Crown Sydney Proposal

An Economic Benefit Assessment - CONFIDENTIAL

August 2012
Report to Crown Limited
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# Executive summary

## Introduction

The objective of this report is to assess the economic impact that the proposed Crown Sydney integrated resort will have both directly and indirectly on the Sydney and New South Wales economies. In an attempt to clearly articulate the wide reaching benefits this project offers, the report also explores the state of Australia’s tourism industry, current opportunities due to a boom in Asian outbound tourism and the need for significant investment in Australia’s tourism infrastructure to capitalise on these opportunities.

The Australian tourism industry has been stagnant since the Sydney Olympics in 2000. The causes have been a lack of investment in tourism infrastructure, especially high quality hotels; the decline of our traditional tourism markets; and, the perception of Australia as a "high-cost" destination.

The future growth of Australia’s tourism industry will heavily rely on the rising Asian middle class, particularly from China. This new wave of tourists seeks different experiences to those provided for our traditional markets. They look for luxury experiences and services which include high quality hotels, dining, high-end retail and, in many instances, the opportunity to gamble.

To this end, Crown Limited has proposed the development of an integrated resort at Barangaroo. The project would include Sydney’s first six star hotel with 350 hotel rooms and 75 serviced apartments; meeting/ballroom facilities; high-quality restaurants; spa, pool and amenity deck; and VIP gaming facilities. This would enable the precinct to become a centre for tourism, conferences and leisure with significant appeal to high net worth domestic and international clientele. This project is expected to require capital expenditure by Crown Limited of approximately $1 billion.

## Economic impact of the Crown Sydney Proposal

This report illustrates the economic benefits of the Crown Limited proposal which will be significant, sustained and far-reaching, covering nearly all regions in NSW.

The key economic impacts include:

- **Once Crown Sydney is operational, gross state product (GSP) is expected to increase by $300-$440 million per year driven by the spending of visitors to the complex, especially overseas visitors, and the consequent flow-on effects to other industries in the State. During the construction phase GSP is expected to increase by approximately $60 million per year.**

- **A boost in business investment of over $200 million per year during the construction phase and an ongoing increase in investment of between $140 million and $200 million every year during the operational phase.**

- **Creation of an additional 1,400 jobs per annum including those employed at Crown Sydney as well as in many industries throughout the state.**
• An increase in NSW tax revenue expected to be payroll tax of between $17 to $26 million per annum from 2018 to 2027. Gaming taxes from Crown Sydney will be $114 million per annum. Commonwealth tax revenue will also increase.

The Crown proposal would also help address the major shortage of quality hotel accommodation in Sydney, which affects Sydney’s ability to attract high net worth tourists in the future. Only one five star hotel has been built in Sydney since the Olympics and no six star hotels have ever been built. Occupancy rates in Sydney’s five star hotels are currently running at over 80 per cent, which is very high by industry standards.

Current State of the Australian Tourism Industry

The Australian tourism industry has been struggling for over a decade. The annual tourism balance of trade has been in deficit for 7 years and now stands at a record low of over $7.2 billion.

Between 2000-01 and 2010-11, the number of Australians travelling overseas increased by 108 per cent (from 3.6 million to 7.4 million), while the number of international visitors to Australia increased by just 17 per cent (from 5.0 million to 5.9 million).

In 2010-11, Australians took 1.5 million more trips overseas than international visitors came to Australia. Of greater concern is that Australia’s net tourism has been gradually deteriorating over the last decade. Australia’s tourism balance of trade surplus peaked at $3.6 billion in the year following the Sydney Olympics and it has been declining ever since.

Causes of the problem

Several key drivers have contributed to the underperformance of Australia’s tourism industry, including:

• A decline in visitation rates to Australia from our traditional high yielding markets such as Europe and North America due to both regions’ weak economic performance and the strong Australian dollar;

• Australia is a high-cost destination:
  – The strength of the Australian dollar makes Australia less price-competitive for international tourists while making overseas destinations more affordable for Australians.
  – Australia’s distance from major markets inevitably means the cost of travelling to Australia is relatively high.
  – As a result, competing on quality rather than price should be the strategy for the Australian tourism industry. This requires investment in quality tourism infrastructure.

• There has been a notable lack of tourism infrastructure investment, especially in Sydney, which is the gateway for foreign tourists. In order to compete with other countries in Asia also trying to attract these tourists, we need to provide a tourism product equal to or better than our competitors.
The Crown Sydney proposal directly addresses one aspect of the shortage of quality tourism infrastructure investment in Sydney.

**Opportunities in Asia**

The outbound tourism market in China is one of the fastest growing in the world. It increased at a compound annual growth rate of 18.5 per cent between 2000 and 2010, from 10.5 million to 57.4 million people. It is forecast to reach 100 million people and be worth US$838 billion by 2020, driven primarily by increased wealth and the easing of travel restrictions.

In the past decade China has also shown by far the fastest growth with regard to expenditure on international tourism, multiplying expenditure four times. Expenditure by tourists from China is now third highest in the world, behind Germany and the United States.

The evidence suggests these consumers are attracted to luxury hotels, great restaurants and high-end retail shopping, which is why there is a boom in luxury hotels and goods outlets across China and also in many international tourist destinations which are trying to attract Chinese consumers.

Given the importance of luxury goods and services to China’s rising middle class, it is easy to understand why they are attracted to luxury integrated resorts which have unparalleled accommodation, world-class restaurants and high-end retail.

Australia’s competitors appreciate the importance of integrated resorts and are acting to take advantage of the opportunity.

The most relevant and successful example of attracting Asian tourists to date has been Singapore, where two new integrated resorts have been developed at a combined cost of approximately $14 billion (AU$13 billion). Singapore’s integrated resorts opened in 2010. In response to these facilities, Singapore has seen convincing growth in its share of the international tourism market, while the broader economy also experiences significant benefits. In 2010 tourism revenue increased 49 per cent to $18.8 billion dollars with hotel revenue increasing 21.8 per cent to $1.9 billion.

Through considerable large scale expansionary projects in Macau and new casinos planned for Vietnam and the Philippines, it is evident these countries have also identified integrated resorts as necessary cornerstones for international tourism growth, particularly from elsewhere in Asia.

**Conclusion**

This report illustrates the economic benefits of the Crown Limited proposal, while detailing the critical role integrated resorts play in delivering new tourism infrastructure, to enable Australia to compete and capitalise on the massive opportunity provided by the rising middle class in Asia.
Summary of the economic benefits of the Crown Sydney Proposal

The Construction Phase (3 years)

- **Gross State Product**: GSP is expected to increase by approximately $60 million per year
- **Jobs**: creation of an additional 300 jobs
- **Business Investment**: expected to increase by over $200 million per year

The Operations Phase

- **GSP**: expected to increase by $300 to $440 million per year
- **Jobs**: creation of an additional 1,400 jobs per annum (direct and indirect)
- **Business Investment**: expected to increase by between $140 and $200 million per year
- **Export Income**: increase in exports from NSW, of around $400 million per year
- **Tax Revenue**: an increase in NSW payroll tax of between $17 to $26 million per year, gaming taxes will be $114 million per year. Commonwealth tax revenue will also increase.

New South Wales Regional Impacts

While it will be located in the Sydney CBD, the economic impacts will be spread throughout NSW. Other than Sydney, the Hunter, Illawarra, mid North Coast and Richmond Tweed regions will see the greatest positive economic impact.

Addressing Sydney’s shortage of hotel accommodation

The Crown Sydney hotel would help address Sydney’s shortage of hotel accommodation. A recent report by the Tourism Association of Australia found Sydney needs 150 to 550 new hotel rooms every year or 5,000 rooms by 2020 to meet the demands of the tourism sector.
Chapter 1

Introduction

1.1 Objectives and Scope

Crown Limited has commissioned the Allen Consulting Group to estimate the economic impact of its proposal to build an integrated resort on the Barangaroo site in Sydney.

The report also explores the state of Australia’s tourism industry, current opportunities due to a boom in Asian outbound tourism and the need for significant investment in Australia’s tourism infrastructure to capitalise on these opportunities.

1.2 The Report

The structure of the report is as follows:

• Chapter 2 discusses the economic impacts of the Crown Sydney Proposal on the NSW economy. The chapter also considers wider impacts of the proposal including the importance of the new six star hotel in addressing Sydney’s shortage of quality hotel rooms.

• Chapter 3 discusses the value of integrated resorts to the tourism industry and the economy. It looks at the current state of the tourism industry, the opportunity that the Asian tourist market presents and how integrated resorts can help Australia capitalise on this opportunity.

1.3 Economic Impact Measured in Two Phases

The economic impacts are measured in two phases:

• The construction phase (modelled over three years from 2015 to 2017), where the economic effect is due to the building activity; and

• The operations phase (modelled over 10 years from 2018 to 2027), where the economic effect is due to the activity generated by visitor spending as a result of the operations of the Crown Sydney complex.

Technical details on the economic modelling are provided in Appendix A.

1.4 Description: The Crown Sydney Project

Crown Limited proposes to build an integrated resort on the Barangaroo site in Sydney, that comprises of a six star luxury hotel, signature restaurants, high-end retail and VIP only gaming.

The hotel tower will have 350 rooms where approximately 20 per cent of rooms will be suites or VIP accommodation. Guest rooms will be six star international standard and the top floors of the hotel tower will house approximately 75 luxury apartments.
The resort will also include:

- Ballroom / meeting facilities / signature dining facilities.
- Club / ultra lounge.
- Spa / pool.
- Amenity deck.
- VIP gaming facilities (Sky Salons / Mahogany Room).

The design of the resort will take the following key design features into consideration:

- The hotel will be designed to international six star standards;
- The resort will be integrated into the Barangaroo precinct and will act as an anchor tenant for the development providing 24/7 activation and amenities for the workers, residents and visitors at Barangaroo.
- Leverage sight lines to Sydney’s key tourism assets (Harbour Bridge, Opera House and Barangaroo Headland Precinct).
- The Resort will convey a sense of architectural significance given its prominence on the foreshore.
Chapter 2
Economic Impact of the Crown Sydney Proposal

2.1 Introduction
The Crown Sydney project is expected to deliver significant economic and employment benefits to the New South Wales economy.

The project is expected to result in:

- Once Crown Sydney is operational gross state product (GSP) is expected to increase by $300-$440 million per year driven by the spending of visitors to the complex, especially overseas visitors, and the consequent flow-on effects to other industries in the State. During the construction phase GSP is expected to increase by approximately $60 million per year.

