RESOURCE INDUSTRY EMPLOYER GROUP

Resource Industry Productivity

Analysis and Policy Options

Discussion Paper

Australian Mines & Metals
Association (AMMA)

April 2013

AMMA is Australia's national resource industry employer group, a unified voice driving effective workforce outcomes. Having actively served resource employers for 94 years, AMMA's membership covers employers in every allied sector of this diverse and rapidly evolving industry.

Our members include companies directly and indirectly employing more than half a million working Australians in mining, hydrocarbons, maritime, exploration, energy, transport, construction, smelting and refining, as well as suppliers to these industries.

AMMA works with its strong network of likeminded companies and resource industry experts to achieve significant workforce outcomes for the entire resource industry.

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Executive Summary

2013 sees the Australian resource industry at a crossroads. Labour productivity is at its lowest level in a generation, competition for global capital is more intense than ever, and new frontiers for resource investment continue to open.

Productivity in the resource industry has been in decline since 2000-01 and is now 45 per cent off its peak. Both the surge in commodity prices and an investment boom have been cited for initiating a steady but inevitable decline in overall productivity, particularly capital productivity. Increasing the level of labour productivity, through both legislative and non-legislative measures, is therefore essential to lift overall productivity in the resource industry.

A double threat is on foot as Australia's international competitiveness continues to decline. Two independent reports in recent months have both cited labour relations as a key reason for the drop in our competitiveness. Resource employers face competition from emerging resource nations and, combined with escalating costs, there is serious concern for the $383 billion of investment currently under consideration in the Australian resource industry.

Resource employers continue to report deteriorating labour productivity under the Fair Work Act, and face unsustainable wage claims, a combative labour environment, project delays and undermined flexibility. Productivity has all but been pushed 'off the table' in enterprise bargaining agreements. This paper sets out five important reforms that can reboot the mining boom through workplace relations reform.

While reform to the Fair Work Act is essential, the challenges of labour and skills demand, human capital development and workplace collaboration must also be met. This paper sets out six initiatives across the areas of firm investment, work practices, leadership, technology, bargaining and skills development to boost productivity in the resource industry.

Ultimately, a multi-faceted approach is required to ensure our great resource industry continues to deliver on its great promise. The purpose of this discussion paper is to facilitate a genuine discussion around both the workplace relations (WR) and non-WR measures that are required to restore resource industry productivity.

1 Australia's Waning Productivity

1.1 What is productivity?

1. Productivity is a measurement of the ratio of output to one or more inputs.

2. Productivity growth is the most important determinant of long-running improvements in economic prosperity. Over the past 30 years, it is estimated that around 80 per cent of the increases in Australia's living standards have been due to increases in productivity levels.[1]

3. The Australian Bureau of Statistics (ABS) provides industry-level indexes for three measurements of productivity: multifactor, capital and labour productivity.

1.2 Multifactor productivity

4. The productivity measure preferred by economists is multifactor productivity. It takes into account the effects of both labour and capital inputs on output.

5. In 2008 the Productivity Commission published a report[2] on productivity in the mining industry which used the ABS data series entitled *Experimental Estimates of Industry Multifactor Productivity*. This data index has also been used by eminent economist Saul Eslake in his 'Productivity: the Lost Decade'[3] paper from 2011, as well by the Bureau of Resource & Energy Economics[4].

6. The graphs in this chapter have been created using the same data series and compare the mining industry data to the ABS 'selected industries' data. The latter category includes the following industries: Agriculture, Forestry and Fishing; Manufacturing; Electricity, Gas Water and Waste Services; Construction; Wholesale Trade; Retail Trade; Accommodation and Food services, Transport, Postal and Warehousing; Information, Media and Telecommunications; Financial and Insurance Services; and Arts and Recreation Services.

7. An examination of multifactor productivity over the past 20 years shows a steady growth trend for other industries. At the same time, the statistics show a resource industry characterised by greater volatility, and productivity falling sharply from 2000-01 onwards.

8. Since peaking in 2000-01, the multifactor productivity in the industry has fallen at an average annual rate of 4.5 per cent, or by 34 per cent in total. Significantly, resource industry productivity fell below that of all other industries for the first time in 2010-11.

