

THE IMPACT OF THE MINING BOOM ON THE DINING INDUSTRY IN WESTERN AUSTRALIA

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ABSTRACT: The purpose of this study is to examine the extent to which high growth in the Western Australia (WA) dining industry from 2004 to 2015—comprising of cafés, restaurants and takeaway food—was caused by the WA mining boom as compared to other factors. The study uses input-output modelling, supplemented with a timely empirical survey, differentiating between regional and metropolitan WA. The study finds that the mining boom accounted for more than half of the dining growth, with the remainder attributable to growth that would have occurred anyway without the mining boom, or to other changing lifestyle factors. The study also examines policy implications in a post mining boom environment and a need is indicated for policies which take advantage of opportunities in non-mining industries, like dining, and which create stable job opportunities.

KEY WORDS: Western Australia, cafés, restaurants, takeaways, mining.

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1. INTRODUCTION

This study examines the economic impact that the mining boom had over the cafés, restaurants and takeaways (hereafter referred to as ‘dining’) industry in Western Australia, differentiating between metropolitan and regional WA.

The mining boom in Australia has been well researched and documented, indicating both the positive and negative impact a growing mining sector has on the economic, social and environmental aspects of society (Bashar, 2015; Measham *et al.*, 2013; Carrington *et al.* 2012). It is described by the Reserve Bank of Australia (RBA) (Downes *et al.*, 2014) as being one of the largest shocks to hit the Australian economy in generations. In particular, the mining boom has impacted the State of Western Australia (WA) where the bulk of mining occurred. What is not so well known is the corresponding boom that occurred in dining in WA (hereafter referred to as the ‘dining boom’).

The study focuses on the period from 2004 (start of the mining boom) to 2015 (defined as the end of the mining boom in this study for reasons discussed in Section 3). Statistics from the ABS (Australian Bureau of Statistics, 2016) and DSD (Department of State Development, 2016) show an increase of 307 per cent (230 per cent in real terms) in mining output and 138 per cent in employment for this period. Along with the mining boom opportunities in WA, population growth in the state in this period was an average of 2.5 per cent p.a. In the dining industry over the same period, output increased by 139 per cent (105 per cent in real terms) and jobs by 69 per cent.

From December 2004 to December 2012 (the start and peak of the mining boom by GVA), the ABS shows that in Australia as a whole, there was strong growth in dining, equal to 1.5x that of the combined seventeen retailing products reported on for Australia (such as hardware, clothing, department stores, grocery stores, liquor, newsagents, pharmaceuticals, recreational goods, and so on). This growth was most prominent in WA, where the percentage growth in the turnover of the cafés and restaurants component of dining was the highest out of all the seventeen retail industries, being 2.6x higher (and fast food 1.4x higher) than that of total WA retailing industries. This dining boom in WA was almost double that experienced by WA self-prepared foods (groceries) and by dining in Australia as a whole. These trends are shown in Figure 1, all indexed at 1990 = 100 for comparison purposes.

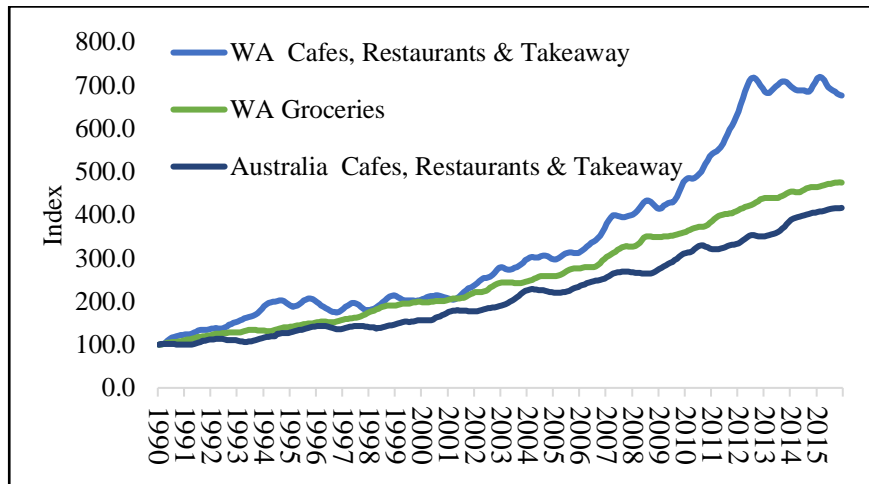


Figure 1. Dining Trends. Source: Authors' calculations from ABS data.