- Increase in business investment of over $200 million per year during the construction phase and an ongoing increase to investment, of between $140 million and $200 million every year during the operational phase.

- Increase in employment by around 1,400 jobs per annum from 2018, which includes employees hired at Crown Sydney as well as in many industries throughout the state.

2.2 New South Wales Statewide Impacts

2.2.1 Macroeconomic impacts
When interpreting the results from the economic modelling, the impacts of the modelled scenario are always expressed relative to the base case scenario. The base case scenario is where Crown Sydney is not built.

Business investment
The integrated resort complex is projected to lead to significant and ongoing increases in business investment, such as spending on equipment and buildings. Increases in business investment (not just Crown’s investment, but throughout the economy) are observed throughout the modelling period, from 2015 onwards till 2027.

During the construction phase, investment in the NSW economy increases, relative to the baseline, by over $200 million per year. Importantly, this boost to investment continues even after the complex has been built, as the ongoing positive impact on the NSW economy leads to further increases to investment, of between $140 million and $200 million every year. This is the critical feature of the economic impact of the complex — it has an ongoing positive effect on the NSW economy.
Gross state product

The initial effect on NSW Gross State Product (i.e. total economic activity in NSW) is projected to be around $60 million per year during the construction phase. This is less than the amount that will be spent directly on the complex itself. This might seem counter-intuitive, but inevitably spending on a large project crowds out, at least to some extent, other spending. This occurs through a number of mechanisms. One of these is via lower consumption spending (see below), another is via delay of spending on similar projects. These counter-balancing effects, however, do not detract from the need to make investments in tourism infrastructure, nor do they subtract from the subsequent benefits of that investment.

The very large impacts on NSW GSP occur when the complex is operational. From 2018 onwards, GSP is higher by $300-$440 million per year. This results from the spending by visitors to the complex, especially international visitors, and the consequent flow-on effects to other industries in the state. The growth in GSP is presented in Figure 2.1.

Employment

Employment is estimated to increase by around 1,400 jobs from 2018 as shown in Figure 2.2. These are not just the jobs at Crown Sydney, but in many industries throughout the state.
Measuring employment using direct and multiplier effects

The modelling of Crown Sydney’s economic impacts in this report assumes that the economy continues to grow at the current rate. If there is a downturn in the economy, the employment and economic effects of the Crown Sydney project will be larger, as there will be more slack in the economy that can be filled in by the project.

An alternative method of estimating employment impacts from the construction and operation phases takes into account direct and multiplier effects:

- The construction of the Crown Sydney project is expected to create an average of 650 on-site construction jobs – this is direct effect. The industry norm is that for every on-site construction job, there is an incremental job from a related service provider off-site e.g. architects, designers, work being manufactured in off-site facilities – the multiplier effect. This equates to total average construction employment of 1,300 per annum over the construction phase.¹

- When the complex is fully operational, Crown expects to employ about 1,250 people.² The American Gaming Association (2012) estimated that every job in the gaming industry creates an additional 1.34 jobs in other sectors of the economy, corresponding to an employment multiplier of 2.34. The annual employment impact during the operational phase would under these circumstances be 2,925.

¹ Crown Limited has provided the estimated number of on-site construction jobs and other jobs in the construction industry employment.
² Crown Limited has provided the estimated number of people to be employed in the Crown Sydney Complex, once it is fully operational.
The modelling in this report provides estimates that take into account the economy wide impacts resulting from the construction and operation phases of the Crown Sydney complex. The results are more conservative than the forecasts obtained using the direct and multiplier effects. This is because the modelling takes into account resource allocation effects, e.g. the people hired to construct the Crown Sydney complex will to a certain extent be at the expense of other construction projects. The greater the slack in the economy at the time of construction, the weaker will be these resource allocation effects, and so the greater the economic impact during the construction phase.

**Export income**

A very notable feature of the complex’s economic effects is that, once operational, the complex will generate significant additional exports from NSW, of around $400 million per year.

**Private consumption**

As discussed above, real private consumption is projected to decrease during the construction phase (from 2015 to 2017) before increasing substantially in the 10 years to 2027 once Crown Sydney is fully operational. Private consumption declines in the investment years because the investment is funded (in part) through additional savings of domestic residents, which necessarily implies a reduction in their consumption spending.\(^3\)

Further detail of the impacts on the NSW economy from the construction and operation of the Crown Sydney proposal are presented in Table 2.1.

### 2.2.2 Industry impacts

While the NSW economy, taken as a whole, will benefit from the Crown Sydney complex, there will be varied impacts in different industries.

The five industries that would benefit most from the project in terms of industry production over the modelling period are:

- Air transport;
- Accommodation and hotels;
- Road transport — passenger;
- Petroleum refinery; and
- Construction services.

The air transport, accommodation and hotels and road transport industries are expected to benefit due to the increase in tourism that results from building Crown Sydney. The construction industry benefits from the construction of the project, and from the fact that growth in the NSW economy is associated with growth in the construction industry (largely housing). Figure 2.3 shows the percentage change in industry production relative to the base case value on the five industries during Crown Sydney’s operational phase from 2018 onwards.

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\(^3\) Note that the modelling makes no assumptions about where and how Crown Ltd will raise the capital to fund the construction of the complex, which could be a combination of equity and debt, raised from investors in Australia and overseas. What the modelling shows is the effect of the investment on the aggregate of savings, consumption and investment in the NSW and Australian economies.
In terms of the magnitude change in the real value of output relative to base case values, the top five industries impacted are as shown in Table 2.3:

- Air transport;
- Accommodation and hotels;
- Construction services;
- Trade services; and
- Other services.

For the duration of the modelling period, the airport transport industry will see an average increase of $234 million per annum. The other four industries will see average increases of between $35 to $200 million per annum in real output. The change in production output is shown in Figure 2.4.
The following industries will also benefit from an increase in employment, ranging from 0.08 to 1.50 per cent relative to base case values between 2015 and 2027:

- Air transport;
- Accommodation and hotels;
- Road transport – passenger;
- Petroleum refinery; and
- Electricity - oil products.

The percentage change relative to base case values in production and employment on industries as a result of the project are presented in Table 2.2 and Table 2.4. The magnitude change in real output value relative to base case values are presented in Table 2.3.
### Table 2.1

**NEW SOUTH WALES ECONOMY WIDE RESULTS**

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Source: Centre of Policy Studies
Table 2.3
NEW SOUTH WALES INDUSTRY PRODUCTION RESULTS (ABSOLUTE DEVIATIONS FROM BASE CASE VALUES — $ MILLION IN 2012 PRICES)

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Source: Centre of Policy Studies
Table 2.4
NEW SOUTH WALES INDUSTRY EMPLOYMENT RESULTS (PERCENTAGE CHANGE FROM BASE CASE VALUES)

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<tr>
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</table>

Source: Centre of Policy Studies
2.3 New South Wales Regional Impacts

Another notable feature of the Crown Sydney complex is that while it will be located in the Sydney CBD, the economic impacts will spread throughout NSW.

2.3.1 Regional production

Over the 13 year modelling period, the largest average annual increase in production relative to the base case in percentage change is observed for the Richmond Tweed region, with regional output up each year by about 0.1 per cent. This occurs because this region is relatively intensive in the industries that benefit directly and indirectly from the operations of the Crown Sydney complex.

Mid North Coast, Sydney, South East and Murrumbidgee also benefit from the project with each region increasing average annual production by 0.07 to 0.09 per cent relative to the base case. Larger increases in production in these five regions are observed during the operational phase over the 10-year modelling period.

The largest increase in absolute deviations from base case values ($ million in 2012 dollars) for production will occur in Sydney, where the complex will be located. Sydney will see an average increase in annual production of $260.7 million relative to base case values. Other than Sydney, the Hunter, Illawarra, mid North Coast and Richmond Tweed regions will see the greatest positive economic impact.

2.3.2 Regional employment

The regions that benefit most in percentage change relative to base case values from the project in terms of employment increase are:

- Richmond Tweed;
- Mid North Coast;
- Sydney;
- South East; and
- Illawarra.

The average annual increases in employment relative to the base case range from 0.14 to 0.27 per cent for these five regions.

In absolute terms, Sydney will see the largest increase in employment relative to base case value, followed by Richmond Tweed, Illawarra, Mid North Coast and Hunter. On average, an additional 1,540 jobs per annum are expected to be created in Sydney.

The impacts on regional production and employment are summarised in Table 2.5 and Table 2.6.
Table 2.5
REAL GROSS REGIONAL PRODUCT

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Top 5 Regions (percentage deviations from base case values)

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Top 5 Regions (absolute deviations from base case values, $m in 2012 prices)

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Source: Centre of Policy Studies
Table 2.6
REGIONAL EMPLOYMENT

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Source: Centre of Policy Studies
# Table 2.7

RESULTS FOR TAXES — $ MILLION (2012 PRICES)

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<td>25.8</td>
<td>26.4</td>
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</tbody>
</table>

Source: Centre of Policy Studies
2.4 Taxation Impacts

The most important result is that during the operations phase, NSW will gain significant and growing tax revenue, up to $60 million in 2027. About half comes from payroll taxes, which follows from increased employment throughout the state. Gaming taxes from Crown Sydney will be $114 million per annum.¹

There is also an increase in federal taxes, mainly GST.

Taxation impacts are shown in Table 2.7. These impacts are an underestimate as they do not account for various state taxes or local charges or corporate taxes, which the model does not estimate.

2.5 Broader Project Contributions

The modelling results in sections 2.2, 2.3 and 2.4 capture the quantitative impacts of the Crown Sydney project. There are also some broader contributions including:

- Integrated resort employees are generally better trained, and therefore better skilled and better paid, than employees in the leisure and entertainment sector generally; and

- Benefits for indigenous employment given Crown is a national leader in employment programs for indigenous employees.

These qualitative benefits exist because the business models of integrated resorts (especially integrated resorts at the high-end of the market) involve them supplying high quality services in a very competitive market — more so than, say, suburban pubs and clubs. Necessarily, casinos with top-of-the-market associated accommodation and entertainment have to have highly trained employees.

2.5.1 Employment and training

Crown Limited (Crown Limited 2012b) is the largest single-site private sector employer in Victoria (Crown Melbourne) and Western Australia (Burswood). Crown Melbourne provides employment for 8,600 people and Burswood provides employment for 5,100 people.

Crown Melbourne provides training through Crown College, a $10 million custom built training facility. The College is made up of four schools, each specialising in a particular area of business. They are the School of Business, School of Gaming, School of Hotels and School of Food & Beverage.