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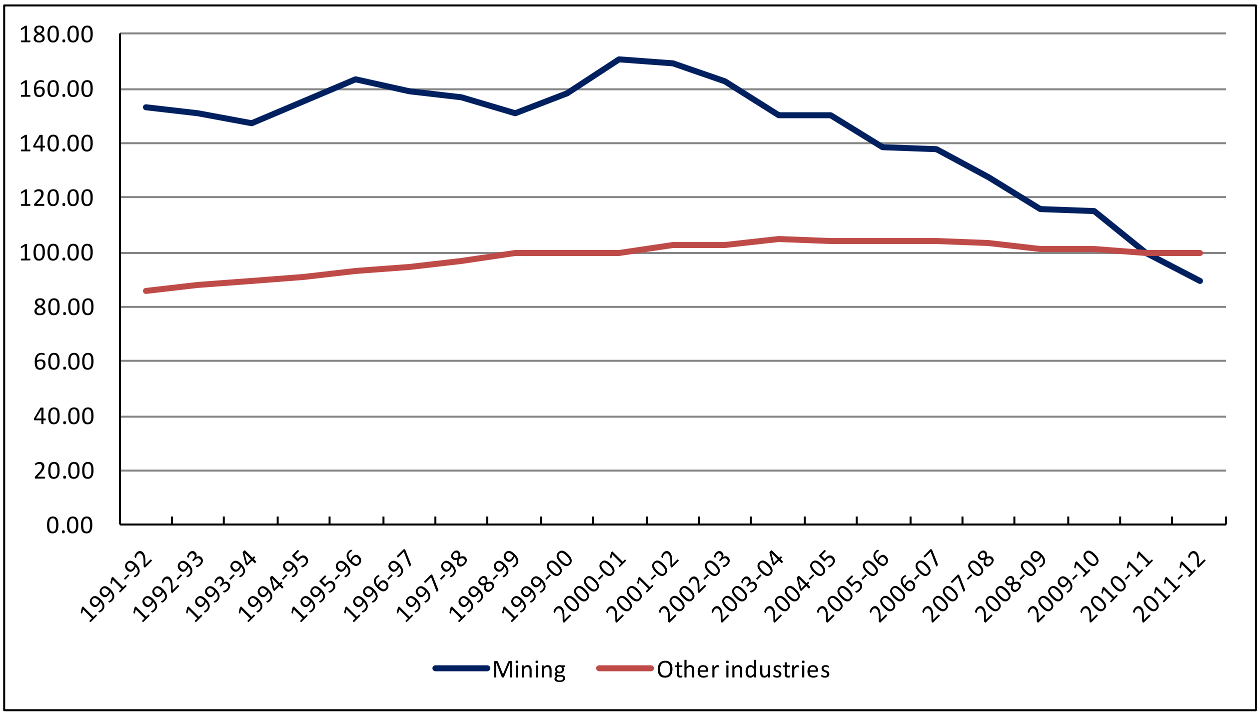
[1] Commonwealth Treasury, Recent productivity outcomes and Australia's potential growth: Economic Roundup Winter 2007

[2] Productivity in the Australian Mining Industry: measurement and interpretation

[3] See: http://www.rba.gov.au/publications/confs/2011/eslake.pdf

[4] See: http://www.aares.org.au/aares/documents/2012ACPapers/MSSyed.pdf

Figure 1: Multifactor productivity



***Data source*: ABS 5260.0.55.002 Estimates of Industry Multifactor Productivity, Australia: Detailed Productivity Estimates**

9. One reason economists cite for the decline in multifactor productivity in the resource industry is the impact of a surge in commodity prices. This has produced large increases in the *value* of output that has not been matched by a commensurate increase in the *volume* of mining output.

10. The Productivity Commission explains:

> *…a commodity price boom can lead to lower productivity (albeit occurring at the same time as high profitability) because higher prices render less efficient mines and mining practices economically viable. In boom times the primary focus of mining operations is usually on increasing output, albeit at a higher unit cost of production*[5].

11. While significant, the impact of commodity prices on resource industry productivity is only one part of the current productivity challenge for the resource industry. To gain a more complete picture, we need to look at the two key components of multifactor productivity: capital productivity and labour productivity.