Several reasons have been put forward in the literature for the growth in the dining industry (which are examined more closely in Section 2), such as a growing coffee culture and busy lifestyles leading to an increase in dining out and takeaways. While these factors may well be valid, there is a sense, particularly in WA, that the underlying driver of these dining boom factors is the mining boom. The literature survey will also identify a lack of studies relating to the impact of the mining boom specifically relating to the dining industry and more specifically to regional and metropolitan WA. This gives rise to the purpose of this study, which is to address the economic impact that the mining boom had on dining in WA and the policy implications of this, particularly in a post-boom environment. This will be done using input-output modelling as discussed in Section 3. In addition, results of a survey into the dining out frequency and spend of WA patrons in comparison to other States is presented. This study thus provides new information on the dining industry in WA, and its link to the mining boom, which is important to policy makers in formulating strategies and policy for the dining and related industries.

The remainder of this study is structured as follows: Section 2 provides background data and a literature survey on the dining industry. Section 3 examines data sources and methodology for the economic impact study and section 4 presents the results. Section 5 deals with the dining survey.

Section 6 provides discussion on the findings and explores policy implications. Section 7 concludes.

2. DATA AND LITERATURE REVIEW ON THE DINING INDUSTRY.

The introduction to this study established that there has been strong growth in the dining industry in WA over the selected period. In this section data and literature on the dining industry at a WA and national level will be examined together with potential reasons for this growth. Also examined are studies that have explored mining impacts on the dining and other industries in Australia and WA. Gaps will be identified from which objectives will be formulated.

Table 1 summarises the growth data (2015 as compared to 2004) data for mining and dining across output, jobs, wages and salaries and gross value-add (GVA). Output refers to the gross revenue generated by businesses and organisations in the selected industry (mining or dining) in WA. Employees (jobs) shows the number of persons whose employment is in mining or dining in WA. Wages and salaries are the total wages and salaries paid by businesses and organisations in the selected industry. GVA is output less intermediate consumption (output less goods or services consumed or used as inputs in production), which represents that industry's contribution to gross state product.

Table 1. WA Mining and Dining Growth 2004 -2015.

	2015 Mining Values	Nominal Mining Growth 2004 - 2015	Real Mining Growth 2004 - 2016	2015 Dining Values	Nominal Dining Growth 2004 - 2015	Real Dining Growth 2004 - 2016
Output (\$m)	109 587	307%	230%	6 964	139%	105%
Jobs (number)	70 035	158%	158%	51 576	69%	69%
Wages & Salaries (\$m)	11 691	429%	294%	2 115	208%	156%
Gross Value- Add (\$m)	58 022	294%	221%	2 943	145%	109%

Source: Authors' calculations from ABS and Remplan data.

The table shows that annual dining output and GVA increased substantially, and by a similar percentage over the 2004-2015 period. While this was lower than mining, it was nonetheless extremely strong growth, representing real GVA growth of 109 per cent. It is noted that while growth in jobs has lagged the other factors, wages and salaries has outpaced output in both mining and dining, resulting in real increases per employee as demand for employees in these industries increased.

On a national level, literature shows that household spend on meals away from home has jumped more than 55 per cent in real terms since the 1980's from \$42 per week in 1984 to \$66 per week in more recent times. Where households used to spend one fifth of their weekly budget on eating out, now it is nearly one third (Ting, 2013). The average Australian spends \$70 per week on eating out (cafés, takeaway and restaurants across the nation), equating to \$60 billion per year (Commonwealth Bank of Australia, 2013).