Crown College works with nine TAFE partners to provide training in the following accredited programs:

- Traineeships and Apprenticeship Programs;
  - SIT30707 Certificate III in Hospitality
  - CPP20207 Certificate II in Security Operations
  - CPP30407 Certificate III in Security Operations
  - SIT30807 Certificate III in Hospitality (Commercial Cookery)

¹ Estimate provided by Crown Limited.
• Crown Leadership Development Program; and
  – BSB40807 Certificate IV in Frontline Management
• Crown Management Development Program.
  – BSB51107 Diploma in Management.

Over 1,000 Crown employees are currently undertaking training across 10 qualification streams with high completion rates expected. The completion rate for traineeships is around 55 per cent compared to VET nationally of around 27 per cent.

In its 15 years of operation, the college has delivered over 2.5 million hours of training in technical skills, supervisory and management areas to over 64,000 employees. More than 4,300 employees have obtained formal qualifications since 2000.

For Crown’s commitment to quality learning and development, it has been the recipient of the following awards for training:

• Victorian Employer of the Year Award 2010; and,
• Australian Employer of the Year Award 2010.

2.5.2 Indigenous employment

Crown has also contributed significantly to indigenous employment. It was the first employer to sign the Australian Employment Covenant and has an Indigenous Employment Strategy in place that is regarded as a best practice model for large organisations. Crown aims to have employed 2000 Aboriginal Australians across its Melbourne and Burswood complexes by 2021 and has employed dedicated employment coordinators to achieve the goal.

To date, Crown has employed over 145 indigenous Australians. The indigenous workforce shows a high retention rate, with a significant number of people settling into permanent employment and building strong careers.

For its contribution, Crown has been the recipient of the following awards:

• Diversity@Work Award 2010 for Employment and Inclusion of Indigenous Australians — Large Organisations;
• Diversity Award for 2011 from Fairfax Media in recognition of Crown’s Indigenous Employment Program; and
• The Wurreker Award 2011 for Private Sector Employer Award for achievements in Aboriginal employment.

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5 Awarded by the Australian Government Department of Education, Employment and Workplace Relations.
2.6 Addressing Sydney’s Tourism Needs

2.6.1 Introduction

Sydney is the gateway to Australia and has internationally iconic tourist attractions such as the Harbour Bridge and Opera House, but a shortage of quality hotel accommodation is a major threat to Sydney’s tourism market over the next few years.

2.6.2 Shortage of hotels in Sydney

The hotel occupancy rate in Sydney is very high by international standards. The occupancy in Sydney for the 2011 December quarter was 86.3 per cent, with average room rates up 4.5 per cent to $201.54 (TTF 2012a).

A recent report by the Tourism Association of Australia found Sydney needs 150 to 550 new hotel rooms every year or 5,000 rooms by 2020 to meet the demands of the tourism sector (TAA NSW 2012). TTF, the Australian Hotel Association and the Accor Hotel Group have all expressed the need for more quality hotels to be built in Sydney (TTF 2012a).

Since the year 2000 only one five star hotel has been built in Sydney (The Darling).

Looking ahead, this short fall of tourist accommodation, especially in the upscale segment could cost NSW tourism and the NSW economy dearly.

The shortage of hotel rooms and undersupply of tourism infrastructure will constrain Sydney’s international and domestic tourism market growth. Sydney’s hotels performed above high expectations in 2011. While very strong forward outlook, very high level of occupancy and good room rate growth are predicted, high occupancy rate and minimal supply growth are expected to constrain future demand growth (Dransfield 2011).

2.6.3 Sydney needs quality hotels to be competitive

The recently released Euromonitor International Top 100 City Destinations Ranking placed Sydney as the 42nd most popular city in the world with 2.61 million international tourist arrivals in 2010. Sydney was Australia’s best performing city. Melbourne was in 88th place with 1.47 million tourist arrivals (Euromonitor International 2012).

Even though Sydney was the best performing Australian city on the 100 Top City Destinations Ranking, Sydney faces stiff competition from the region. Of the top 10 cities on the list, five were cities in Asia:

- Hong Kong ranked 1st with nearly 20 million international visitors and 18 per cent growth in tourist arrivals between 2009 and 2010;
- Singapore ranked 2nd with nearly 18.3 million visitors and 16 per cent growth in tourist arrivals between 2009 and 2010;
- Macau ranked 4th with nearly 13.1 million visitors and 25.9 per cent growth in tourist arrivals between 2009 and 2010;
- Bangkok ranked 5th with nearly 11 million visitors and 10 per cent growth in tourist arrivals between 2009 and 2010; and
Kuala Lumpur ranked 7th with nearly 10.4 million visitors and 10 per cent growth in tourist arrivals between 2009 and 2010 (Euromonitor International 2012).

In Singapore, the opening of new tourist attractions like the Marina Bay Sands Resort Sky Deck, new casinos (Marina Bay Sands and Resorts World Sentosa), new shopping centres like the Orchard Central, the Universal Studios Singapore and the Helix Bridge helped bring international visitors to the city, resulting in a tourist volume growth of 16 per cent in 2010 (Euromonitor International 2012). Tourist volume increased by a further 13.1 per cent in 2011 compared to 2010 (STB 2012).

Most Asian cities have the added advantage of being lower cost economies where international tourist dollars stretch further. As it is very difficult for Sydney to compete in terms of price, it is essential for Sydney to differentiate itself by offering quality tourist attractions and tourism products.

Sydney also faces significant competition from other states for both the international and domestic tourist dollar. In 2011, New South Wales attracted 52 per cent of international visitors to Australia but its share of visitor nights was 35 per cent, indicating tourists stayed for a short period of time in New South Wales. Within New South Wales, Sydney attracted nearly 47 per cent of total international tourists to Australia, 30 per cent of visitor nights and accounted for 31 per cent of total expenditure. Each Sydney-visiting international tourist spent on average $2,112 and $95 per night. Compared to some other major cities in Australia, some of these statistics were lower. For example, an international tourist visiting Melbourne spent $2,329 per visit and $102 per night while an international tourist to Perth spent $2,458 per visit and $97 per night (TRA 2011a).

### 2.6.4 A need to act quickly

Given the time it takes to build hotels, NSW needs to urgently start construction of new hotel accommodation or there will be a significant loss of potential tourism income and jobs to other Australian states and international cities.
Chapter 3

Value of Integrated Resorts to Tourism and the Economy

3.1 Introduction

The Australian tourism industry has been struggling since the Sydney Olympics in 2000. The causes have been a lack of investment in tourism infrastructure, especially high quality hotels; the decline of our traditional tourism markets; and recently the high Australian dollar. The future growth of the industry will come from the rising Asian middle class, particularly from China. These potential tourists seek different experiences from our traditional markets. They look to high quality hotels, dining and shopping — and the opportunity to gamble.

This Chapter considers in more detail the state of the tourism industry and how integrated resorts will play a critical role in helping Australian tourism convert the massive opportunity provided by the rise of Asia.

3.2 Current State of the Australian Tourism Industry

3.2.1 The tourism industry has been stagnant

The Australian tourism industry has been stagnant for over a decade. Arrivals by international tourists to Australia grew by an annual rate of 1.6 per cent over a 10 year period from 2001-2010 – this is well below the growth average of the Asian region of 6.1 to 9.2 per cent (UNWTO 2011).

Between 2000-01 and 2010-11, the number of Australians travelling overseas increased by 108 per cent (from 3.6 million to 7.4 million), while the number of international visitors to Australia increased by just 17 per cent (from 5.0 million to 5.9 million). The number of Australian residents taking overseas trips grew at a rate of 7.6 per cent per annum while arrivals by international visitors grew at an annual rate of 1.6 per cent.

The annual tourism balance of trade was a record deficit of over $7.2 billion in 2010-11. In 2010-11, Australians took 1.5 million more trips overseas than international visitors came to Australia. Of greater concern is that this decline in Australia’s attractiveness to tourists has been happening for over a decade. Australia’s tourism balance of trade surplus peaked at $3.6 billion in the year following the Sydney Olympics – it has been declining ever since. Australia’s tourism balance of trade has been in deficit for the past seven years.

Since 2004-05, tourism imports (or consumption made by Australians when travelling overseas) have exceeded tourism exports (or international visitor consumption in Australia) resulting in a tourism balance of trade deficit as shown in Figure 3.1. The deficit has been increasing at a rate of 61.4 per cent per annum since 2004-05, from a deficit of $4.0 million in 2004-05 to $7.2 million in 2010-11.
In 2010-11, Australians took 1.5 million more overseas trips compared to international arrivals (ABS 2011). Figure 3.2 shows that since 2007-08, the number of Australians taking overseas trips has exceeded the number of international arrivals, with the gap increasing (ABS 2011). In 2007-08, 70,000 more overseas trips were taken compared to 1.5 million in 2010-11, representing an annual compounded growth of 180 per cent in the last three years (2007-08 to 2010-11).
3.2.2  Reasons why the tourism industry has underperformed

Several key drivers contributed to the underperformance of the industry.

Traditional markets in decline

There have been lower visitation rates to Australia by traditionally high yielding markets such as Europe and North America due to both the regions’ weak economic performance, the strong Australian dollar and improved product offering from other competing destinations (TRA 2011). This trend has reduced Australia’s competitiveness as a destination for international visitors (TRA 2010).

Australia is a high-cost destination

Australia is a high-cost destination for international tourists due to a number of factors:

• The Australian dollar

As the TTF noted, the high Australian dollar means that Australia faces considerable competition from more affordable tourist destinations:

Another factor affecting our competitiveness is the strong Australian currency, which reduces our affordability as a destination. While it’s generally acknowledged that the exchange rate is not the key determinant in the decision to visit Australia, it does impact on the spending behaviour and choices of visitors once they arrive.

TTF 2012b

The high Australian dollar is a relatively recent phenomenon (since the global financial crisis) and is but one of the factors affecting the tourism industry. Given that the tourism balance of trade was in decline before the high Australian dollar was a factor, there are other inherent issues with the tourism industry that need to be addressed.

• High labour costs

In addition to the high Australian dollar, Australia has to contend with higher labour costs relative to most Asian tourism destinations. As the tourism industry is labour intensive, labour costs are a large and unavoidable component of operational costs for tourism operators.

Although labour costs are higher in Australia, it is important that Australia’s tourism industry continues to offer wages that attract talented individuals to provide superior service.

