroduction of the NSW high roller program, and taxes on international VIP program players in the NT and the ACT.

Star City's international VIP program was reactivated on 1 January 2006 after having ceased in 2001 due to its risky nature. Under an agreement with the NSW Government, a non-refundable instalment of \$3 million is paid in January and July of each year, and an additional 10 per cent duty applies to gross gaming revenue in excess of \$60 million.

Table 7.1

STATE AND TERRITORY TAXES ON TABLE GAMING

ACT⁴	• General gaming: 10.9% of gaming revenues. • International VIP program player gaming: 0.9% of gaming revenues. Tax payable is 20% of monthly gaming revenues, dropping to 10% in the month after total profit for the year exceeds \$10m the month after profit first exceeds \$20m, the rate drops to 5% until the end of the financial year.
NTc	Lasseters Casino: 8% of gaming revenues (effective rate is 0% after GST). SKYCITY Darwin Casino: 12% of gaming revenues less GST for regular players and 9.09% gaming revenues less GST for international VIP program players.
TAS	10% of gaming revenues.
SA	10% of gaming revenues.
WAb	18% of gaming revenues. International VIP program player business is taxed at 11%.
QLD ^b	20% of monthly gaming revenues for Gold Coast and Brisbane casinos and 10% of gaming revenues for Townsville and Cairns casinos. For international VIP program players: 10% of monthly gaming revenues for Gold Coast and Brisbane and 8% for Cairns and Townsville casinos.
VICa	General tax: • For regular players: 21.25% of gaming revenues. • For international VIP program players: 9% of gaming revenues from dedicated gaming tables.
MSM	From July 1 2008, a new single rate scale applies to both table games and electronic gaming. The tax is calculated on a marginal scale related to gaming revenue. The base rate is 22.13% for 2008–09 rising to 25.50% from 2012–13. The maximum rate is 47.13% in 2008–09, rising to 48.00% from 2012–13.

Source: Adapted from Office of Financial Management 2007.

Notes: *Payment of taxation is required weekly within 7 days of the end of the week. Super tax: Regular players, 1% for each \$20m of gross gaming revenue over \$880m (CPI adjusted from 1994) up to a maximum of 20% on gross gaming revenue over \$880m (CPI adjusted from 1994). Super tax: international VIP program players, 1% for each \$20m of gross gaming revenue over \$380m (CPI adjusted from 1994). The maximum total tax on marginal revenue for regular players is 41.25%. The maximum total tax on marginal revenue for international VIP program players is 21.25%. GST credit is provided. *Lax payable is calculated at the prescribed rate and is reduced by an amount equal to GST. *Taxes are not subject to GST.

Table 7.2 STATE AND TERRITORY GAMING MACHINE TAX

ACT		General gaming: 10.9% of gross revenue. International VIP program player gaming: 0.9% of gross revenue. Tax payable is 20% of monthly gross profit, dropping to 10% in the month after total profit for the year exceeds \$10m. The month after profit first exceeds \$20m, the rate drops to 5% until the end of the financial year.		Tax is levied on gross monthly garning revenues as follows: • <\$15 000: Nil • \$15 000<\$25 000: 15% • \$25 000<\$50 000: 17%
NT ⁹		Lasseters Casino: 21% of gaming revenues SKYCITY Darwin Casino: 20% gaming revenues.		Based on monthly gaming revenues:
TAS		Less than \$35m gaming revenues: 30.00% Over \$35m gaming revenues: 35.00%. In addition, a community support levy of 4% of gaming revenues is levied.		Tax based on annual gaming revenues in a financial year. • <\$35m: 30.00% • equal to or greater than \$35m: 35.00% of excess. In addition, a
SA°	ne tax: casinos	43.50% of net gaming revenue.	ine tax: clubs	Tax based on annual gaming revenues in a financial year: • \$0-\$75 000: Nil • \$75 001- \$399 000: 30.09% of excess
WAd	Gaming machine tax: casinos	20% of electronic gaming machine gaming revenues. As of 1 January 2008, 2% (an increase from 1.5%) of gross EGM revenue is allocated to Swan/Canning River conservation and upkeep of Burswood Park. International VIP program player business is taxed at 11%.	Gaming machine tax: clubs	No gaming machines.
QLD°		20% of monthly gross revenue for Gold Coast and Brisbane casinos and 10% of gross revenue for Townsville and Cairns casinos. For international VIP program players: 10% of monthly gross gaming revenue for Gold Coast and Brisbane and 8% for Cairns and Townsville casinos.		 Based on monthly metered win (i.e. amount bet less payout to players) Monthly metered win: \$0-\$9 500: Nil \$9 501-\$75 000: 27.00%
VICb		For regular players: 21.25% gross gaming revenue. From 2007-08: \$4333.33 per year per operating machine is paid to the Health Benefit Levy.		• 33.33% of gaming revenues.
NSWa		From July 1 2008, a new single rate scale applies to both table games and electronic gaming. The tax is calculated on a marginal scale related to gaming revenue. The base rate is 22.13% for 2008–09 rising to 25.50% from 2012–13. The maximum rate is 47.13% in 2008–09, rising to 48.00% from 2012–13.		From September 1 2007 tax levied on gaming revenues. • Up to \$200 000: Nil • \$200 001-\$1m: 10% • \$1m-\$5m: 21% • \$5m-\$10m: 26%