Several reasons have been put forward for the national dining increase. Bankwest (2015) attributes this growth to factors such as: increasing real household income which allows more dining out; the convenience of café style meals with consumers living increasingly busy lives; and an increasing food culture with greater awareness of fashionable restaurants and cafés and food trends through online review sites and greater prevalence of cooking shows. IBISWorld (2016) reports cafés and restaurants in Australia to have the characteristics of an industry in a growth life cycle, including a rapid increase in new cafés and coffee shops, and the industries contribution to the Australian economy growing faster than Australian Gross Domestic Product (GDP). They attribute this growth to factors such as Australia's vibrant coffee culture, busier lifestyles leading to greater demand for fast and convenient food and dining options, and an increase in expenditure on recreation and culture.

A further factor in this growth is that the consumer movement toward high quality food, beverages and services has led an increased interest, particularly with the younger market, in the small bar and restaurant sector, notably in WA. The de-regulation of licensing laws since 2006 in WA have resulted in an array of small bars/restaurants opening up across Perth (capital city) and its suburbs, buoyed by the greater disposable income flooding into Perth as a result of the mining boom (Butler and Surace, 2015). The mining boom impact has been attributed to the increase in expenditure at cafés and restaurants as far away as Melbourne and Sydney (Martin, 2012).

As the spend on eating out is a discretionary household purchase, it is volatile and reacts to short-term shocks that may be either local or global

circumstances which influence and impact upon people's purchasing decisions. For example, during the global financial crisis (GFC) the café and restaurant sector's real output contracted in real terms as people economised (Ting, 2013). Data from ABS confirms that the national growth of dining turnover dropped from 8.3 per cent in 2007 to 0.3 per cent in 2008 at the height of the GFC, bouncing back up to 9.6 per cent in 2009. The bulk of this drop was in cafés and restaurants as opposed to takeaways, as also noted by the Department of Agriculture (2012).

This study now turns to the literature on the impact of mining on the dining industry. There are various studies which have examined impacts of the mining boom on the Australian economy as a whole, rather than a particular focus on the dining industry. Reserve Bank of Australia (RBA) studies (Downes *et al.*, 2014; Rayner and Bishop, 2013) have used types of input-output modelling to examine mining boom economic impacts on various industries in Australia as a whole, not including dining. To estimate the size and impact of the mining boom, the Downes *et al.* (2014) study created a counterfactual for how the economy would have evolved without the boom and compared the economic indicators over the boom period to what would have happened otherwise. For Australia as a whole, they estimated that the mining boom increased real per capita household disposable income by 13 per cent in Australia, real wages by 6 per cent and reduced the unemployment rate by about 1¼ percentage points.

Although there are very limited studies which focus directly on the mining impacts on the food industry, there are other studies which explore associated aspects such as mining impacts on tourism, (Dwyer *et al.*, 2016; Dwyer, 2015; Forsyth *et al.*, 2014; Tourism Research Australia, 2013) and population growth and transient FIFO workers (Sanders *et al.* 2016; Pham *et al.*, 2015; Petrova and Marinova, 2013; Garnett, 2012; Carrington and Pereira, 2011). There is generally found to be a mix of negative and positive impacts. On the positive side, there is increased demand for services such as travel, accommodation and food to accommodate the mining sector. On the other hand it can lead to increased wages and prices. There can also be difficulties in attracting and retaining local staff such as chefs and waiters who cannot afford to pay the high costs of rents and living expenses in mining areas.

The literature survey has identified a lack of studies specifically relating to the dining industry in WA and to the impact of mining on the dining industry. There is also a lack of information on regional as compared to urban areas. To address these gaps, this study will undertake modelling with an objective of assessing how the mining industry impacts on dining industry in terms of key output and employment indicators. Unlike other

national studies, a further key objective is to focus specifically on WA where the bulk of the mining boom took place, differentiating between regional and urban areas. In addition, given that the increase in the WA dining industry is much greater than in other states, another objective of the study is to examine whether there are differences between WA and other states in regards to frequency and spending on dining out and takeaways using a self-administered questionnaire. Policy implications will also be examined.