• Geographical location

Australia’s geographical location poses another challenge. Australia is very far from traditional tourist markets such as United States and Europe. Also for Chinese tourists, other tourism destinations in Asia are much closer than Australia. Hong Kong and Singapore, for example, have almost three billion people living within a six hour flight.
- **Competition from lower cost overseas destinations**

Another factor affecting our tourism trade is the increased competition from overseas destinations. This is best illustrated by the record number of Australians travelling overseas to many close and relatively cheap destinations such as Bali, Indonesia (TRA 2011). Assisted by a strong Australian dollar and growth in international low cost aviation capacity, an increasing proportion of the nearly $100 billion Australian domestic tourism market are travelling overseas.

Tourism Australia Chairman, Geoff Dixon, noted that Australia has to accept it is a high-cost destination and ensure the tourist experience is a superior and consummate offering with urban tourism infrastructure complementing arguably one of the most unique natural destinations in the world. Therefore, Australia needs to provide a diverse and unrivalled product, which is recognised as a compelling value proposition, despite being 'high-cost' (AFR 2012).

This has also been recognised by Australia’s TTF:

> With our high capital and operational costs, Australia’s tourism industry is unable to compete on price with many competitor destinations in our region. Our focus must be on providing potential visitors with a compelling value proposition. We must concentrate our efforts on improving our product, through investment in new and refreshed accommodation, attractions and activities.

TTF 2012b

**Lack of investment in tourism infrastructure**

As discussed in section 2.6, there is a lack of quality tourist infrastructure, especially quality hotels in Sydney. This is representative of the low level of tourism infrastructure investment in Australia - discussed below.

**Low level of tourism infrastructure investment**

The overall tourism investment climate has become more competitive and uncertain. The current high profitability of the resources and energy sectors has seen an increase in investment in these industries — investment in the resources and energy sector is expected to represent over half of all new investment in 2011–12 and 2012–13. While the resources and energy sector booms continue, lesser-performing industries, such as tourism, are predicted to continue to struggle to attract investment (TRA 2010).

Growth in Australia’s tourism industry investment has been low compared to other sectors. For the period 2003–04 to 2009–10, growth in investment by tourism-related industries was around 1.9 per cent per year, which was much lower than for all industries in Australia whose investment rate was 3.9 per cent per year (TRA 2011c). Furthermore, the tourism-related investment undertaken in this period was predominantly refurbishing existing assets rather than building new capital assets (TRA 2011c).

**Decline in hotel investment**

Accommodation investment can be used as a partial indicator of tourism investment. Figure 3.3 shows that non-dwelling investment in accommodation (with expenditure adjusted for inflation) was strong in the late 1980s and increased again in the late 1990s (reflecting the boost caused by the Sydney Olympics).
Accommodation in Australia is a critical component of infrastructure for tourism’s supply chain. Fluctuations in the availability and price of debt cause accommodation investment to be highly cyclical. The 1990s saw the introduction of strata-titled accommodation that led to a surge in investment (TRA 2011c). The 2000 Sydney Olympics also encouraged strong investment in Sydney’s accommodation stock. Subsequent falls in demand led to some redevelopment of this stock to residential accommodation, particularly in the early 2000s (TRA 2011c).

With the exception of serviced apartments, the majority of investment in accommodation in recent years has focused on the refurbishment of existing stock. Since 2000, building approvals for accommodation peaked in 2007 at around $2.0 billion (CPI-adjusted) or 5.4 per cent of total non-residential building approvals. Accommodation investment fell to $630 million in 2010, a level less than one third of 2007 levels (TRA 2011c).

This lack of new investment has led to a fall in the stock of high-end hotel rooms, with the percentage of five star rooms declining by 27 per cent in the last six years (TRA 2011c).

Research undertaken for the Tourism Ministers’ Investment and Regulatory Reform Working Group (IRRWG) has found that the cost of building a 350 room five star hotel in Sydney was 40 per cent higher than the cost of building a comparable size residential apartment complex (TRA 2011c). It was found that the rate of return for a hotel is less than one fifth (18 per cent) of that from the similar sized residential apartment complex (TRA 2011c).

Therefore, a number of factors have contributed to the downturn in the level of larger accommodation investment. Given the sensitive cyclical risk profile, the accepted lower revenue growth profiles for tourism and, higher construction costs - investment in accommodation is often considered less viable relative to other options (such as residential strata-type developments) (TRA 2011c).
3.3 The Opportunity is Asia

3.3.1 Introduction

With the United States and European economies experiencing a slow recovery from the global financial crisis of 2008 and the recent European debt crisis, the continued strong growth in Asian economies, especially China, makes Asia an appealing region from which to source tourists.

While our tourism industry has been struggling for the last decade we have a very large opportunity to turn that around if we successfully target the Asian outbound tourism market and deliver the tourism products and services they demand.

3.3.2 Size of the opportunity

The rising Asian middle class

The number of people in the Asian middle class could rise from 500 million in 2009 to 3.2 billion by 2030 (DIC 2011). The Chinese middle class is almost as large as the entire population of the United States and by 2030, China is expected to have approximately 1.4 billion middle class consumers compared to 365 million in the United States and 414 million in Western Europe (Forbes 2011).

David Gruen (Gruen D. 2011), executive director of the Macroeconomic Group in the Australian Treasury noted the importance of the Asian middle class to Australian services including tourism when discussing the re-emergence of China and India to the global economy:

The implications for Australia will depend on how rapidly the global supply of commodities rises to meet rising global demand... but has broader implications for Australia than simply heightened demand for our mineral and energy commodities.

But in the longer term, the increasing numbers of people in the Asian middle classes, with disposable incomes to match, will generate rising demand for a range of Australian goods and services – whether they will be foodstuffs, Australian tourist destinations, educational, financial and other professional services where Australia has a proven track record (emphasis added).

China and India are expected to experience the highest growth in gross domestic product per capita between 2010 to 2020 at 110 per cent and 88 per cent respectively. Nine of the top 10 largest growing economies are from the Asian region.
The large and rapid increase in Chinese outbound tourism

The outbound tourism market in China is one of the fastest growing in the world. It increased at a compound annual growth rate of 18.5 per cent between 2000 and 2010, from 10.5 million to 57.4 million people (HVS 2011). It is forecast to reach 100 million and be worth US$838 billion by 2020, driven primarily by increased wealth and the easing of travel restrictions (BCG 2011).

In the past decade China has also experienced by far the fastest growth of expenditure on international tourism, multiplying expenditure four times. Expenditure by tourists from China is now third highest in the world, behind Germany and the United States.

Chinese tourist arrivals to Australia have jumped from 156,000 ten years ago to over 500,000 last year.

Statistics from Tourism Australia revealed that Chinese tourist spending has risen by an average of 18 per cent per annum since 2000 to make them Australia’s most valuable tourist market (AFR 2012). This trend in increased spending is likely to continue as the growth of gross domestic product per capita in Asia is expected to increase as shown in Figure 3.5.

Tourism Research Australia (TRA) reported that for the year ending in December 2011, Australia welcomed 5.44 million international visitors, of which 2.22 million were Asian tourists (TRA 2011a).
While the Asian tourists’ share as a percentage of international tourists in 2010-11, has remained stable over the last decade, the increase in the number of tourists from some Asian countries, such as China and parts of Southern and Central Asia, have grown significantly over the same period (from 2000-01 to 2010-11) and have taken over tourist numbers from other traditional countries of origin (such as Japan). Table 3.1 shows that China experienced the highest increase in tourist numbers over the last decade.

Table 3.1

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<td>Singapore</td>
<td>8</td>
<td>296,300</td>
<td>315,500</td>
<td>19,200</td>
</tr>
<tr>
<td><strong>Loss</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>-50</td>
<td>724,200</td>
<td>364,100</td>
<td>-360,100</td>
</tr>
<tr>
<td>Taiwan</td>
<td>-34</td>
<td>124,300</td>
<td>82,100</td>
<td>-42,200</td>
</tr>
</tbody>
</table>

* China excludes special administrative regions (SARs) such as Hong Kong, and Taiwan.

Source: ABS 2011

With the European and North American markets struggling, strong growth from Asia is expected to drive the performance of the Australian inbound tourism sector (TRA 2011b). The number of international tourists is expected to rise a further 5.8 per cent to 2.6 million in 2012 (TRA 2011b). Tourists from regions outside Asia however, are forecast to increase only slightly by 0.4 per cent in 2012 relative to 2011 (TRA 2011b).

Between 2010 and 2020, Asian tourists are expected to contribute 55 per cent of the projected 2.2 million increase in tourist arrivals, with China making up approximately 42 per cent of the increase in tourist numbers from Asia. By 2020, Australia expects to welcome 8.1 million international tourists, of which 958,000 are expected to be from China.
Between 2010 and 2020, the Chinese and Indian tourist markets are expected to experience the highest annual growth in tourist numbers as shown in Figure 3.5. The Chinese tourist market is expected to grow 7.8 per cent annually and the Indian market at eight per cent per annum (TRA 2011b). By 2020, it is expected that Chinese tourists will make up nearly 12 per cent of all international tourists (TRA 2011b).

**Figure 3.5**

INTERNATIONAL TOURIST ARRIVALS COMPOUNDED PER ANNUM GROWTH FORECAST FOR 2010 TO 2020

It is important that Australia does not lose our competitive advantage of our close proximity to Asia through complacency (TTF 2012b). A business-as-usual approach may see Australia lose market share to competitors including the United Kingdom, United States and Europe (TTF 2012b).

**Other countries also recognise the opportunity**

As the Tourism and Transport Forum noted in a recent paper: Australia is not alone in recognising the potential of the Asian Century and it is critical that we don’t lose the competitive advantage of our proximity to Asia through complacency.

Conversely, putting the right framework in place will set Australia up for growth and ensure that we will have a sustainable tourism industry, providing economic and employment opportunities after the resources boom (TTF 2012b).

3.3.3 **Characteristics of high-end Asian and Chinese tourists**

The Tourism Research Australia International Tourist Visitor Survey (TRA 2011a) found that in 2010-11, 5.4 million international tourists visited Australia and spent a total of 195 million nights in the country. The top four countries of origin of visitors were: New Zealand (1,066,018), United Kingdom (573,553), China (512,632) and the United States of America (428,976).
Holidaymakers made up the majority (44 per cent) of international visitors in 2011. The total expenditure for the year ended December 2011 was $18.5 billion, which represented a four per cent increase from the year before. The average trip expenditure in Australia per international visitor was $3,396, while the average nightly expenditure was $95 (TRA 2011a).

In 2010-11, between 2.2 million (TRA 2011a) and 2.4 million (ABS 2011) tourists from Asia visited Australia. While Asian tourists made up about 40 per cent (ABS 2011 and TRA 2011a) of all international tourists, they spent a total of $9.7 billion, representing 52 per cent of total international tourist expenditure ($18.5 billion). A comparison of the characteristics of the average international tourist, the average Asian tourist and international tourists from the top four countries of origin is provided in Table 3.2.