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ACTh	 over \$50 000: 21% Unlawful: 100%. 		25.9% of monthly gaming revenues.	
NT9			52.00% of gaming revenues plus a Community Benefit Levy at 10% of gaming revenues.	
TAS	community support levy of 4% of gaming revenues is levied.		As for clubs. In addition, a community support levy of 4% is levied.	
SA°	\$945 000: \$68 040 plus 37.59% of excess • \$945 001-\$1.5m: \$223 650 plus 40.00% of excess • \$1.5m-\$2.5m: \$395 200.50 plus 46.59% of excess • \$2.5m-\$3.5m: \$770 200.50 plus 56.09% of excess • over \$3.5m: \$1.240 200.50 plus 64.09% of excess	ne tax: hotels	Tax based on annual gaming revenues in a financial year: • \$0-\$75 000: Nil • \$75 001- \$399 000: 36.59% of excess • \$399 001- \$945 000: \$89 100 plus 46.09% of excess • \$945 001-\$1.5m: \$291 120 plus \$200% of excess	
WA ^d		Gaming machine tax: hotels	No gaming machines.	
QLD°	• \$75 001- \$150 000: 20.91% • \$150 001- \$300 000: 23.91% • \$30 000-\$1.4m: 25.91% • over \$1.4m: 35.91%.		35.91% of monthly metered win (i.e amount bet less payout to players). Includes 8.5% levy for the Community Investment Fund. In addition, hotels are required to contribute to the Health Services Fund. Based on monthly metered win: \$ \$0.\$100 000: Nil	
VIC			41.66% of gaming revenues of which 8.33% is allocated to a Community Support Fund. In addition, Tattersalls is required to pay additional tax equal to 7% of its gross gaming revenue at clubs and hotels (in lieu of a licence fee payment).	
NSWa	• \$10m-\$20m: 29% • over \$20m: 30.9%. (Under the Community Development and Support Expenditure Scheme, the marginal tax rate on clubs' earnings above \$1m is reduced by 1.5% if clubs contribute 1.5% of gaming revenue in excess of \$1m to eligible community projects).		From July 1 2007, levied on gaming revenues derived from gaming machines: • Up to \$25 000: 5.4% • \$25 001-\$200 000: 15.4% • \$20 001-\$400 000: 21.1% • \$400 001-\$1m: 28.2% • \$1m-\$5m: 33.2% • over \$5m: 41.8%	

ACT ⁿ	
NT ⁹	
TAS	
SA°	• \$1.5m-\$2.5m: \$518 170.50 plus 56.59% of excess • \$2.5m-\$3.5m: \$993 170.5 plus 66.09% of excess • over \$3.5m: \$1 563 171.50 plus 74.09% of excess.
WAd	
۵LD°	• \$140 001-\$180 000: 5.5% • \$180 001-\$180 000: 5.5% • \$180 001-\$20 000: 7.5% • \$220 000-\$260 000: 13.5% • over \$260 000: 20%.
VICb	
NSWa	Hotel tax rates changes are being phased in up to 1 July 2010.

applies. GST credit is provided. The Health Benefit Levy is payable to the casino operator in two equal instalments by 15 December and 15 June each year. Club taxes include a levy of 8.5% for the Community Investment Fund. Payments are made monthly relating to previous month's activity. GST credit is provided. Club rates apply to all clubs and other not-for-profit licensees. Payments are made monthly relating to players is 21.25%. There are no dedicated gaming machines for international VIP program players. Where international VIP program players is 21.25%. There are no dedicated gaming machines for international VIP program players. Notes: * Under the Community Development and Support Expenditure Scheme, the marginal tax rate on clubs' earnings above \$1m is reduced by 1.5% if clubs contribute 1.5% of gaming revenue in excess of \$1m revenue over \$880m (CPI adjusted from 1994). For international VIP program players: super tax of 1% for each \$20m of gross gaming revenue over \$160m (CPI adjusted from 1994) up to a maximum of 12.25% on gross gaming revenue over \$380m (CPI adjusted from 1994). The maximum total tax on marginal revenue for international VIP program to eligible community projects. Club tax rates will remain frozen from 1 September 207 until 31 August 2012. GST rebate payments will continue to be provided to all clubs on the first \$200 000 of gaming profits from 2004-05. Payments are quarterly, relating to the previous 3 months' transactions. Payment of taxation is required weekly within 7 days of the end of the week. For gaming machine tax in casinos, for regular players, in addition to table games and gaming machines gross gaming revenue, super tax of 1% for each \$20m of gross gaming revenue above \$500m (CPI adjusted from 1994) up to maximum of 20% on gross gaming previous month's activity. GST credit is provided. Payment relates to previous months activity. Payments are made monthly relating to previous month's activity. Tax payable is calculated at the prescribed rate and is to be reduced by an amount equal to GST. Payments are monthly and relate to transactions in the previous month. Taxes are not subject to GST.