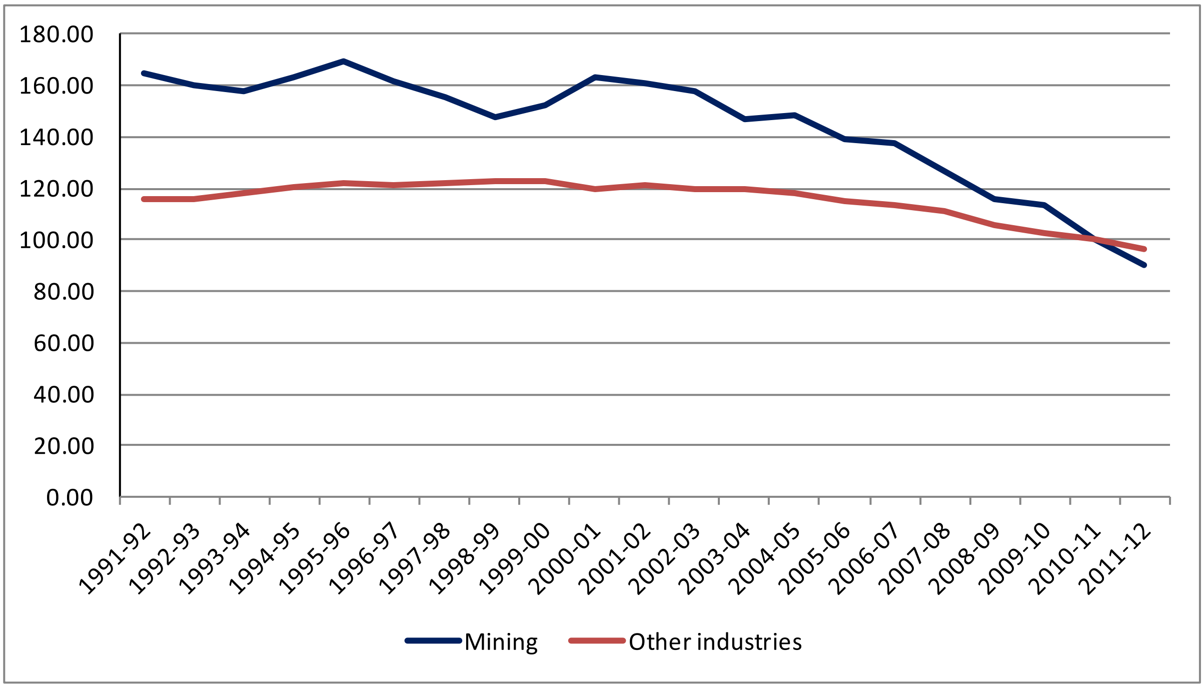
[5] Productivity Commission (2008), Productivity in the Australian Mining Industry: measurement and interpretation

1.3 Capital productivity

12. Capital productivity is the measure of the amount produced per unit of capital services utilized. The composition of capital used in the resource industry differs to that of other industries because it includes exploration expenditure as a capital input on the basis that, regardless of whether it is successful or not, exploration is required in order to acquire new reserves.

13. Given the capital-intensive nature of Australia's resource industry, it is useful to consider how capital productivity has trended over the past two decades.