Having summarised the relevant data and literature on the dining industry, and identified gaps and objectives, the study now turns to the economic impact study methodology in Section 3.

3. ECONOMIC IMPACT STUDY – METHODOLOGY

Data Sources

The study uses a combination of data obtained from the Remplan economic and community data and modelling package, and Australian Bureau of Statistics (ABS). Time series data is obtained for mining and dining on output, employment, wages and salaries, and GVA (as defined at the start of Section 2, with aggregate data presented in Table 1). The period that data is obtained for is from 2004 (the start of the mining boom) until 2015 (the end of the boom). There are many definitions of the end of a boom (such as decline in GVA, jobs or investment). The level of investment is often used as signalling the end of a boom, and while WA mining investment peaked in 2012 (along with GVA), it continued to be reasonably constant at this peak level until 2015, only experiencing a sharp fall of 23 per cent in 2016 (Department of Mines and Petroleum, 2016). Hence this study will measure the boom up until the end of 2015. From Remplan, data was obtained on both WA and Greater Perth for the input-output modelling (explained later in Section 3), and from this the study was able to derive the data and undertake modelling for regional WA.

Measuring the Mining Boom

The first step in the methodology is to quantify the size of the mining boom in WA. As GVA of an industry is well recognised as the measure of its economic contribution, GVA growth is used as the key measure of the analysis. Original GVA values are used as opposed to chain values, given that chain values are production rather than price focussed, and both production and prices were very much part of the mining boom. As noted by the previously mentioned Downes *et al.* (2014) study, measurement of the mining boom needs to consider actual mining figures as compared to a counterfactual no-boom situation. In line with this rationale, the study measures the size of the mining boom as the difference in the actual mining GVA between 2004 and 2015, as compared a to a baseline situation where the mining boom did not occur.

For the purposes of this study, the mining boom is defined as deviation of mining GVA from its 'norm' or long run trend. Of course, as also noted by Downes *et al.* (2014), any base or trendline is debatable, especially with the mining boom including the period of the Global Financial Crisis and the subsequent rapid recovery thereafter. However, these factors all form part of the cumulative deviation away from the norm, and the study is interested in this total deviation rather than in interim fluctuations.

To ascertain the baseline (no mining boom), the study extrapolates the pre-mining boom long run GVA trend figures (using 1990-2003) to the present. In order to do this, the residuals in this pre-boom period are first examined to determine the most appropriate trendline. The trend is found to be highly linear for this period, with a least squares linear trendline yielding a high R^2 of 0.9615 and the study thus uses a linear approach for the no-boom base-line as demonstrated by the dotted line in Figure 2. The area under this is the normal no-boom growth (which the study terms 'core growth'). The study then compares the no-boom baseline to the actual boom figures from 2004 to 2015. For simplicity and illustrative purposes the mining boom trendline is shown rather than actual figures but as this trend is no longer linear, the best fitting line is found to be a 6 point polynomial as shown by the solid line in Figure 2. The cumulative difference between the solid and dotted lines is the size of the GVA of the mining boom.