Source: Adapted from Department of Treasury and Finance (WA) 2008; Office of Financial Management 2007.

Additional community levies

The casinos in NSW, Victoria, Queensland and Tasmania are subject to community levies in addition to those specific to the revenues derived from the different forms of gaming. Table 7.3 summarises these charges.

Table 7.3

STATE AND TERRITORY GOVERNMENT CASINO COMMUNITY LEVIES

NSW ^a	Victoria	Queensland	Tasmania
Responsible Gambling Levy of 2% of gross gaming revenue.	1% of gross revenue of both regular and international VIP program players (Community Benefit Levy).	1% of monthly gross revenue to Community Benefit Fund applies to all casinos.	Community Support Levy of 4% of EGM revenues.

Notes: ^a The NSW Government is required to pay the casino a rebate on the gross amount of GST paid on the program.

Source: Office of Financial Management 2007.

In WA, the Burswood Entertainment Complex is required to pay a levy to the Burswood Park Board for the conservation and upkeep of the Swan and Canning Rivers, and the Burswood Park. In 2007-08, this levy comprised 2 per cent of EGM gross revenue, with \$6.4 million paid to the Burswood Park Board. Also in WA, winnings not claimed by patrons after a certain period of time are paid to the Gaming Community Trust Fund. In 2007-08 unclaimed winnings amounted to approximately \$177 000.

Casino licence arrangements

Licence fees

Most states and territories impose license fees on their casinos, with these arrangements differing considerably across jurisdictions. Queensland, Tasmania and the ACT have recurring licence fees indexed annually to CPI while NSW and Victoria charge one-off payments. WA is the only state to impose both elements on its casino — a one-off payment and a recurring licence fee. Currently both SA and the NT do not have casino licence fees. However, in South Australia an annual levy of \$1.2 million was introduced in 2007 to reimburse the Office of the Liquor and Gambling Commissioner for costs associated with regulating SKYCITY Adelaide.

Exclusivity periods

New South Wales' 2007 exclusivity agreement was developed between the NSW Government and Tabcorp (the Star City operator). The additional licence fee of \$100 million guarantees Star City exclusivity in NSW for 12 years until 2020. The fee is to be paid in two tranches of \$50 million — in the 2007–08 and 2008–09 financial years. This exclusivity period has provided the certainty required by Tabcorp to commit to investing \$475 million to redevelop Star City (Tabcorp Holdings Limited 2007b).

Crown Melbourne in Victoria paid an initial licence fee of \$200 million and opened as a temporary casino in 1993 and permanently in 1997. From 1996, the casino paid an additional \$100.8 million in monthly instalments of \$2.8 million over a 3-year period (the final payment was made in December 1998). Crown Melbourne had an exclusivity agreement that expired in 2005.

In WA, Burswood made an initial \$20.6 million payment confirming the exclusivity of licence which ended in 2000. In the Northern Territory, exclusivity agreements were extended in 2001 to 2015 for SKYCITY Darwin and 2018 for Lasseters Alice Springs.

In Tasmania, the Federal Group Ltd has exclusive rights to conduct casino operations and operate gaming machines in Tasmania for a 15-year period starting from July 2003. At the conclusion of this period, the licence converts to a rolling five-year licence renewable annually.

7.3 Changes to tax arrangements in the past decade

Introduction of the Goods and Services Tax

GST arrangements

The main change to tax arrangements since 1999 has been the introduction of the GST on July 1 2000. Registered businesses are required to charge GST when selling goods and/or services to another business or to consumers. In casinos, GST is paid on all 'gross gaming revenue' — gross gaming revenue is revenue before any expenses or taxes are deducted.

The introduction of GST on casino EGM revenue was affected by the principle of taxation revenue neutrality, such that the 1999 intergovernmental agreement stated that states and territories would adjust gaming tax arrangements to take account of the impact of the GST (Treasury 1999).

Effectively the GST transferred some of the state and territory taxation revenue collection to the Australian Government, with states and territories reimbursed for the amount forgone due to the GST. All states have adjusted their tax rates to account for the impact of the GST, or have noted that casinos are entitled to GST credit on gaming taxes.

Characteristics of the GST

The introduction of the GST changed the nature of casino taxation in terms of economic efficiency and equity. The GST, an ad valorem tax, encourages casinos to pursue a low-margin, high-turnover pricing strategy, compared with a low-turnover and high-margin strategy which is the more probable strategy under taxes based on bet placement. As such, the GST may generate more government revenue from casinos (Paton et al 2001). This trend is true for both monopoly and oligopoly markets, with supporting empirical evidence found in studies of cigarette taxes (for which demand is likely to be inelastic). The GST on casino gaming is also considered a less stable government revenue base than a commodity tax base (Paton et al 2001).