Figure 2: Capital productivity

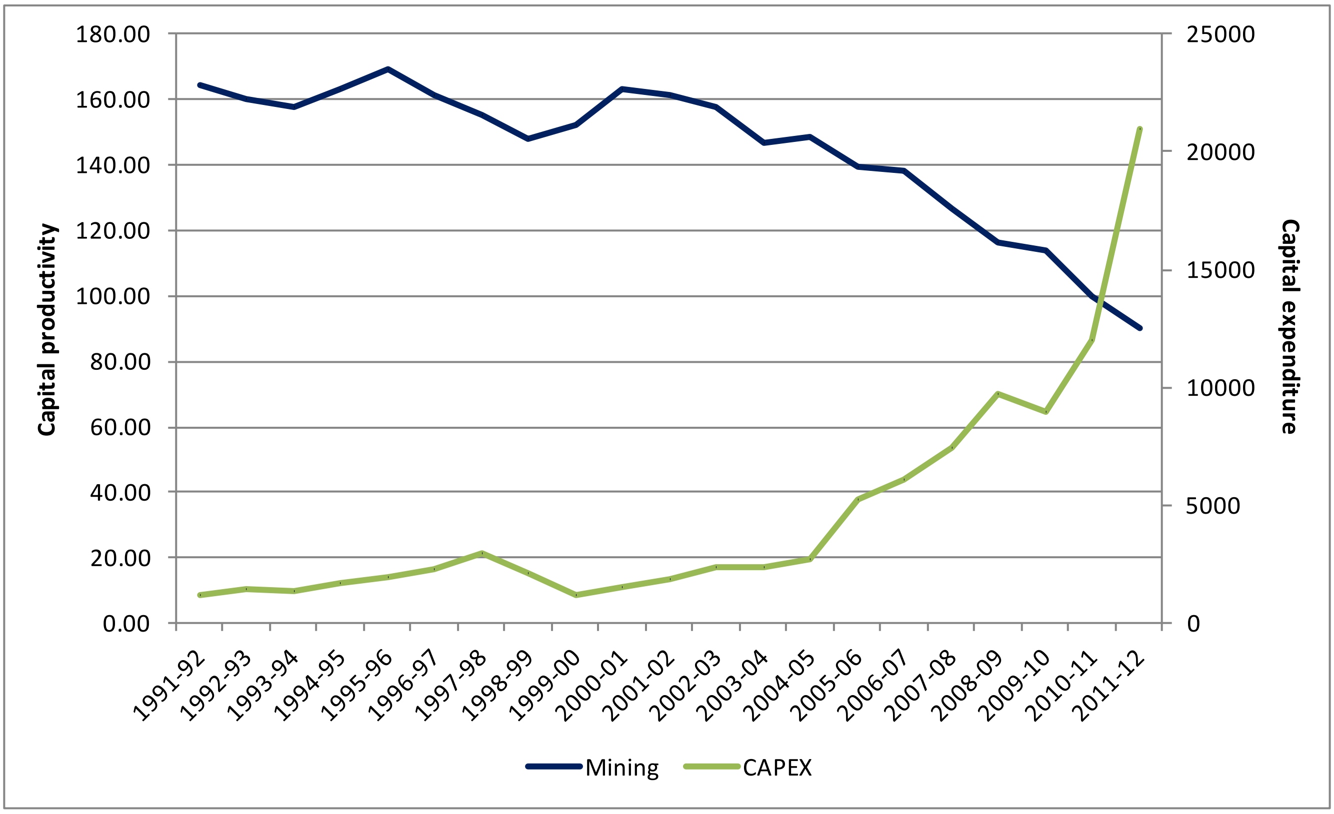


***Data source**: ABS 5260.0.55.002 Estimates of Industry Multifactor Productivity, Australia: Detailed Productivity Estimates*

14. As the graph above shows, while capital productivity for selected industries has remained fairly stable over the 20-year period, there has been a sustained general downward trend since 2004. Capital productivity in the mining industry fell below all industries for the first time in 2010-11.

15. Adding mining industry capital expenditure to the scene in the graph below provides a more complete picture.

Figure 3: **Capital productivity vs. capital expenditure**



***Data source**: ABS 5625.0 - Private New Capital Expenditure and Expected Expenditure, Australia*

16. What becomes apparent from the graph above is that capital expenditure in the resource industry shows an inverse correlation to capital productivity. As capital expenditure increases, productivity falls, as shown above, particularly since 2000-01.

17. There is also a lag effect that occurs in measures of capital productivity. The Productivity Commission has stated that the average production lag in mining is around three years. This means that there are usually three years between the time of capital expenditure being made and the resulting production output.

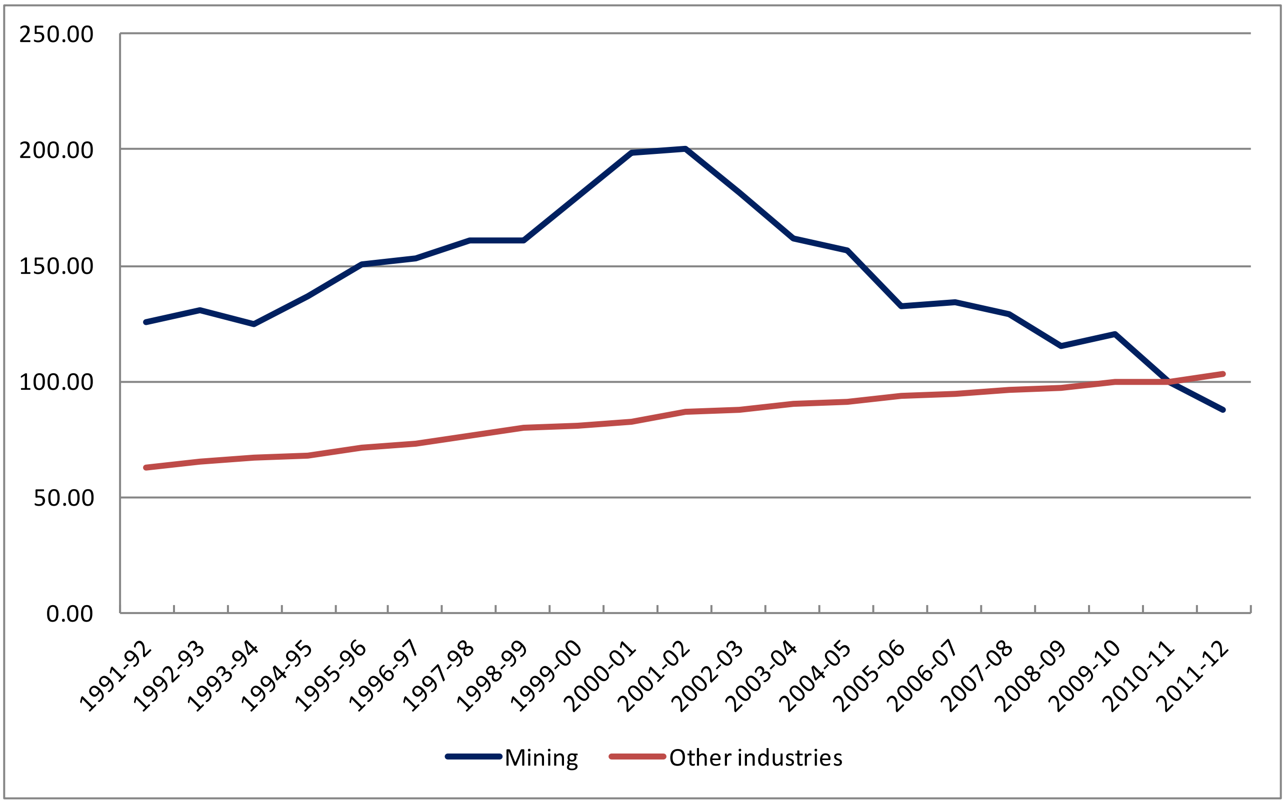
18. With over $590 billion of capital investment either under way or in the pipeline of resource projects, the capital investment outlook in the sector is strong. This suggests that the rate of capital productivity is unlikely to increase in the short to medium-term.