As shown in Table 3.2, Asian tourists tend to visit for a longer period (higher average and median nights) and spend an average of 28 per cent more than the average international tourist.

Table 3.2

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>International tourist</th>
<th>Asian tourist</th>
<th>NZ</th>
<th>UK</th>
<th>China</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor number ('000)</td>
<td>5,439</td>
<td>2,222</td>
<td>1,066</td>
<td>574</td>
<td>513</td>
<td>429</td>
</tr>
<tr>
<td>Total nights in Australia ('000)</td>
<td>194,655</td>
<td>96,816</td>
<td>15,186</td>
<td>20,915</td>
<td>25,880</td>
<td>10,082</td>
</tr>
<tr>
<td>Average no. nights in Australia</td>
<td>36</td>
<td>47</td>
<td>14</td>
<td>36</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>Median no. nights in Australia</td>
<td>11</td>
<td>12</td>
<td>7</td>
<td>20</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Expenditure in Australia ($ million)</td>
<td>18,470</td>
<td>9,694</td>
<td>1,562</td>
<td>1,675</td>
<td>2,888</td>
<td>1,193</td>
</tr>
<tr>
<td>Average expenditure per tourist ($)</td>
<td>3,396</td>
<td>4,362</td>
<td>1,466</td>
<td>2,920</td>
<td>5,633</td>
<td>2,782</td>
</tr>
<tr>
<td>Average expenditure per night ($)</td>
<td>95</td>
<td>100</td>
<td>103</td>
<td>80</td>
<td>112</td>
<td>118</td>
</tr>
</tbody>
</table>

Source: TRA 2011a

Comparing all international tourists by nationality in 2010-11, the following trends could be observed:

- The average expenditure per tourist:
  - Chinese tourists topped the list at $5,633 per person. Chinese tourists spent 66 per cent more than the average international tourist and 29 per cent more than the average Asian tourist (TRA 2011a).
  - Korean tourists ($5,395) and Indian tourists ($4,773) are in second and third place (TRA 2011a).

- The average expenditure per night:
  - Chinese tourists spent an average of $112 per night, which is towards the higher end of the expenditure range across all international tourists (TRA 2011a).
Singaporeans spent the most per night at $171 with Malaysian ($125) and Indonesian ($120) tourists in second and third place (TRA 2011a).

- The most valuable type of tourist:
  - Younger Chinese tourists (aged up to 29 years) were valuable visitors and made up 31 per cent of total Chinese visitors in 2010 but contributed 70 per cent of total expenditure, averaging $13,101 per visitor (TRA 2011d).

- Destinations:
  - Chinese tourists preferred spending time in major cities, choosing to spend 83 per cent of their nights in Sydney, Melbourne, Brisbane and Adelaide and 7 per cent of nights in regional Australia (TRA 2011d).

The Chinese inbound tourist market is of particular importance to Australia’s tourism industry. Chinese tourists had the highest per tourist expenditure in 2010-11 contributing a total of $3.26 billion to Australia’s economy – making it our most valuable inbound tourist market. By 2020, Tourism Australia expects the Chinese inbound tourist market to be worth between $7 to $9 billion annually (TA 2011).

**Chinese tourists want luxury goods and services**

Given the importance of Chinese visitors to Australian tourism, it is critical that we have a comprehensive understanding of what attracts them to a destination. Unless we can deliver the product and service they demand, we will fail to capitalise on our status as the number one Chinese ‘must visit’ destination (TRA 2012).

Evidence suggests these consumers are attracted to luxury hotels, world-class restaurants and high-end retail shopping. This is demonstrated by the rapid expansion of luxury hotels and luxury goods outlets across China and also, in the many international tourist destinations trying to attract Chinese consumers.

A 2011 McKinsey & Company report into the consumption habits of China’s middle class found that the rapid increases in wealth, and the shifting social mores that sanction the display of that wealth, are driving a growing infatuation for luxury goods. The study found that by 2015 China will account for over 20 per cent of the global luxury market ($180 billion RMB), overtaking Japan as the world’s largest luxury market (McKinsey & Company 2011).

The world’s priciest and most prestigious luxury brands are scrambling to erect massive retail shrines in urban China’s tiniest shopping districts. Louis Vuitton now has 36 stores in 29 cities across mainland China, compared to stores in just 10 cities in 2005. Gucci has expanded even faster, starting with just six stores in the beginning of 2006, ramping up to 39 stores today. Hermes quadrupled its stores from five in 2005 to 20 today.

McKinsey & Company 2011

**Chinese tourists are attracted to integrated resorts**

Given the importance of luxury goods and services to China’s rising middle class it is easy to understand why they are attracted to luxury integrated resorts which offer unrivalled accommodation, excellent restaurants and high-end retail.

Dr Marc Faber, an investment analyst found that “Eighty per cent of Chinese traveling outside the country for the first time head for a casino and 90 per cent of Chinese who travel to the US visit Las Vegas” (Faber M. 2011).
Macau and Singapore experiences typify the popularity and appeal of integrated resorts to Chinese tourists. In 2011, 16 million mainland Chinese visited Macau. That was a 20 per cent increase on 2010 and a 60 per cent increase on 2006.

Since the opening of the two integrated resorts in Singapore, Chinese tourist arrivals have increased from 940,000 in 2009 (before the opening of the resorts) to 1.58 million in 2011. Represented as percentages, Singapore experienced an increase in Chinese tourists of 25 per cent in 2010 (the first full year of operation of the integrated resorts), and a further 35 per cent in 2011 (STB 2012). Figure 3.6 below shows the increase in Chinese tourist numbers to Singapore over a 10-year period from 2002 to 2011. In particular, Chinese tourist numbers increased substantially in 2010 and 2011 since the opening of the two integrated resorts.

**Figure 3.6**

**CHINESE TOURISTS TO SINGAPORE 2002 TO 2011**

![Graph showing Chinese tourists to Singapore from 2002 to 2011](source: STB 2012)

### 3.4 Asian Countries Are Building Integrated Resorts To Boost Tourism

The integrated resort sector in Asia has been growing rapidly over the past decade with further plans to continue to expand. This growth has been spawned from the success of Macau’s and Singapore’s integrated resort sector in attracting tourism, foreign investment and higher levels of economic growth. Both Macau’s and Singapore’s tourism growth has been aided by their geographic and political position to the ever-expanding Chinese tourist market.

Local and regional governments in Japan, Taiwan and Vietnam have recognised that integrated resort developments have the potential to increase tourism, encourage economic development, increase employment and lead to higher incomes.

Below are some details of the investment in integrated resorts in Asia which aim to attract a growing slice of Chinese and other tourism in future.
In 2005, the government of Singapore announced it would grant licences for Singapore’s first two integrated resorts. Following a combined investment of over S$14 billion - Resorts World Sentosa (RWS) and Marina Bay Sands (MBS) were opened in 2010. The Singapore government has supported the development of the integrated resorts through a number of initiatives aimed at attracting visitors from a wide range of emerging countries such as China.

Resorts World Sentosa (RWS) was developed by Genting International and opened in February 2010 (KPMG 2010). The resort is Singapore’s largest integrated resort and covers 49-hectares on the island of Sentosa. The resort includes six hotels with about 1,800 rooms in total, a casino with approximately 1,600 electronic gaming machines and over 500 table games, meeting, conference and exhibition facilities, Universal Studios Singapore theme park, and numerous shopping, entertainment and food outlets.

The Marina Bay Sands (MBS) resort, located adjacent to the Singapore CBD, was developed by Las Vegas Sands Corp. The development opened in April 2010 and includes a world class casino, two theatres with a seating capacity of approximately 4,000, a Convention and Exhibition Facilities Block, three hotel towers with 2,560 rooms and suites, a 60,000 square foot Art-Science Museum, the 12,400 square metre Sky Park, 300 specialty retail stores, the largest ballroom in South East Asia with seating capacity of 8,000 and numerous entertainment, shopping and food facilities. The complex houses 1,900 electronic gaming machines and over 600 table games.

In 2005 the Singaporean government released its ‘Tourism 2015’ plan with the goal to increase its’ standing as a competitor for tourism exports. The plan included the following targets:
- To attract 17 million visitors by 2015 from eight million in 2004;
- To generate an additional S$30.0 billion (AU$22.8 billion) of tourism receipts; and
- To create an additional 100,000 service sector jobs by 2015 (KPMG 2010).

In working towards this plan, the government of Singapore has gone to great lengths to enable the two integrated resorts to be successful so as to realise the country’s tourism goals. These measures include:
- Legalising casino gambling;
- Encouraging Business Events (BE) and meetings, conferences and exhibitions;
- Expanding the Government Land Sales Programme;
- Expanding Changi Airport functions; and,
- Working on enabling the workforce (KPMG 2010).

The policies adopted by the Singaporean Government worked together to promote growth in the tourism sector. The Singapore Tourism Board also has a dedicated team focusing on promoting and developing the integrated resorts.
Research by the World Economic Forum suggests that Singapore is well on its way to achieving its goal. In 2009 Singapore moved up to 10th place from 16th place in the World ranking and second in the Asia Pacific ranking of travel and tourism competitiveness (WEF 2010). In 2011, Singapore retained its 10th placing in the World ranking and topped the Asia Pacific ranking (WEF 2011). During the same period, Australia’s travel and tourism competitiveness decreased moving from 9th to 13th.

**Economic benefits**

The economic impacts of Singapore’s integrated resorts on the broader economy come in a variety of forms, both direct and indirect. It has been estimated that spending at integrated resorts contributed to 47 per cent of the Singapore tourism industry’s year-on-year growth in 2011 (ATW 2011).

In the first nine months of 2010, the two integrated resorts contributed S$3.7 billion (AU$2.8 billion) or 1.7 per cent of nominal GDP, the equivalent of nearly half of the total contributed by the tourism industry (China Economic Net, 2011).

Listed below are some of the major economic contributions of the two resorts.

**Tourism growth**

- Tourism revenue increased 49 per cent to S$18.8 billion (AU$14.3 billion) in 2010 (STB 2012).
- Hotel room revenues were estimated at S$1.9 billion (AU$1.4 billion) in 2010, increasing 21.8 per cent year-on-year (STB 2012).
- Visitors per year increased from 8.3 million in 2004 to 13.2 million in 2011 (STB 2012).