The GST also has positive implications in terms of equity. As Smith (2000) notes, the GST provides an improvement to the horizontal equity of taxing 'luxuries'. Prior to the GST, gambling was taxed whereas other luxury activities such as dining and holidaying were not. However, the regressive elements of the GST remain in casino programs such as high roller rebates, which are outside the scope of the GST. Further, other taxes specific to casinos that may increase the burden on gamblers have not been lifted to compensate for the introduction of the GST.

Changes to State and Territory tax arrangements

There have been a number of significant changes to state and territory government gaming tax arrangements since the 1999 PC inquiry, with the key changes identified below.

Western Australia

In 1999 WA's Burswood Entertainment Complex was taxed at 15 per cent of gaming revenues. Currently, EGMs are taxed at 20 per cent of gaming revenue and table games and keno are taxed at 18 per cent of gaming revenue.

Queensland

This year the Queensland Government announced an increase in taxes from July 2009 on EGMs in casinos only. The tax rates for gaming machines in Conrad Treasury and Conrad Jupiters Gold Coast will increase to 30 per cent (from 20 per cent) and to 20 per cent (from 10 per cent) for gaming machines in Jupiters Townsville and Reef Hotel Casino.

Tasmania

In Tasmania, future changes to the casino tax arrangements will see a single flat tax rate of 25.88 per cent applied to gross revenues from casino-based EGMs from 1 July 2013.

New South Wales

NSW introduced a single marginal tax rate scale in July 2008. This tax rate applies to both table and electronic casino gaming and is calculated according to gaming revenue. In 2008-09 the base rate is 24.13 per cent (for revenues between \$0 and \$600 000), with a top marginal rate of 47.13 per cent (for revenues greater than \$720 million), with rates to increase annually to 2012-13. In 2012-13 the base rate in NSW will be 25.50 per cent (for revenues between \$0 and \$675 000), with the top rate to be 50 per cent (for revenues greater than \$810.6 million). From 1 July 2013 the NSW tax rates will stay constant, with the bands to increase annually in line with CPI. NSW is the only jurisdiction with a marginal tax scale on table gaming.

7.4 International casino tax comparisons

International comparisons are used to place Australian casino taxes in a broader context. Casino taxes are examined in five countries: the United States (USA); New Zealand (NZ); Canada; South Africa; and Macau. It should be noted that the different regulatory, taxation and other characteristics of each jurisdiction mean that these comparisons should be treated with caution.

United States

Twelve states within the USA operate commercial casinos and of these, 9 operate land-based casinos. Other types of casinos in the US are river-boat casinos, Native American casinos, dockside casinos and racetrack casinos.

Land-based casinos are most comparable with the casinos in Australia. For this comparison, two states operating only land-based commercial casinos, Michigan and Nevada, are considered.

States with land-based casinos have extensive systems of fees and taxes imposed by local and state governments. For example, Michigan applies a municipal service fee upon casinos and Nevada has a system of county licence fees and state licence fees. In Nevada, separate taxes apply to restricted and non-restricted licensees. The definitions of these two separate licence categories are:

- Restricted licence issued for the operation of not more than 15 slot machines and no other games
- Non-restricted licence issued for the operation of games and/or tables only; or, for the operation of 16 or more slot machines only; or, for the operation of games and/or tables in conjunction with slot machines (Nevada Gaming Commission and State Gaming Control Board n.d).

Both Michigan and Nevada have the common element of gaming taxes being based on gaming revenues. Michigan's casinos pay a tax rate of 12.1 per cent to the state and 11.9 per cent to the city. The rate in Nevada is substantially lower, where the maximum rate is 6.75 per cent.

Casinos in Nevada are subject to both annual and quarterly licence fees for slot machines and table games whereas casinos in Michigan are not. Nevada casinos operating under a restricted licence pay \$250 per gaming machine annually plus an amount based on the month the machine commenced operating. The quarterly licence fee for casinos with a restricted licence depends on the number of slot machines in operation. Non-restricted licensed casinos pay the same annual tax as casinos with a restricted licence, but a lower quarterly licence flat fee. This rate is low compared with casinos operating under restricted licences.

Table gaming in Nevada is only offered in casinos with a non-restricted licence and is subject to annual licence fees and quarterly licence fees. The annual licence fee payable by casinos is based on the number of games offered.

Table 7.4 summarises the tax arrangements in Michigan and Nevada.