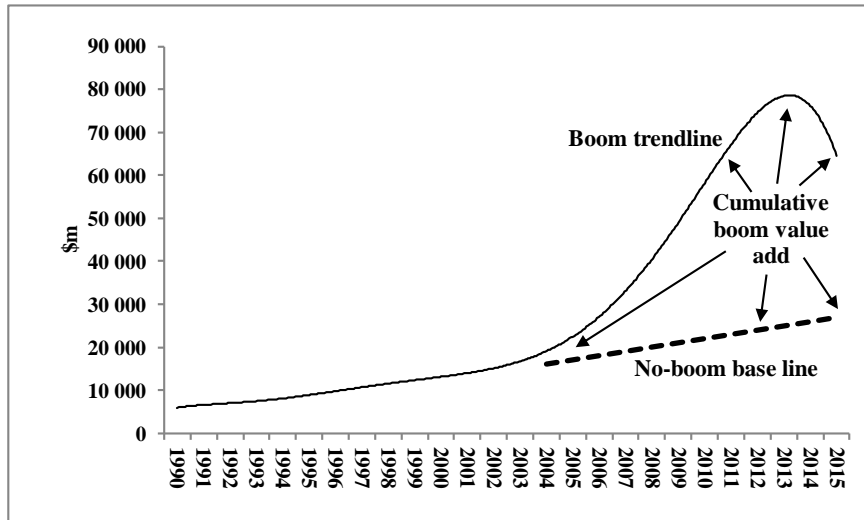


Figure 2. Size of the Mining Boom in WA (GVA). Source: Authors' calculations from ABS and Remplan data.

Input-output Modelling Methodology

Input-output modelling shows interdependencies between different components of an economy, which in this study are the industries making up the WA economy. An output of one industry may become an input of another industry. The ABS provides input-output matrices showing flows between industries, but does not calculate multiplier effects. This study undertakes input-output modelling through a combination of Remplan and the authors' own multiplier modelling. Input-output modelling is well known, and thus only a brief summary is provided here as this is not a study on modelling techniques but rather an empirical one on the application of those techniques in the mining and dining industries. A detailed explanation of the techniques can be seen in McLennan (2016).

In summary, there are two types of multiplier effects. Industrial effects reflect increased output generated by servicing industry sectors (provision of goods and services to other sectors) in response to the direct change in output and demand. Consumption effects occur because as output increases, total employment and salaries and wages paid to employees also increase, and part of this will be used for consumption in the local economy, leading to further increases in demand and output. Industrial effects are also known as a type 1 multiplier and the combination of

industrial effects and consumption effects as a type 2 multiplier. The study calculates both industrial effects and consumption effects of increased production in mining on dining output, employees, wages and salaries and gross value-add, for WA, Greater Perth and Regional WA.

4. RESULTS – ECONOMIC IMPACT STUDY

The cumulative 2004-2015 GVA area for mining between the WA no-boom baseline and the boom actuals as illustrated in Figure 2 is \$346.3 billion (this is the ‘size of the WA mining boom’), equating to production of \$654 billion. Applying the same technique to WA dining (cumulative dining increase above long term dining trend base line) the GVA increase is \$5.7 billion (size of the WA dining boom), equating to production increase (output) of \$11.7 billion. This excludes the no-boom core GVA growth under the baseline of \$3.3 billion which is this study’s estimate of what would have occurred anyway without the boom. For comparison, figures are provided in Table 2 for Australia as a whole.

Table 2. WA Mining and Dining Cumulative Increase.

	Mining Australia	Mining WA	Dining Australia	Dining WA
GVA (\$m)	602 932	346 267	44 967	5 681
Production (\$m)	1 301 815	653 999	92 729	11 715

Source: Authors’ calculations from ABS and Remplan data.

Of course, this dining boom is not necessarily all due to the mining boom, and so the next step is to examine the impact of the \$346 billion mining boom on dining, using input-output modelling. This finds that the WA mining boom had a cumulative industrial impact on food GVA of \$1.06 billion and a consumption impact of \$3.7 billion, giving a total value-add impact of \$4.8 billion. This is shown in Table 3. The table also shows that the majority (69%) of the impact occurred in Greater Perth. As Perth has 79 per cent of the WA population, the proportional impact was greater in the regional areas, likely impacted by fly-in, fly out workers. Table 4a shows a breakdown of the actual value total effects by output (\$9.9 billion), jobs (21 thousand), and wages and salaries (\$3.0 billion). As the impacts occurred in the past, Table 4b) compounds the historical GVA and output by the Australian CPI to get present value, and wages are compounded by

the Australian wage price index. Both Greater Perth and regional WA have clearly benefitted in these categories from this dining boom.

Table 3. GVA Impacts of Mining on Dining.