**Boost in GDP in first full year of integrated resorts’ operation**

- Singapore’s GDP increased by 14.5 per cent in 2010 (MTIS 2011).
- GDP from services producing industries grew 10.5 per cent in 2010 (MTIS 2011).

**Sustained economic growth**

- Singapore’s GDP growth for 2011 was 4.9 per cent (MTIS 2012).
- Tourism receipts were S$22.2 billion (AU$16.8 billion) for 2011, an increase of 17 per cent from 2010 (STB 2012).
- Accommodation receipts for 2011 increased by 19 per cent from 2010 (STB 2012).

**Macau**

Macau, located off the coast of mainland China, south west of Hong Kong, has a long history of casino gambling which forms a prominent feature of its economy. Since the removal of a monopoly on gambling in 2002, the sector has opened up to include multiple operators.
Macau is geographically the closest legal gambling area, to the high-income regions of China, Guangdong, and Hong Kong. The Macau government is particularly supportive of the integrated resort sector as it recognises its effect on attracting visitors and encouraging spending in their region.

There are currently over 30 casinos in Macau, many of which include accommodation and complementary services with the newest being the US$4.4 billion Cotai Central, which opened in April 2012. Four of the largest integrated resorts in Macau are The Venetian Resort Hotel Macau, Wynn Resort Macau, MGM Macau and The City of Dreams Macau.

**Economic benefits**

Macau’s largest export and biggest contributor to GDP is tourism. The tourism sector is the largest employer of Macau labour, the major contributor to government revenues and the main driver of economic growth. In 2011, Macau received more than 28 million visitors (DSEC 2011), which was more than five times the number of visitors in 1998 before the opening of the market in 2002. Relative to 2010, GDP in 2011 expanded by 20.7 per cent in real terms to MOP 292.1 billion, largely driven by an increase in exports of gaming services. The gross gaming revenue increased by 41.9 per cent, visitor arrivals rose by 12.2 per cent and total visitor spending grew 20 per cent. There was also an 11 per cent increase in hotel guests leading to a 4.3 per cent growth in hotel occupancy rate. A buoyant tourism industry boosted retail sales, resulting in an increase of 41.7 per cent. The relative importance of exports of tourism and gaming services relative to GDP rose to 58.8 per cent compared to 55.9 per cent in 2010 (DSEC 2011b).

Below are some of the major economic benefits of recently opened and planned integrated resorts to the Macau economy:

**Cotai Central (opened in April 2012)**

- Constructed at a cost of US$4.4 billion (Reuters 2012a).

**Galaxy Macau (opened in May 2011)**

- Constructed at a cost of US$2 billion.
- Second expansion phase commenced in 2012, with a target completion date of 2015 and at a cost of HK$16 billion (US$2.06 billion) (Galaxy Entertainment 2012).

**Wynn Cotai Resort (To open in 2016)**

- Macau government approved a new 51-acre casino resort on the Cotai Strip on 1 May 2012.
- Expected to cost US$2.7 billion to construct (Las Vegas Review Journal 2012a).
• Wynn Macau will lease the Cotai land from the Macau government for 25 years with renewal rights. In addition to a $193.4 million land premium payment, Wynn Macau is required to pay $771,738 a year in rent during the development phase and $1.08 million a year in rent once development is completed (Las Vegas Review Journal 2012b).

For case studies on current and proposed integrated resorts in Malaysia, the Philippines, Japan, Vietnam and Taiwan, please refer to Appendix B.

3.5 Importance of Integrated Resorts to Australia’s Tourism Future

Integrated resorts are Australia’s most popular tourism destinations. In the Euromonitor International’s Top Tourist Attraction Ranking (Euromonitor International 2011), which ranked tourist attractions according to number of annual visitors, the top three Australian tourist attractions were integrated resorts. Crown Melbourne was the highest ranked (ranked 17 with nearly 11 million visitors in 2010), followed by Jupiters Casino (ranked 18 with 10.6 million visitors in 2010) and Star City\(^6\) (ranked 31 with 9 million visitors in 2010). The Sydney Opera House was ranked 37 with 7.4 million visitors in 2010.

In a submission to the Productivity Commission’s Inquiry into Gambling, the Tourism & Transport Forum highlighted the significant contribution by integrated resorts in Australia in 2008:

• Of the 5.2 million international visitors to Australia, 1.1 million (19.4 per cent) of those tourists visited a casino;

• Expenditure of tourists who visited a casino accounted for $4.9 billion or 30 per cent of total tourist expenditure ($16 billion);

• Casino visiting tourists spend approximately $4,941 per person compared to $2,628 per non-casino visiting tourists;

• Tourists from the top 10 tourism markets into Australia had a high propensity to visit casinos. The percentage of tourists who visited casinos by country of origin include, 49 per cent from Taiwan, 39 per cent from Korea, 36 per cent from China, 34 per cent from Hong Kong, 30 per cent from India and 26 per cent from Malaysia, Singapore and Indonesia; and

• Tourists who visited a casino tended to spend more per visitor night. In particular, Chinese tourist who visited a casino spent $143.43 per visitor night compared to $118.86 for a Chinese tourist that does not visit a casino and $100.69 for all international tourists who do not visit a casino (TTF 2009).

3.6 Other Economic Benefits

The casino industry in Australia generated over $4.4 billion in revenue in 2009-10 (ACG 2011). In 2009-10, Australian casinos received 78 per cent of their revenues from gaming, 13 per cent from food and beverage and 5 per cent from accommodation. Of the gaming revenues, international VIP programs contributed a significant share at 20.1 per cent (ACG 2011).

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\(^6\) Now called The Star.
Casino operating expenditure increased at a rate of 7.4 per cent since 2002-03 to $2.4 billion in 2009-10 (ACG 2011). Wages formed the largest component at 20 per cent. The Australian casino industry employed 24,714 people in 2009-10 (ACG 2011). In 2009-10 casinos contributed $739 million in capital expenditure. Casinos paid approximately $1.16 billion in taxes in 2009-10 (ACG 2011).

The number of casino patrons has fluctuated over recent years, from 41 million in 2002-03 to 49.6 million in 2007-08 before falling to 47.7 million in 2009-10 (ACG 2011). The fall in the two years to 2009-10 can be attributed to the global financial crisis and the decision of many Australians to travel overseas. Visits by international tourists were 2.42 million in 2009-10 (ACG 2011). In 2007-08, one million international tourists made 2.4 million visits to Australian casinos, spending a total of $4.9 billion or $4,940 per tourist (ACG 2011).

3.7 Value of VIP Customers to the Australian Economy

The value of VIP casino gaming customers to the Australian economy can be summarised as:

- The VIP Casino business in Australia is estimated to be worth $1 billion in FY 2012 and it also generates additional significant high tourism on-spend.
- The VIP business supports Australian integrated resorts in investing in additional non-gaming infrastructure, including new and upgraded hotels, convention and conference facilities, theatres, cinemas, restaurants and retail outlets etc, which results in further tourism on-spend.

The Australian VIP business mainly consists of high-value players, predominantly from Asia, and more specifically from mainland China and Hong Kong. There is an estimated 30 million Chinese patrons in the VIP gambling market.

In 2011/12 the international VIP business in Australia is estimated to be worth $1 billion (prior to including the value of the tourism on-spend). Proceeds generated in VIP rooms enable casinos to further invest in tourism infrastructure, including world-class hotels, convention and conference facilities, theatres, cinemas, restaurants and retail outlets, which results in further tourism on-spend. Currently the casino industry is in the process of spending over $4.6 billion on redeveloping and building new tourism infrastructure. Of equal importance is the fact that 35 per cent of all revenue earned in Australian casinos returns to the community through taxes paid to the three levels of government.

Despite Australia’s geographic isolation, Australian casinos currently attract about 3 per cent of the highly competitive international VIP gaming business. Looking to replicate Singapore’s and Macau’s success, competition for this market is increasing with new integrated resorts opening in the Philippines and Vietnam, and possibly Japan and Taiwan.

When VIP customers come to Australia they visit for five to seven days (a much longer stay than for local and interstate customers) and are mostly accompanied by family or friends who participate in a range of other tourism activities beneficial to the economy, such as shopping, visiting major tourist attractions and other destinations apart from the city in which they are staying. It has also been known for these influential and highly regarded business people’s contribution to develop beyond tourism expenditure into investment in Australian businesses.
State and territory regulators recognise the importance of the high-roller business and Australia’s place within a global market. For that reason state and territory governments have responded with a different taxation scheme for the VIP business, setting rates, which are competitive with Las Vegas and the Asian markets.

There can be no doubt that competition is increasing in the worldwide VIP business. Singapore’s casinos offer a lower tax rate on VIP gaming than Australia and the Singapore government is focused on targeting high value players for Marina Bay Sands and Resorts World Sentosa – Singapore’s two integrated resorts.

3.8 Casino Industry: Provider Of Private Sector Tourism Infrastructure Investment

In recent times, Australia’s tourism-related industry and tourism specific investments have been in existing assets and growth has been lagging behind other industries. As a result of low investment, tourist accommodation stock in Australia and Sydney has shown only moderate growth since 2000.

Seeking increased investment funds for tourism and its related industries, as part of the 2020 Tourism Industry Potential, will be a major challenge in the coming years, especially given the tight government budgetary constraints in recent times. Despite this, private investment in tourism infrastructure has become increasingly necessary (TRA 2011c).

World class tourism assets are imperative to attract visitors and are critical for the future of tourism in Australia. Tourism attractions require significant capital outlay and offer returns not only to the investors but also the wider economy. The current misalignment between investment and return constitutes a market failure in the operation of tourism visitor attractions (TTF 2009).

Given that integrated resorts are profitable, they are capable of attracting the significant private investment currently absent from Australia’s tourism sector (TTF 2009). As such, the Crown Sydney integrated resort proposal offers Sydney the opportunity to receive significant private investment in its tourism sector and to receive a world class tourist attraction capable of attracting increased visitor numbers, resulting in increased tourist expenditure — therefore, expanding the tourism sector and benefitting the broader economy.

The services offered by integrated resorts include not only gaming but also hotels, convention facilities, exhibition spaces, shopping and retail outlets and various other entertainment facilities.