Table 7.4

CASINO TAXES, MICHIGAN AND NEVADA

Tax item	Michigan	Nevada		
		Non-restricted licence	Restricted licence	
Slot machines	State wagering tax —12.1% gaming revenues City wagering tax — 11.9% of gaming revenues Effective Gaming-Related Tax Rate (State + City), based on \$900 million gaming revenues is 24%.	Annual tax: \$250/machine plus additional amount based on month machine commenced operating. Ranges from \$20.83 (June) to \$250.00 (July). Quarterly licence fee: \$20.00 per machine, payable in advance; no proration.	Annual tax: \$250/machine plus additional amount based on month machine commenced operating ranging from \$20.83 (June) to \$250.00 (July). Quarterly licence fee: amount payable in advance dependent on the number of operating slot machines ranging from \$81 for 1 slot machine to \$1815 for 15 slots.	
Table games	State wagering tax —12.1% gaming revenues City wagering tax — 11.9% of gaming revenues Effective Gaming-Related Tax Rate (State + City), based on \$900 million gaming revenues is 24%.	Annual licence fee: based number of games. Ranges from \$100 for 1 game to \$16000 plus \$200/game >16 games, for locations with >17 games. Quarterly licence fee: based on games numbers. Casinos with <10 games pay fees ranging from \$12.50 total for 1 game to \$750 total for 8—10 games. Casinos with >10 games pay from \$125/game for 1—16 games to \$20 300 plus \$25/game for >35 games.		
General rates	Application Fees - \$50 000 x 3 casinos — One-time fee Licensing Fees - \$25 000 × 3 casinos — Payable annually.	Monthly Percentage Fee: based on gaming revenue — • 3.5% of the first \$50 000 during the month, plus • 4.5% of the next \$84 000, plus • 6.75% of revenue exceeding \$134 000.		
Other	Annual State Services Fee—Each casino pays one-third of \$25 million annually Municipal Services Fee (\$4 million × 3 casinos) — Payable annually.	Live entertainment tax at 10% of amounts paid for food, refreshment, merchandise, and admission or similar charges while in live entertainment status. ^a Licensees offering entertainment in an area with a maximum occupancy of at least 7500 pay 5% tax on admission sales.	In addition to State administered gaming license fees and taxes, various other license fees and taxes may be required by the Federal Government and local governmental units throughout Nevada.	

Notes: ^a Restricted licensees are subject to a Live Entertainment Tax if all of following criteria are met: 1. Live entertainment is offered on your premises. 2. An admission charge or drink minimum is collected. 3. The facility providing live entertainment has a maximum occupancy capacity of at least 200. Non-Restricted licensees who license more than 50 slot machines, more than 5 games or any combination thereof and offer live entertainment in a facility with a maximum occupancy of less than 7500. For non-restricted locations who license less than 51 slot machines, less than 6 games or any combination thereof, the tax applies only if entertainment is provided in a facility with a maximum occupancy of at least 200 and an admission charge is collected.

Source: Nevada Gaming Commission and State Gaming Control Board n.d; Legislation Council, State of Michigan 2007

New Zealand

Casinos in NZ are subject to three separate duties:

- Casino duty payable monthly by casino operators on gaming revenues at 4 per cent
- Problem gambling levy payable on gaming revenues at 0.72 per cent plus GST
- Gaming machine duty levied at 20 per cent of gaming machine revenues (Inland Review 2009).

The problem gambling levy is imposed on all gambling operators at different rates. As Table 7.5 shows, non-casino gaming machine operators pay the highest rate, followed by casino operators. These rates recognise that problem gambling is more prevalent in non-casino gaming machine operator locations. The NZ Cabinet Social Development Committee approved placing greater emphasis on this element when calculating rates for gambling operators (Cabinet Social Development Committee 2004).

Gaming operators in New Zealand are also required to pay a GST of 12.5 per cent.

Table 7.5

NEW ZEALAND PROBLEM GAMBLING LEVY BY GAMBLING TYPE

Gambling operators	Tax base	Rate (GST-exclusive)
Casino operators	Casino wins	0.72%
Non-casino gaming machine operators	Gaming machine profits	1.70%
The New Zealand Racing Board	Betting profits	0.55%
The New Zealand Lotteries Commission	Turnover less prizes paid and payable	0.20%

Note: Rates set by Order in Council and apply from 1 July 2007.

Source: Inland Review 2009

After taking into account the effects of the NZ GST, most Australian casinos are subject to higher casino tax rates than their New Zealand counterparts.

Canada

Canada's provinces and territories have separate casino arrangements for both taxation and regulation. This section summarises and compares casino arrangements in Alberta and Ontario. Crown Limited has a 50 per cent share in nine Canadian casinos (Crown Limited 2008).

Most gambling activities in Canada were legalised in 1969. Basham and White (2002) outline the growing importance and changing face of casino gaming in Canada from the 1990s:

Casinos moved to the forefront of the gambling industry in the early 1990s. Prior to the establishment of government-owned monopoly casinos in Winnipeg, Halifax, Montreal, Windsor, Hull, and Regina, casinos were limited to 'charity casinos,' which were solely permitted to raise revenue for 'good causes'. These were predominately located in Canada's western provinces (Alberta, Manitoba, and British Columbia). In addition, so-called 'destination casinos' have been established in Niagara Falls, Ontario, Charlevoix, Quebec, and Sydney, Nova Scotia.