	Australia	WA	Greater Perth	Regional WA
Industrial Effect (\$m)	3 609	1 061	787	273
Consumption Effect (\$m)	11 207	3 753	2 586	1 167
Total Effect (\$m)	14 816	4 813	3 373	1 440

Source: Authors' calculations from ABS and Remplan data.

Table 4. Total impacts of Mining on Dining.

a) Actual Values	Australia	WA	Greater Perth	Regional WA
Output (\$m)	30 554	9 926	6 956	2 970
Jobs (number)	53 371	21 030	14 793	6 237
Wages & Salaries (\$m)	9 277	3 014	2 112	902
GVA (\$m)	14 816	4 813	3 373	1 440
b) Present Values	Australia	WA	Greater Perth	Regional WA
Output (\$m)	34 220	11 117	7 791	3 326
Jobs (number)	53 371	21 030	14 793	6 237
Wages & Salaries (\$m)	10 390	3 375	2 365	1 010
Value-Add (\$m)	16 594	5 391	3 778	1 613

Source: Authors' calculations from ABS and Remplan data.

To summarize the cumulative dining GVA growth over 2004 – 2015, the study has identified that: there was core growth of \$3.3 billion which would likely have occurred without the boom; that the cumulative increase above the no boom base line was \$5.7 billion of which \$4.8 billion can be attributed to the mining boom, leaving 0.9 billion additional attributable to other factors. These other factors incorporate those identified in the introduction and literature survey such as the growing coffee culture and busy lifestyles leading to a switch to convenient foods, some which may have occurred irrespective of the mining boom. Figure 3 summarises the components of WA total GVA growth.

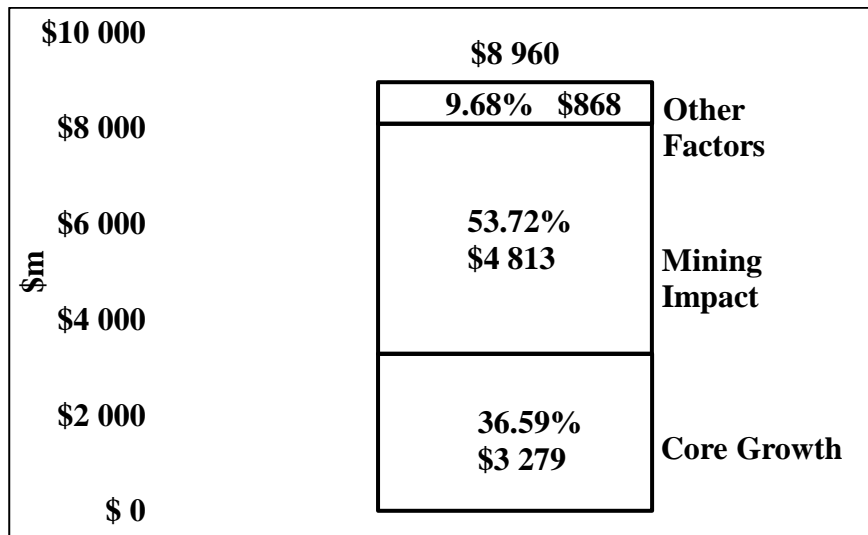


Figure 3. Components of WA Dining GVA Growth 2004-2015. Source: Authors' calculations from ABS and Remplan data.

5. DINING SURVEY

The literature survey in this study identified some non-mining boom reasons behind the growth of the dining industry in Australia. However, neither the literature survey nor the impact modelling in this study provide information on spending patterns on different dining options in WA or between States. Therefore to supplement the input-output modelling, survey data has been included here on spending patterns.