1.4 Labour productivity

19. As mentioned, multifactor productivity accounts for the impacts of both capital and labour on output. As shown above, capital productivity is unlikely to pick up in the near future given the sheer volume of capital investment already in the pipeline. This means the key to enhancing productivity in the mining sector lies largely in raising labour productivity.

20. The labour productivity index is often considered of most obvious relevance from a workplace relations perspective. It measures the output produced by one typical employee over a period of time.

***Figure 4*: Labour productivity**



***Data source*: ABS 5260.0.55.002 Estimates of Industry Multifactor Productivity, Australia: Detailed Productivity Estimates**

21. Immediately apparent from the graph above is the significant discrepancy between the trend lines, for mining compared to other industries. 'All industries' labour productivity has shown a steady but moderate growth over a 20 year period, rising 20 per cent over the past decade. Resource industry labour productivity, on the other hand, showed much stronger growth up until 2001-02 but then went into sharp decline and is now 60 per cent lower than its peak in 2001-02. As Saul Eslake commented:

> *There's no denying that both labour and multifactor productivity have fallen sharply in the mining and utilities sectors over the past decade*[6].

22. There is also an accelerated decline coinciding with the commencement of the Fair Work changes. Labour productivity levels in the industry are currently at their weakest level since 1987.

23. A recent report from BIS Shrapnel[7] describes mining industry labour productivity as a 'disaster' and argues that governments have failed to deliver the structural reform required to increase output. While acknowledging the impact of the surge in commodity prices, the report argues that the resource sector is at a crossroads and that changing the relevant policy levers is more urgent

[6] Saul Eslake (2011), Productivity: The Lost Decade, p229

[7] BIS Shrapnel (2012), Mining in Australia 2012 – 2027

than ever before, including but not limited to industrial relations, tax and regulation.

24. These findings are consistent with feedback from AMMA's members. Resource industry employers continue to stress that greater productivity can be generated through flexible workplace relations arrangements, particularly more direct employer-employee arrangements at the workplace level. Access to skilled labour, including via skilled migration in a small number of cases, is also of vital importance in delivering productivity growth.

25. BIS Shrapnel also found that, faced with rising wage costs, construction cost blowouts, increasing regulation and additional taxes, resource industry employers need flexibility in dealing with contractors in order to drive productivity improvements. Similarly, AMMA's policy is that where there is third-party involvement in workplaces it must be both reasonable and constructive, including respecting management's rights to make management decisions.

26. Unfortunately, some commentators and interest groups continue to neglect to properly acknowledge the impact of the industrial relations framework on productivity. While labour relations policy is by no means the only factor affecting productivity, it is certainly an issue for policymakers to get right in order to drive much needed improvements.

27. Eminent economist and outgoing Chairman of the independent Productivity Commission Gary Banks recently and forcefully made the point that:

> *…industrial relations regulation is arguably the most crucial [area of regulation] to get right. Whether productivity growth comes from working harder or working 'smarter', people in workplaces are central to it[8]".*

1.5 Putting our productivity in a global context

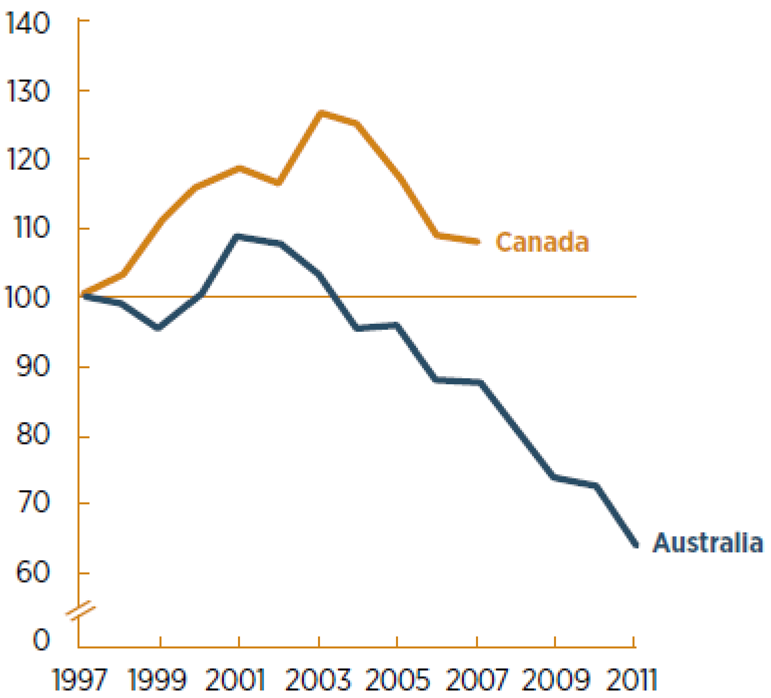
28. It should be acknowledged that declining productivity in the mining industry is not unique to Australia. The boom in commodity prices has led to less 'productive' mines coming online around the world.