Basham & White 2002 p. 20.

In Alberta the gaming industry consists of charitable gaming and lotteries. The province's casinos fall under the category of charitable gaming and are operated by charitable, religious and not-for-profit organisations. Due to their charitable nature, these casinos are not obligated to pay tax as all revenues from table games and electronic gaming are given to charity. However, as an example, only \$51 million of \$150 million was put towards charity as casino operators and other intermediaries took their share of proceeds. The Alberta Gaming and Liquor Commission is required to pay GST and Federal Tax on gaming activities, but not liquor sales (GamblingCompliance 2008a).

In Alberta, it is a requirement that casinos are run locally and only a certain proportion of revenue can be used towards casino expenses. Fees applicable to casinos are:

- permanent licence fee \$15 per table (excluding poker) per day for a permanent casino
- temporary licence fee \$35 per table (excluding poker) per day for a temporary casino
- casino facility licence fee \$500 per year, or two years or period of time for which the facility licence fee is granted (GamblingCompliance 2008a).

Ontario operates both charity casinos and for-profit casinos in joint ventures between government and private businesses. For-profit casinos have operated since 1993 and charity casinos since 1998. The Ontario Lottery and Gaming Corporation pays GST and Federal Tax on gaming activity revenue, but not on liquor sales. Casino revenue put towards charity is not taxed (GamblingCompliance 2008b).

Australian casinos are, overall, subject to higher average casino tax rates than their Canadian counterparts, including for-profit casinos.

South Africa

South Africa's first casino opened in 1978 with 37 in operation over 2008. The five years spanning 1997 to 2002 had the highest growth in casino openings with 16 casinos built during this time.

Casino gaming in South Africa is taxed on gaming revenues both nationally and provincially. Nationally, the Value Added Tax (VAT) is charged on player loss at a rate of 14 per cent. Casinos are also required to pay tax to their provinces. South African provinces, like Australia's states and territories, receive more revenue than the national government from gaming, since they collect annual licence fees and taxes on gaming revenues and corporate profits. Table 7.6 shows the provincial taxes on casino revenue as quoted in a 2007 Casino Survey.

Table 7.6

SOUTH AFRICAN PROVINCIAL CASINO TAXES

Province	Taxation		
Eastern Cape	Tax on revenues of:		
	• 0–4m rand: 3.0%		
	• 4–8m rand: 5.0%		
	more than 8m rand: 10.0%		
Free State	5.7% of revenues		
Gauteng	9.0% of revenues		
KwaZulu-Natal	Tax on revenues of:		
	• 0–30m rand: 9.0%		
	more than 30m rand: 12.0%		
	In addition, a 0.5% local government tax is imposed.		
Limpopo	6.0% of revenues		
Mpumalanga	5.7% of revenues		
North West	3.0% of revenues		
Northern Cape	8.0% of revenues, in addition to a 2.0% contribution to a development trust		
Western Cape	Tax on revenues of:		
	• 0–10m rand: 6.0%		
	• 10–20m rand: 8.5%		
	• 20–30m rand: 11.0%		
	• 30–40m rand: 13.0%		
	• 40–50m rand: 15.0%		
	• more than 50m rand: 17.0%		

Source: Rodrigue 2008.

Three of the 9 provinces impose a marginal tax rate scale on casino revenue. Of these, Western Cape has the most extensive scale. The other provinces levy a flat rate on gaming revenue ranging from 3.0 per cent to 9 per cent in Gauteng.

South African casinos are also required to pay licence fees. In Western Cape licence fees are progressive in nature, ranging from 6 per cent of taxable revenue to 17 per cent of taxable revenue for casinos with taxable revenue in excess of 71 million rand (see Table 7.7). In Gauteng casino licence fees are a fixed amount, with casinos paying a licence application fee of 827 000R and an annual licence fee of 83 000R (Gauteng Gambling Board 2008).

Table 7.7

RATE OF TAX IN RESPECT OF CASINO OPERATOR LICENCE IN WESTERN CAPE

Taxable revenue	Rates of tax in respect of casino operator licence
Less than or equal to R14.2m	6% of taxable revenue
R14.2m — 28.4m	R852 000 plus 8.5% of revenue exceeding R14.2m
R28.4m — 42.6m	R2.059m plus 11% of revenue exceeding R28.4m
R37.2m — 56.8m	R3.621m plus 13% of revenue exceeding R42.6m
R56.8m — 71.0m	R5.467m plus 15% of revenue exceeding R56.8m
R71.0m	R7.597m plus 17% of revenue exceeding R71.0m

Source: Province of Western Cape 2003.

The average casino tax rates in Australia are, generally speaking, higher than the casino tax rates in South African provinces.