As part of a larger multi-project Australian based food consumption research program, a survey was conducted in late 2014 early 2015 examining the frequency of dining out across a range of dining options including cafés, takeaway meals, fast food, food court and full service restaurants. The dining survey was a large scale (1 314 responses) quota based survey based on ensuring a representative sample from each of the main five mainland states based on this distribution NSW (33%), Vic (28.3%), Qld (20.4%), WA (10.8%), and SA (7.6%) The data collection was facilitated by a research company online with age and gender monitored to ensure a cross section of groups were represented. The survey was conducted for the authors by a commercial market research company using panel respondents. As this survey had multiple research objectives relating to food consumption, the online, panel approach was deemed to be

the most cost effective for the sample size required. The panel comprises respondents who opt into the research process with the survey link being distributed to a large number of potential panel respondents. Survey respondents were required to be 18 years or older and the main grocery shopper in the household. Respondents were asked questions on eating away from home practices, including how often they dine out. Less than once a month was the highest reported response for all options, as indicated in the following table, whereas cafés (31.9%), takeaway meal (home) (29.6%) and fast-food (home) (28.6%) are strongly noted as being frequented 1-2 times per month.

Café, takeaway meal (home) and fast-food (home) were the most reported responses for dining 1-2, 3-5 and 6-10 times a month, with café the most reported response for dining out more than 10 times a month.

Table 5. Frequency of Dining Out.

Item	< once a month	1-2 times	3-5 times	6-10 times	> 10 times	TOTAL%
Full service restaurant	68.9	21.0	7.8	1.7	0.7	100
Café	47.5	31.9	15.1	3.9	1.6	100
Takeaway meal (eat at location)	69.6	20.9	6.5	2.2	0.8	100
Takeaway meal (take home to eat)	54.2	29.6	12.1	3.4	0.7	100
Fast food (eat at location)	61.0	24.8	10.4	2.9	0.9	100
Fast food (take home to eat)	49.8	28.6	16.4	4.3	0.9	100
TOTAL	58.5	26.1	11.4	3.1	0.9	100

Source: Authors' calculations from their own survey data.

Responses were examined across states to ascertain if any differences existed between WA and the rest of the Australian states. No significant differences between states existed with respect to frequency of these dining out options. As this was a point-in-time study it is not possible to ascertain if there was growth in frequency within WA over time. However, these results support the popularity of the café and takeaway market for food consumption.

In terms of actual spend, respondents were asked how much they would typically spend per person on one trip to a food court. Although WA

patrons indicated they would consume food court meals less than once a month (60%), more so than those from all other states (44%), average spend was higher for WA. As indicated in Table 6, WA had less percentage within the \$1-\$10 band (27.3%) compared to 33.2 per cent for all other states. WA had 72.7 per cent spend \$11 and over (with 16.3 per cent in the \$21-\$40 band compared to 14.2 per cent for all other states) compared with 66.8 per cent for all other states.

Table 6. Typical Spend per Person on One Trip to a Food Court.

Spend	WA	All other states	Total
\$1 - \$10	27.3%	33.2%	32.8%
\$11 - \$20	56.4%	51.1%	51.5%
\$21 - \$40	16.3%	14.2%	14.2%
More than \$40	1.8%	1.5%	1.6%
Total	100.0%	100.0%	100.0%

Source: Authors' calculations from their own survey data.

6. DISCUSSION AND FUTURE IMPLICATIONS

It is clear from the information presented that the mining boom has had a substantial impact on the dining industry in both metropolitan and regional WA. The studied period saw substantial growth in the industry in employment, wages, output and GVA. It is difficult to draw direct comparisons between prior studies on the impact of the mining industry that were examined in the literature survey (for example Downes *et al.*, 2014; Rayner and Bishop, 2013), as these were generally at a national level and not specifically focussed on the dining industry. Nonetheless, most of the prior studies reported strong impacts of the mining boom on other industries, which is confirmed in this study for the dining industry, at a high level of impact given that the study focuses directly on WA where the mining boom took place.

While the link between mining and dining has been hugely beneficial in the boom time in terms of output and employment, it is important also to consider future implications of this link. While the study focuses on the period from 2004-2015, it should of course be noted that in the latter part of this period, the tide began to turn quite dramatically in mining and, to a lesser extent, in dining. In 2015 mining GVA contracted by 23 per cent and in 2016 by a further 15 per cent. This contraction was mainly due to falling metals prices, as production volumes have continued to increase.