In 2007-08, the Australian casino industry generated a social surplus of $3 billion and over the following three years invested approximately $1.5 billion in major capital works to enhance the offerings of their complexes (TTF 2009). In recent years the casino industry has been the sole investor in hotels in capital cities, Crown Metropol and The Darling (TTF 2009). Further examples of investment in tourism infrastructure by the casino industry include:

- Crown Limited;
  - Between 2007 and 2013, Crown Limited will spend over $2.2 billion maintaining, improving and expanding its facilities in Melbourne and Perth (Crown Limited 2012b), including:
$1.5 billion capital expenditure program between 2007 to 2013 for Crown Melbourne that included a $212 million expansion and upgrade to its VIP facilities, refurbishment and upgrade of the main gaming floor and other areas, the construction of Crown Metropol and convention facilities (Crown Limited 2010, 2012b);

$750 million refurbishment of the Burswood Entertainment Complex due for completion in 2012 (Crown Limited 2011);

- Echo Entertainment Group;
  - $860 million refurbishment of The Star in Sydney (Echo Entertainment Group 2010), completed in 2011;
  - $350 million refurbishment of Jupiters Gold Coast (Tabcorp 2010);
  - $260 million investment to significantly upgrade and expand the entertainment and gaming facilities available at the Treasury Casino & Hotel Brisbane (Tabcorp 2010);
  - $15 million investment to upgrade facilities at Jupiters Townsville (Tabcorp 2010);

- SkyCity Entertainment Group;
  - $30 million capital upgrade of SkyCity Darwin (SkyCity 2007).

The casino industry is well placed to fund the development of tourism infrastructure through gaming revenues generated by gaming activity in casinos (TTF 2009).

3.9 Conclusion

This report illustrates the economic benefits of the Crown Limited proposal which will be significant, sustained and far-reaching, covering nearly all regions in NSW.

The report also details how integrated resorts like the one Crown is proposing can play a critical role in delivering new tourism infrastructure, which will allow Australia to compete with other nations and capitalise on the massive opportunity provided by the rising middle class in Asia.
Appendix A

The MMRF Model

A.1 Monash Multi Regional Forecasting (MMRF) Model

Overview

MMRF is a dynamic, multi-sectoral, multi-regional model of Australia. A full description of the model is available in Adams et al. (2008). The model distinguishes 58 industries, 63 products produced by the 58 industries, 8 states/territories and 56 sub-state regions. At the state/territory level it is a fully specified bottom-up system of interacting regional economies. To allow estimates of the effects of policy at the sub-state level, a top-down approach is added.

The key property of a general equilibrium model is that productive resources are assumed, correctly, to be finite, and everything must add up, so that, for example, more employment in one Australian state must imply less employment in another (except in the short run of up to a few years). Another key property is that every industry is linked to every other industry — they all buy and sell from each other, in varying degrees. This is the way that shocks that begin in one industry are spread through the economy.

MMRF forecasts both macroeconomic variables like Gross Domestic Product (GDP) and the trade balance and also industry output and employment from 58 industries.

A.2 General Equilibrium Core

The nature of markets

MMRF determines regional supplies and demands of commodities through optimising behaviour of agents in competitive markets. Optimising behaviour also determines industry demands for labour and capital. Labour supply at the national level is determined by demographic factors, while national capital supply responds to rates of return. Labour and capital can cross regional borders in response to relative regional employment opportunities and relative rates of return.

The assumption of competitive markets implies equality between the basic price and marginal cost in each regional sector. Demand is assumed to equal supply in all markets other than the labour market (where excess supply conditions can hold). The government intervenes in markets by imposing ad valorem sales taxes on commodities. This places wedges between the prices paid by purchasers and basic prices received by producers. The model recognises margin commodities (e.g., retail trade and road transport freight), which are required for each market transaction (the movement of a commodity from the producer to the purchaser). The costs of the margins are included in purchasers’ prices but not in basic prices of goods and services.
Demands for inputs to be used in the production of commodities

MMRF recognises two broad categories of inputs: intermediate inputs and primary factors. Firms in each regional sector are assumed to choose the mix of inputs that minimises the costs of production for their levels of output. They are constrained in their choice by a three-level nested production technology. At the first level, intermediate-input bundles, primary-factor bundles and other costs are used in fixed proportions to output. These bundles are formed at the second level. Intermediate-input bundles are combinations of goods imported from overseas and domestic goods. The primary-factor bundle is a combination of labour, capital and land. At the third level, inputs of domestic goods are formed as combinations of goods sourced from each of the eight domestic regions, and the input of labour is formed as a combination of inputs of labour from nine different occupational categories.

Household demands

In each region, the household buys bundles of goods to maximise a utility function subject to a household expenditure constraint. The bundles are combinations of imported and domestic goods, with domestic goods being combinations of goods from each domestic region. A Keynesian consumption function is usually used to determine aggregate household expenditure as a function of household disposable income.

Demands for inputs to capital creation and the determination of investment

Capital creators for each regional sector combine inputs to form units of capital. In choosing these inputs, they minimise costs subject to a technology similar to that used for current production; the only difference being that they do not use primary factors directly.

Governments’ demands for commodities

Commodities are demanded from each region by regional governments and by the Federal government. In MMRF, there are several ways of handling these demands, including:

- by a rule such as moving government expenditures with household consumption expenditure or with domestic absorption or with GDP;
- as an instrument which varies to accommodate an exogenously determined target such as a required level of government deficit; and
- exogenously.

Other costs is a miscellaneous cost category. Unless otherwise specified, the price of other costs is indexed to the price of private consumption, while the volume moves with industry output. It is assumed that the income from other costs accrues to the government.
**Foreign demand (international exports)**

MMRF adopts the ORANI specification of foreign demand. Each export-oriented sector in each state faces its own downward-sloping foreign demand curve. Thus, a shock that reduces the unit costs of an export sector will result in increased export volume, but a lower foreign-currency price. By assuming that the foreign demand schedules are specific to product and region of production, the model allows for differential movements in foreign-currency prices across domestic regions.

**Regional labour markets**

The response of regional labour markets to policy shocks depends on the treatment of three key variables – regional labour supplies, regional unemployment rates and regional wage differentials. The main alternative treatments are:

- to set regional labour supplies and unemployment rates exogenously and determine regional wage differentials endogenously;
- to set regional wage differentials and regional unemployment rates exogenously and determine regional labour supplies endogenously (via interstate migration or changes in regional participation rates); and
- set regional labour supplies and wage differentials exogenously and determine regional unemployment rates endogenously.

**Investment**

Investment undertaken in year $t$ is assumed to become operational at the start of year $t+1$. Under this assumption, capital accumulates according to (industry and region indexes dropped for convenience):

$$K(t + 1) = (1 - DEP) \times K(t) + Y(t)$$

where:

- $K(t)$ is the quantity of capital available in industry at the start of year $t$;
- $Y(t)$ is the quantity of new capital created during year $t$; and
- $DEP$ is the rate of depreciation, which is treated as a fixed parameter.

Given a starting point value for capital in $t=0$, and with a mechanism for explaining investment through time, equation (1) can be used to trace out the time paths of industry capital stocks.

Following the approach taken in the MONASH model (Dixon and Rimmer, 2002, Section 16), investment in year $t$ is explained via a mechanism of the form:

$$\frac{K(t+1)}{K(t)} - 1 = F^{[EROR(t)]} \left[ \frac{EROR(t)}{RROR(t)} \right]$$

where

- $EROR(t)$ is the expected rate of return in year $t$;
- $RROR(t)$ is the required rate of return on investment; and

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MONASH (Dixon and Rimmer, 2002) and MMRF have evolved from the Australian ORANI model (Dixon et al. (1977) and Dixon et al. (1982)).
• \( F' [\ ] \) is an increasing function of the ratio of expected to required rate of return with a finite slope.

In the current version of MMRF, it is assumed that investors take account only of current rentals and asset prices when forming current expectations about rates of return (static expectations). An alternative treatment available in the MONASH model, but not currently for MMRF, allows investors to equate the expected rate of return with the present value in year \( t \) of investing $1, taking account of both the rental earnings and depreciated asset value of this investment in year \( t+1 \) as calculated in the model (rational expectations). In standard closures of the model, RROR is an exogenous variable which can be moved to achieve a given change in capital.

### A.3 Base Case Scenario

The base case scenario is the control scenario against which alternative policy scenarios are compared. Dynamic policy simulations do not always require a detailed base case. Indeed it is often sufficient to capture some of the main macroeconomic trends, and to incorporate little structural detail.

**Gross Domestic Product**

Real GDP grows at an average annual rate of 3.1 per cent between 2010 and 2020, slowing to an average rate of 2.6 per cent between 2020 and 2030. Average annual growth over the full projection period is projected to be 2.9 per cent, which is consistent with the historical norm for Australia.

In the four years after 2010, growth exceeds three per cent, supported by strong growth in exports as the world recovers from the Global Financial Crisis. Thereafter, GDP growth is projected to stabilise and then to slowly fall in line with demographic projections from the IGR.

In line with recent history, the export-oriented states, QLD and WA, are projected to be the fastest growing state economies, followed by NSW and VIC. SA and TAS are the slowest growing, though the gap between the slowest and fastest growing states and territories is a little less than in recent times.

**Real national private consumption**

Real national private consumption grows at an average annual rate of 3.0 per cent in the first half of the period and 2.9 per cent in the second half. Growth of 2.9 per cent is projected for the full projection period. The time profile for growth in consumption is similar to that for real GDP. Initially strong, then stabilizing and slowly falling.

Not surprisingly, the regional pattern of growth for consumption is similar to that for GDP: fastest growth occurs in QLD and WA; slowest growth in TAS and SA.
International exports and imports

Over the past fifteen years the volumes of international exports and imports have grown rapidly relative to real value added in each region. This reflects several factors: declining transport costs; improvements in communications; reductions in protection in Australia and overseas; and technological changes favouring the use of import-intensive goods such as computers and communication equipment. All these factors are extrapolated into the base case, but their influence is assumed to slowly weaken. Thus, on average, trade volumes grow relative to GDP by about 1.5 per cent per year. Note that with growth in imports expected to be in line with growth in exports, little improvement is expected in the current imbalance between export and import volumes.

Terms of trade

Assumed changes in Australia’s terms of trade ensure that the terms of trade, which are at a 50-year high, return to a historically normal level by 2020 and remain unchanged thereafter. Coupled with little change in the net volume of trade, a return to more normal levels in the terms of trade implies little change in Australia’s trade-account deficit as a share of GDP across the full projection period.

A.4 Scenario Modelling

Data input assumptions

The construction phase is assumed to be over three years, starting in 2015 and continuing in 2016 and 2017. Investment spending is $333.3 million (constant prices) in each of the three years resulting in a total investment of $1 billion over three years.