Macau

Macau's casino industry is unique providing the majority of government revenues. Casinos contribute approximately 99 per cent of total gaming income, 66.5 per cent of which is attained from VIP gaming rooms. Macau's casino tax rates are high relative to Australia and other international jurisdictions, however, Macau's casinos pay no company tax on their profits. Casino-specific taxes total 40 per cent of casino gross gaming revenue. Individually these are:

- basic tax rate of 35 per cent of monthly gaming revenue
- levy of 2 per cent of gross gaming revenue payable to a public charitable foundation (the Macau Foundation in 2008)
- levy of 3 per cent of gross gaming revenue for 'urban development, tourism promotion and social security' (Pessanha 2008).

Pessanha (2008) notes that in practical terms casinos are likely to pay slightly less tax than 40 per cent. The effective tax rate differs from the actual tax rate by about 1 per cent due to negotiations surrounding contract arrangements. Casinos pay 1.6 per cent rather than 2 per cent to the Macau Foundation and are likely to pay between 1.4 per cent to 2.4 per cent for urban development, tourism promotion and social security. The effective rate for the urban development tax differs between casinos, with some agreements kept confidential.

Given the growth in casinos throughout Asia, the high gaming taxes in Macau has been the cause of some concern. In particular, Singapore and other Asian markets will be targeting international VIP program players who frequent Macau. Pessanha (2008) notes that the Government of Macau may be open to altering its tax policy to continue to remain competitive in the region.

The casino tax rates imposed in Macau are higher than those average taxes faced by Australian casinos.

Appendix A

Glossary

Casino

A casino is a building or room where gambling, particularly table games, is undertaken. In the Australian context casinos may also feature Electronic Gaming Machines (EGMs), as well as a range of non-gaming facilities including accommodation, dining and live entertainment.

Consumer surplus

The consumer surplus attained by casino patrons is the difference between what a consumer pays for a good or service and what they would have been prepared to pay, according to the (estimated) demand function for that good or service. Put another way, if consumers obtain a service more cheaply than the price they were prepared to pay, then they receive a benefit equal to the difference between the two prices.

Convenience gaming

Convenience gaming involves a locality element, connecting gaming with environments that people travel through in the course of their daily lives (i.e. to drink, shop and eat). In these circumstances, people do not need to make a pre-meditated decision to each a gaming venue.

Destination gaming

Destination gaming is a style of gaming venue that encourages pre-determined decisions to gamble. The idea behind destination gaming is that it reduces the gambling behaviours of those who gamble based on impulse alone.

Exports

Exported goods or services are provided to foreign consumers by domestic producers, such as a good that is sent to another country for sale. International tourism to Australia is an exported service as it is consumed by foreigners.

Gambling

Either gaming or wagering.

Gaming

The playing of a game of chance for winnings in money, with any person playing the game at risk of either winning or losing money. Some games involve purely chance, whereas other games may also involve an element of skill.

Gaming revenues

Revenues from games after the payout of winnings. Identical to player gaming expenditure or player loss.

Gross domestic product (GDP)

The total value of all final goods and services produced in an economy in a given year. This includes the sum of private consumption, gross investment, government spending and exports minus imports.

Gross State Product (GSP)

A measurement of the economic output of a state or territory. It is the sum of all final goods and services produced in a particular state (or territory) within a given year. GSP serves as a part of GDP.

Imports

Any good or service brought to one country from another, typically for use in trade. Imported goods and services are provided to domestic consumers by foreign producers.

International VIP program players

International VIP program players, also known as 'high rollers', comprise overseas players who travel to Australia for the express purpose of playing casino table games. These players place very high stakes on individual table game hands.

Private consumption

Private consumption is the level of private expenditure on goods and services, and is accepted as being a proxy measure for overall economic welfare. Private consumption is a component of Gross Domestic Product.

Producer surplus

The producer surplus received by the casino industry is the amount by which producers benefit from selling a good at a higher price than they would be willing to sell for.

Social Surplus

The social surplus of the casino industry is defined as the sum of what is referred to in economics as consumer surplus and producer surplus. Estimates of social surplus should also include any positive or negative externalities that are not recorded in any of these three surplus measures. Social surplus is akin to the social welfare attained by society from a good or service.

Total Inbound Economic Value (TIEV)

TIEV is a measure developed by Tourism Research Australia, and is calculated using data on total trip expenditure by inbound tourists to Australia and benchmarked to ABS data

Wagering

The staking or hazarding of money on the outcome of an uncertain happening, such as a horse race, where the odds are set via a totalisator, or on a fixed odds basis.

Appendix B

Economic modelling

B.2 Monash Multi Regional Forecasting model

The MONASH Multi-regional Forecasting (MMRF) model is maintained by the Centre of Policy Studies at Monash University. This model has been used to estimate the casino industry's economic contribution, as generated by international VIP program players. MMRF generates outputs at the macroeconomic (state and national) and also by region and industry.