29. However, the following graph shows that while Canada has also experienced declining mining productivity, Australia has performed significantly worse[9]. While Australia's mining productivity peaked in 2001, Canada experienced growth until 2003 and has been able to retain some of the gains made since 1997, unlike Australia.

[8] Gary Banks, 'Successful Reform: Past Lessons, Future Challenges', Keynote address to the Annual Forecasting Conference of the Australian Business Economists, Sydney, 8 December 2010

[9] Minerals Council of Australia, Opportunity at Risk: Regaining Our Competitive Edge in Minerals Resources

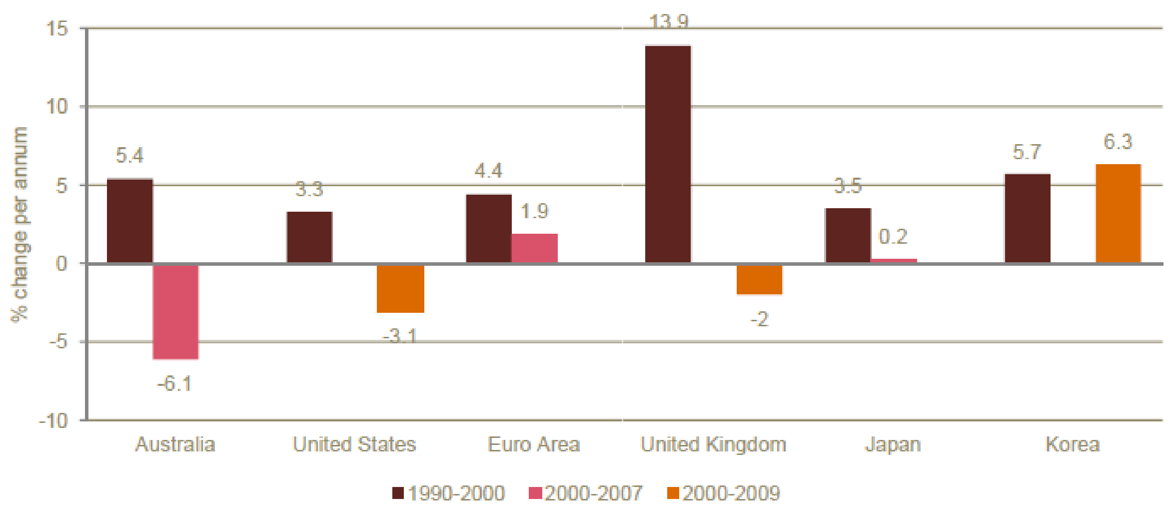
Figure 5: Multifactor productivity: Australia vs. Canada



***Source*: 'Opportunity at Risk: Regaining our competitive advantage in minerals resources', Port Jackson Partners for the Minerals Council of Australia, September 2012**

30. Australia's mining productivity performance has been poor not only compared to Canada but also advanced economic. In their Productivity Scorecard Pricewaterhousecoopers (PwC) have stated "there is no doubt that while the past decade has also seen mining industries' labour productivity decline in advanced economies around the world, the decline in Australia is notable."

Figure 6: Labour productivity: international comparisons (mining and quarrying)



***Source*: PwC Productivity Scorecard, March 2012**

31. Saul Eslake[10] has published data showing that Australia's mining and quarrying labour productivity decreased 6.1% from 2000 to 2007, while the Euro Area grew 1.9% and Japan managed to avoid any loss in productivity. These comparisons are displayed in the above graph first published by PwC.

32. While the United States and the United Kingdom both registered productivity losses, Korea's mining and quarrying sector recorded 6.3% labour productivity growth between 2000 and 2009. Of the nations listed below, Australia has been the poorest productivity performer since 2000 in the mining and quarrying sector.