In the modelling, the complex is fully operational from 2018. The operational phase is modelled over 10 years from 2018 to 2027. Contribution to the economy is expected to come from two expenditure sources, namely the revenue that is generated from gaming, hotel and entertainment services provided by the complex and the operating costs of running the complex (e.g. taxes, commissions, employee costs). The annual projected revenue and operating costs by sources are provided in Table A.1.
Table A.1

The Financial Projections have been redacted as they are commercial in confidence.
Appendix B

Integrated resorts case studies

B.1 Malaysia

Although it is illegal in Malaysia for Muslim Malaysians to gamble, Malaysia has operated its one casino (Resorts World Genting) since 1971, which attracts many Chinese Malaysians and foreigners. The resort is located in the Genting Highlands in Malaysia and is operated by Genting Malaysia Bhd. The resort includes six hotels with approximately 10,000 rooms, over 200 food, beverage and retail outlets and various forms of entertainment (Genting Malaysia Berhad 2010).

Economic benefits

The economic impacts of Resorts World Genting consist of impacts on tourism, employment and GDP. Manufacturing and tourism are currently Malaysia’s largest exports. Tourism is estimated to have grown at an average rate of 17.6 per cent per year over the past 30 years (KPMG 2010). Over the same period tourist arrivals have grown at a rate of 10.2 per cent per year.

Some of the major economic benefits of integrated resorts (IRs) to the Malaysian economy include:

- In 2010, the resort received 19.9 million visitors (compared to 19.5 million in 2009). In comparison, a total of 24.6 million tourists visited Malaysia (compared to 23.6 million in 2009) (Genting Malaysia Berhad).
- The resort’s revenue in 2010 was RM 5.3 billion (Genting Malaysia Berhad 2010).
- In 2010, 13,900 people were employed at the resort (Genting Malaysia Berhad 2010).

B.2 Philippines

Since 1977, the Philippines has had a sole operator of the casino and gambling sector, the Philippines Amusement and Gaming Corp. (PAGCOR), a state controlled entity. The Philippines is located such that it has access to the growing Asian tourism market.

PAGCOR controls and operates all gaming facilities in the Philippines. Currently under development is the proposed Bagong Nayong Philippine Manila Bay Entertainment City (BNP). The development is to be constructed over three phases and once fully developed will have contributed between US$10-$20.0 billion to the Philippine economy (BNP 2012).
**Economic benefits**

PAGCOR is currently the Philippine government’s second largest contributor of revenue, second to the Tax Authority. PAGCOR earned P3.35 billion in gross income for January 2012 representing a P600 million growth (22 per cent higher), compared to the same month last year (P2.76 billion). PAGCOR expects income in 2012 to be P45 billion, which will be 22 per cent higher than 2011 (PAGCOR 2012).

The development of the BNP is expected to triple PAGCOR’s income from $500 million to $1.5 billion annually (BNP 2012), which in turn will increase government revenue.

The BNP Term of Reference (ToR) requires it to generate an additional 1 million visitors per year. This would mean an increase in tourist numbers of 50 per cent on current numbers. PAGCOR Chairman, Ephraim Genuino, expects that the development could reach 10 million tourist arrivals in 5 years (BNP 2012).

Predicted economic benefits to the Philippines include:

- The ToR estimates 40,000 workers will be employed at the IR.
- The ToR estimates an additional 150,000 jobs will be created outside to service the integrated resort.
- The construction project is expected to initially generate 250,000 jobs for the local work force (BNP 2012).

**B.3 Vietnam**

Vietnam has a conservative stance on gambling, with casino gaming still illegal for Vietnamese residents. Any integrated resort development in Vietnam would therefore be for the purpose of attracting foreign visitors and their expenditure.

There are small casino-style resorts across the country. These resorts include:

- The Silver Shores International Resort at Da Nang Beach with over 600 rooms, meeting and banquet facilities, restaurants and bars, recreation (fitness centre, water sports and golf) and spa facilities and the Crown International Club (gaming facility for foreigners only) (Resort Vietnam 2011);
- The Lao Cai International with four star accommodation, meeting rooms, restaurants, bars and entertainment centre (with gaming facilities for foreigners) (Lao Cai 2012);
- Li Lai Hotel and Casino Mong Cai;
- Royal Casino Hotel & Villas Halong Bay with 18 tables and 70 slots; and
- Bac Ninch—Six tables and 76 slots looking to expand to 15 tables and 200 slots.

Vietnam has proposed to construct its first large scale IR, the Ho Tram strip. The first component of the proposed IR is the MGM Grand Ho Tram that is currently under construction by Asian Coast Development Ltd (ACDL) and expected to open in 2013. The Ho Tram strip is expected to consist of US$4.2 billion of development (ACDL 2012).
The five-star MGM Grand Ho Tram will consist of 541 luxury guest rooms, an array of world-class amenities, a conference centre and gaming area consisting of 90 live table games, 500 electronic games and VIP facilities (ACDL 2012). The second phase will include a new tower containing 549 additional guest rooms bringing the total to 1,100 five star hotel rooms, including suites and villas (ACDL 2012).

**Economic benefits**

Predicted economic benefits from the MGM Grand Ho Tram include:

- Investment of US$4.2 billion (ACDL 2012);
- Creation of an additional 33,000 jobs (KPMG 2010).

Potential economic benefits from pending projects include:

- Happy Valley, a US$2 billion theme park just outside HCM city. It is possible that this project will include a gaming component although it has not been made public.
- Flamboyant Island, a 28-story, 300-room Zeus Hotel, with 150 villas on 60 hectares of constructed island 60 kilometres southeast of Hanoi to be managed by Casinos Austria.
- Genting’s US$4 billion, 1,555-hectare gaming resort joint venture with VinaCapital in the central province of Quang Nam 70 kilometres south of Danang, as well as a second US$4 billion, 1,800-hectare development in the province of Quang Ninh.
- Phu Quoc Island, a 135-hectare site in the island’s northeast. A 30,000-square-metre casino with 200-400 tables plus 2,000 slots will be supported by a total of 3,000 rooms. The projected investment required is around US$4 billion (Global Gaming Business 2012).

**B.4 Taiwan**

In 2009, the Taiwanese Government legislated to allow gaming, as part of casino resort developments, on Taiwan’s offshore islands. Aimed at the development of the islands’ tourism industries, this is a clear indication of the Government’s recognition that integrated resorts can play a central role in achieving their national tourism goals.

In July 2012, a referendum held in Matsu (an archipelago in the Taiwan Strait), approved a government plan permitting casino gambling on the islands. The foundation of the referendum was the belief that integrated resort developments will provide necessary tourism infrastructure, employment and positive operational impacts, while boosting Taiwan’s tourism profile – enabling them to effectively compete for the region’s tourist dollar.

Following the referendum result, Cabinet and legislative approval must now be received for the measure. As a result of the complexity of this process and subsequent steps required for the selection of concessionaires, planning and construction, it is unlikely that a casino will open in Matsu before 2015 (Nomura Equity Research 2012).
Given Matsu’s proximity to China’s Fujian province (only a 30 minute ferry ride) it is expected that the potential integrated resort could draw visitors from Fujian’s 37 million strong population (UBS Gaming 2012). Already, media speculation suggests several parties are interested in developing the project including Weidner Resorts who are proposing a US$2 billion development that includes luxury hotels, professional sports venues and convention halls (Reuters 2012b).

B.5 Japan

Like Taiwan and Vietnam, Japan has a conservative approach to gambling. The Japanese government has debated the legalisation of casinos and IRs for several years now and is yet to reach a conclusion. There is recognition of the large amount of foreign investment and tourism that could come with the development of an IR. Like Taiwan, there is support from local governments. In 2006, the Liberal Democratic Party (LDP) of Japan proposed a draft policy to open up the market for IRs, though it was never implemented.

At the end of 2011, a group of Japanese politicians was interested in resurrecting the 2006 campaign, as a means to fund the rebuilding of the national’s north-east coastline (cost at $245 billion) following the March 2011 earthquake and tsunami.

A 2009 study by Osaka University of Commerce found that casino resorts could be worth US$44 billion a year. The potential of an increase in tax revenue in the midst of an economic crisis in Japan is becoming more attractive to politicians who had previously voiced their objections to building casinos (The Guardian 2011 and The Wall Street Journal 2012).
References


Australian Casino Association ACA (Undated), Australia’s Casinos – More than gaming.


Barangaroo Delivery Authority 2012, Learn more about Barangaroo, accessed 26 March 2012. (http://www.barangaroo.com/)

Channel News Asia (CNA) 2007, Resorts World at Sentosa adds new attractions, 6 November 2007.


DBS Group Research (DBS) 2010, Singapore: GDP contributions of the IRs.


Department of Industry, Tourism and Resources (DITR) 2006, National tourism investment strategy: Investing for our future, report to the Minister for Small Business and Tourism by the National Tourism Investment Strategy Consultative Group, Canberra.


Euromonitor International 2011, Euromonitor International’s Top Tourist Attractions Ranking, 7 July 2011.

Euromonitor International 2012, Euromonitor International’s Top 100 City Destinations Ranking, 10 January 2012.


OECD 2008b, The Tourism Economy and Globalisation: An Engine for Innovation, Growth and Employment, Riva Del Garda action statement for enhancing competitiveness and sustainability in tourism, Riva del Garda, Italy.


Echo Entertainment Group 2010, Tabcorp Increase Investment at Star City, 5 August 2010, Media Release.


Tourism & Transport Forum (TTF) 2012a, Rooms needed for Tourism Growth, Media Release, 5 April 2012.

Tourism & Transport Forum (TTF) 2012b, Australia in the Asian Century Visitor Economy Opportunities, March 2012.


Tourism Accommodation Australia (TAA) 2012, Crown proposal fits need for more accommodation, Media Release, 9 March 2012.


Tourism Australia (TA) 2011, China 2020 Strategic Plan – 2011.

Tourism Australia (TA) 2012, Knowing the Customer in China – Research Update, March 2012.

Tourism NSW 2010, Sydney Accommodation Supply and Demand Study to 2020, on behalf of the NSW Ministerial Taskforce into Tourism, Planning and Investment, March 2010.

Tourism Research Australia (TRA) 2009, International Visitor Profile 2009 China, Canberra.


Tourism Research Australia (TRA) 2011d, Snapshots 2011 China – Inbound and Outbound Travel, Canberra.

Tourism Research Australia (TRA) 2011e, National Visitors in Australia, December 2011 Quarterly Results of the National Visitor Survey, December 2011, Canberra.


Tourism Western Australia 2006, *Making tourism a first resort*, WA.


Urbis and Tourism & Transport Forum 2010, National Tourism Planning Guide: Key issues & Future Directions, for the Department of Resources, Energy and Tourism, Canberra.