The MMRF model has been used in numerous economic contribution studies including, relevant to this context, a study of the Australian Formula 1 Grand Prix and the particular effect on the economy of foreign visitors.

The model is built from the 'bottom up' and states are linked via interstate trade, interstate migration, and capital movements. The MMRF model is comprised of eight Australian regions (the six States and two Territories) and 56 sub-state regions. At the state level, there is detailed modelling of the behaviour and interactions of five types of economic entities:

- industries there are 58 industry sectors, that each produce a single commodity. Investment is allocated across industries to maximise rates of returns to investors
- capital creators there are capital creators for each industry that produce units of industry specific capital in a cost-minimising manner
- households there is a single household in each state
- governments there is a state government in each state and a federal government
- *foreigners* the behaviour of foreigners is summarised by export demand for the products of each state and by supply of international imports to each state.

MMRF determines the supply and demand for each regionally produced commodity as the outcome of producers and consumers who seek to obtain the optimal outcomes. Industries are assumed to choose labour, capital and land so as to maximise their profits while operating in a competitive market. In each region, a representative household purchases a particular bundle of goods in accordance with the household's preferences, relative prices and disposable income. The specifications of supply and demand behaviour co-ordinated through market clearing assumptions comprise the general equilibrium core of the model.

The model is populated using data from the MONASH regional database, which in turn is based on the Australian input-output tables developed by the Australian Bureau of Statistics (Gretton 2005).

The MMRF model has had a long history of use by various state and Australian government agencies and is maintained with up-to-date values of coefficients. The workings of the MMRF model have been documented, and subjected to peer review.

Outputs of the MMRF modelling

The outputs of the MMRF model paint a detailed picture of how the casino industry contributes to the working of the Australian economy. An important point to emphasise is that casinos contribute not just directly to the leisure and entertainment industry but indirectly to all industries in the economy.

B.3 Economic modelling results

Table B.1 provides detailed results generated by the MMRF economic model.

Documentation of the assumptions underpinning the MMRF model, the basis of the MMRF-GREEN model, is available at the Centre of Policy Studies website. In particular, see Dixon et al 1996 and Adams et al 2003.

Published works applying this model include Adams et al 2000.

Table B.1

INDUSTRY PRODUCTION: CHANGE FROM BASECASE 2007-08, 2008 PRICES

	Deviation from base case values	
Industry sector	Per cent	Output (\$ m)
Sheep and cattle	-0.04	-6.1
Dairy	-0.03	-1.7
Other animals	-0.08	-3.1
Grains	-0.03	-5.9
Other agriculture	0.03	3.1
Agricultural services and fishing	-0.07	-7.6
Forestry and logging	-0.06	-1.7
Coal mining	-0.26	-69.5
Oil mining	-0.29	-27.5
Gas mining	-0.08	-20.0
Iron ore mining	-0.28	-37.7
Non-ferrous metal ores	-0.23	-71.7
Other mining	-0.25	-30.3
Meat products	-0.06	-14.3
Other food and drink products	-0.03	-23.0
Textiles, clothing and footwear	-0.09	-11.7
Wood products	-0.06	-7.6
Paper products	-0.02	-2.6
Printing and publishing	0.04	12.3
Petroleum refinery	-0.08	-11.8
Other chemicals	-0.05	-17.1
Rubber and plastic products	-0.04	-5.2
Non-metallic construction materials (not cement)	-0.02	-2.5
Cement	-0.01	-0.6
Iron and steel	-0.09	-16.2
Alumina	-0.23	-15.2
Aluminium	-0.22	-16.0
Other non-ferrous metals	-0.23	-84.4
Other metal products	-0.03	-8.4
Motor vehicle and parts	-0.11	-33.3
Other manufacturing products	-0.09	-61.2
Electricity - coal	-0.04	-3.5
Electricity - gas	-0.07	-1.0
Electricity - oil products	0.04	0.1
Electricity - nuclear	0.00	0.0
Electricity - hydro	-0.05	-0.4
Electricity - non-hydro renewable	-0.06	-0.1
Electricity supply	-0.05	-9.5

	Deviation from base case values	
Industry sector	Per cent	Output (\$ m)
Gas supply	-0.03	-0.9
Water supply	0.02	2.1
Construction services	-0.01	-21.5
Trade services	-0.02	-43.1
Accommodation and hotels	0.01	4.4
Road transport - passenger	-0.03	-0.5
Road transport - freight	-0.06	-21.1
Rail transport - passenger	-0.11	-1.3
Rail transport - freight	-0.18	-18.4
Other transport (includes water transport)	0.00	-1.1
Air transport	-0.10	-22.4
Communication services	0.06	31.5
Financial services	0.01	15.9
Business services	0.02	60.2
Dwelling ownership	0.04	38.5
Public services	0.00	-1.5
Other services	0.71	621.1
Private transport services	0.02	9.3
Private electrical equipment services	0.04	5.4
Private heating equipment services	0.02	2.3

Source: CoPS 2009

Appendix C

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