Key takeaways:

- The resource sector is at a crossroads – labour productivity in the industry is now 60% off its peak in 2001 and at its lowest level since 1987.
- Capital, labour and multifactor productivity in the resource industry all fell below the all industries levels for the first time in 2010-11.
- A boom in capital investment has created an inevitable steady decline in capital productivity, placing further importance on improving levels of labour productivity to drive resource sector productivity growth.
- Productivity in Australia's mining industry has performed poorly compared to our international competitors.
- Declining productivity in the mining sector drags down overall productivity levels in resource-rich states such as Queensland and Western Australia.

[10] Saul Eslake 2011, "Productivity" presented to the *Annual Policy Conference of the Reserve Bank of Australia,* HC Coombs Conference Centre, Kirribili, Sydney, 15-16 August

2 Declining Competitiveness – Resource Investment at Risk

33. At the same time as productivity problems are being faced by resource industry employers, Australia's international competitiveness has declined significantly. Two recent reports have attributed the steep decline in Australia's reputation as a destination for investment to our labour relations system. Combined with intensified global competition and escalating costs, significant amounts of Australian resource investment are at risk.

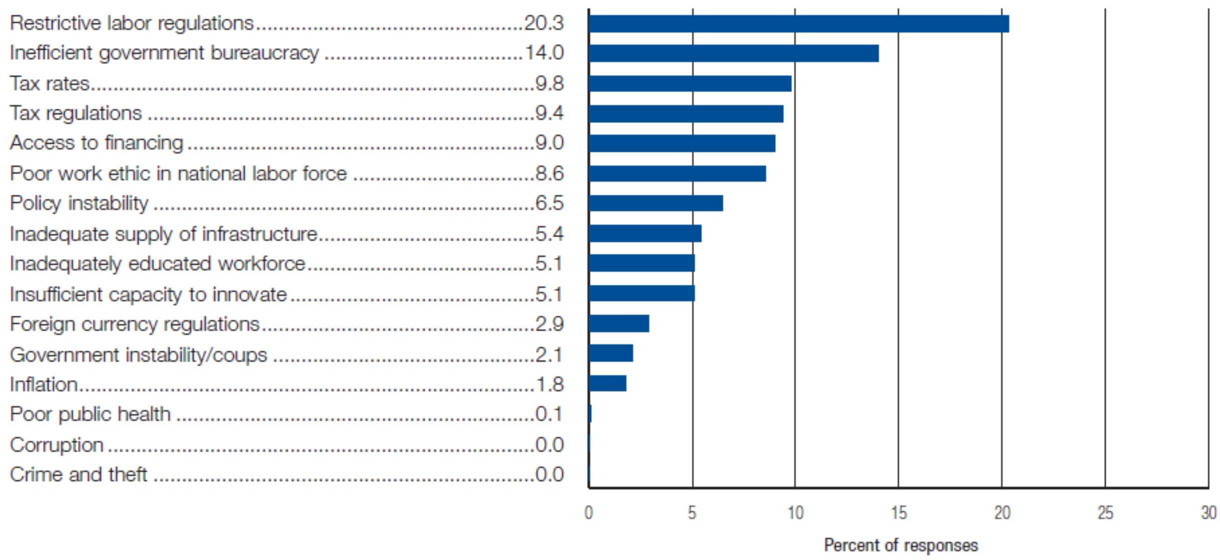
2.1 Labour relations dragging down our competitiveness

34. Australia has fallen from 9th to 15th in global competitiveness rankings. The rankings, released in January 2013 by IMD business school in Switzerland[11], indicate that despite Australia's positive legal environment and corporate governance faring well, a big factor in the loss of our earlier top 10 status is the negative impact of our current labour relations system.

35. The findings echoes research published by the World Economic Forum (WEF) in November 2012. In the Global Competitiveness Report[12], major sectors of the Australian economy were asked to select and rank the five most problematic factors facing business today. As pictured below, restrictive labour regulation was singled out as the most problematic from a total of 16 competitiveness factors, including infrastructure, tax, and government bureaucracy.

36. The fact that twice as many respondents cited restrictive labour regulation as a greater impediment to doing business than tax rates is concerning, particularly in light of Australia being one of the world's highest-taxed countries.

Figure 7: The most problematic factors to doing business in Australia



Note: From the list of factors above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

<u>Source</u>: World Economic Forum Global Competitiveness Report, 2012-13

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[11] IMD World Competitiveness Yearbook 2013, 25th anniversary edition, accessed 1 February 2012
[12] WEF Global Competitiveness Report 2012-13, accessed 1 February 2012

37. Despite ranking 4th in the efficiency of corporate boards (a proxy for management acumen), 5th for the stability of our banking system and 7th for the quality of scientific research institutions, Australia ranked a dismal 42nd in overall labour market efficiency in the WEF report. Canada – a commonly used comparator against Australia – ranked 4th in labour market efficiency while our rivals across the Tasman also earned a top 10 place. As the WEF report noted, "the main area of concern for Australia is the rigidity of its labour market".