Nonetheless, this GVA is still 240 per cent above its 2004 values. Employment in mining showed a reduction of 8 per cent over the two years to 2015, rising again in 2016 by 5 per cent as metals prices experienced some improvement. Population growth in WA slowed to 1.2 per cent in 2015 and 1 per cent in 2016. In dining overall, turnover reduced by an average of 0.14 per cent over the three years to 2016, and (similar to what was noted for the 2008 GFC year in the literature survey (Ting, 2013: Department of Agriculture, 2012)) there was a swing away from cafés and restaurants which contracted by (-2.0%) to takeaways (+3.75%). Jobs showed an increasing trend up to the end of 2015, but fell by 5 per cent in 2016 with a large swing away from full time employment (-25%) to part time employment (+9%).

It is too early in the downturn period in these industries to be able to confidently assess the impact of these downturns on the future of the WA dining industry. The recent reduction in output for cafés and restaurants (but an increase in takeaways) coupled with a large reduction in full time employment (but an increase part time employment) is a potential indicator to future trends in the industry. Given the link that the study has demonstrated between mining and dining, the extent of these trends in WA will depend to a large extent on future trends in the mining industry. Given that the upside impact of mining has been relatively higher in regional areas than in urban areas, it is the regional areas where the impact is likely to be most felt.

The good news is that the modelling in WA shows that the growth experienced in the dining industry is not entirely mining reliant, as there is also a component of core growth and growth due to other factors. These findings support what was noted by studies in the literature survey such as Bankwest (2015) and IBISWorld (2016) who identified other contributing factors such as a growing coffee culture busier lifestyles leading to greater demand for fast and convenient food and dining options.

As the dining industry cannot continue to rely on mining to boost it in a post mining boom environment, it is important that the industry is supported through government and industry policies that support non-mining industries. Restaurant and Catering Australia (R&CA, 2016), the national industry association representing the interests of cafés and restaurants maintain that ensuring that this sector continues to prosper is essential to the economy and needs to be supported by policies and initiatives on aspects such as funding and training for the industry.

While it is generally recognised that mining is likely to always be important to the WA economy, there have been calls for diversification of

the economy and state government investment into alternate industries to mining, like dining, especially in regional areas such as the Pilbara (see for example Green *et al.*, 2014). In line with the findings in this study relating to employment in the dining industry, Duncan *et al.*, (2016) also report on a shift from full to part-time employment and maintain that feelings of job insecurity are more prevalent than ever before. The authors report a need for efficient, creative and imaginative policies in order take advantage of new opportunities for economic growth and that this responsibility extends to the need for the creation of new secure employment opportunities for WA's workforce.

7. CONCLUSIONS

Key objectives of this study were to examine the impact of the mining industry on the dining industry in WA, differentiating between urban and regional impacts, and to explore policy implications. The study has provided important new information into the driving factors behind the dining industry growth in WA. It is clear that the mining boom has had a major impact on the dining industry in WA, contributing more than half of the industry GVA growth over the studied period and also having a major impact on output and jobs. While a large part of this has happened in the metropolitan area, proportionally there has been greater impact in the regional areas. There are also other contributing non-mining factors, such as core underlying growth and lifestyle factors which were identified through the literature survey, including a growing coffee culture and busier lifestyles leading to greater demand for dining out and takeaways. These lifestyle factors are not unique to WA and the survey data in this study finds very similar patterns to other states in terms of the frequency of use of various dining options such as cafés, restaurants and food courts, although the spend per person is higher in WA compared to other states. These insights are important to food retailers and economic policy makers alike in better understanding the dynamics of the dining industry in WA. The current trends and policy analysis discussion in this study has shown that the recent downturn in mining has led to a corresponding downturn, although to a lesser degree, in output and permanent employment in WA cafés and restaurants, with a swing to fast foods and temporary employment. Implications are a need for policies which support the dining industry, including the creation of stable job opportunities.

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