Figure 8: Australia's 'hit-and-miss' rankings in factors determining international competitiveness

'Top 10' rankings		***'Situation critical'***	
Efficiency of corporate boards	4th	Flexibility of wage determination	123rd
Stability of banking system	5th	Hiring and firing practices	120th
Intensity of local competition	6th	Pay and productivity	80th
Quality of scientific research institutions	7th	Co-operation in labour relations	67th
Financial market development	8th	Overall labour market efficiency	42nd

***Source*: World Economic Forum's Global Competitiveness Report, 2012-13**

2.2 Intensified global competition

38. An examination of trends in the international resource sector further illustrates why this decline in international competitiveness threatens the billions of dollars of uncommitted investment in our resource industry pipeline.

39. Over the past decade, Australia's resource industry has been responsible for the greatest creation and transfer of wealth and skills in our country's history. However, with capital more global and mobile than ever before, $383 billion worth of uncommitted resource projects and hundreds of thousands of jobs could be at risk unless investors are reassured of Australia's status as a reliable prime destination for investment. Improving productivity is a crucial part of this.

40. While substantial attention about demand for our natural resources from China is warranted, it must not be overlooked that China is both an energy customer and energy competitor to Australia. A sole focus on China's demand appetite would be misguided.

41. China remains the world's largest producer of coal, steel, cement, aluminium, lead, zinc, tin and magnesium. China's mining industry as a whole has approximately 80,000 state-owned mining companies and 200,000 collectively-owned mines. According to the Australian Trade Commission, the Chinese

mining industry has been experiencing strong growth driven by increasing demand from the power, manufacturing and construction industries[13].

42. Australia's strategic location in Asia is often cited as a key driver of the resource industry's competitiveness. However, there are other emerging competitors in this region. These are often low-cost economies with a significant headstart against Australia in the hunt for global capital. Mongolia was the world's fastest growing economy in 2011, driven by foreign investment and rapid developments in its rich coal, copper and gold mining sectors.

43. The Guardian recently said: 'If you were going to develop a commodity supply source anywhere – even today, when global commodity prices have taken a dip – it would be in Mongolia, this former Soviet satellite right next to China, the most resource-hungry market in the world[14].' The recent discovery of vast mineral deposits in the Mongolian hinterlands is helping drive the country's progress and diverting the attention of investors from conventional markets like Australia.

2.3 Increasing cost pressures

44. According to a recently published Australian Financial Review analysis, up to $100 billion of mining projects are currently under threat due to rising costs and falling commodity prices, with the analysis predicting that more than a dozen developments will be further delayed[15].

45. Xstrata reportedly told a Hunter Valley business in August 2012 that the cost of building a new thermal coal mine in Australia was 66 per cent more expensive than anywhere else in the world, at $US176 a tonne versus $US106 a tonne elsewhere[16].

46. In 2012 the Business Council of Australia commissioned an analysis of the cost of building large-scale resource projects in Australia, and found productivity and wage inflation levels far worse than those of our global competitors.

Figure 9: Summary of Australian project cost performance

Project type	Average cost compared to US Gulf Coast
Sustaining capital projects	40 per cent higher
Iron ore and coal developments	38 per cent higher
Large complex processing projects	50 per cent higher

Source: Internal report prepared for Business Council of Australia by Independent Project Analysis, 2012

[13] Australian Trade Commission, 'Mining to China', accessed 1 February http://www.austrade.gov.au/Mining-to-China/default.aspx (Last updated: 31 Jul 2012)

[14] The Guardian online, Foreign firms dig deep for Mongolia's commodity riches, 20 August 2012

[15] $100bn mining projects threatened , Australian Financial Review, 4 September 2012

[16] More big mine projects at risk, published by the Australian Financial Review, *25 August 2012*

47. While Australia will never be able to compete against many of our Asian neighbours on wage costs, it is concerning to see our industry at a distinct cost disadvantage compared to an economy of comparable living standards such as the US. It is little wonder companies like Chevron and Woodside, which are developing the largest offshore LNG projects in the world in Western Australia, cite such cost escalations from an already high base as a major concern.

48. Numerous resource industry leaders have warned that Australia cannot afford to have its cost curve further jeopardised by escalating wage claims, and have flagged that labour productivity improvements as essential when the cost of labour in Australia is double that of many of our competitors.

49. As the Managing Director of Rio Tinto stated at the Australian Resources Conference and Trade Show in November 2012:

> *Australian projects are now at a distinct capital cost disadvantage relative to peers. Reform of the Fair Work Act needs to go much further than has so far been flagged by the government.*[17]

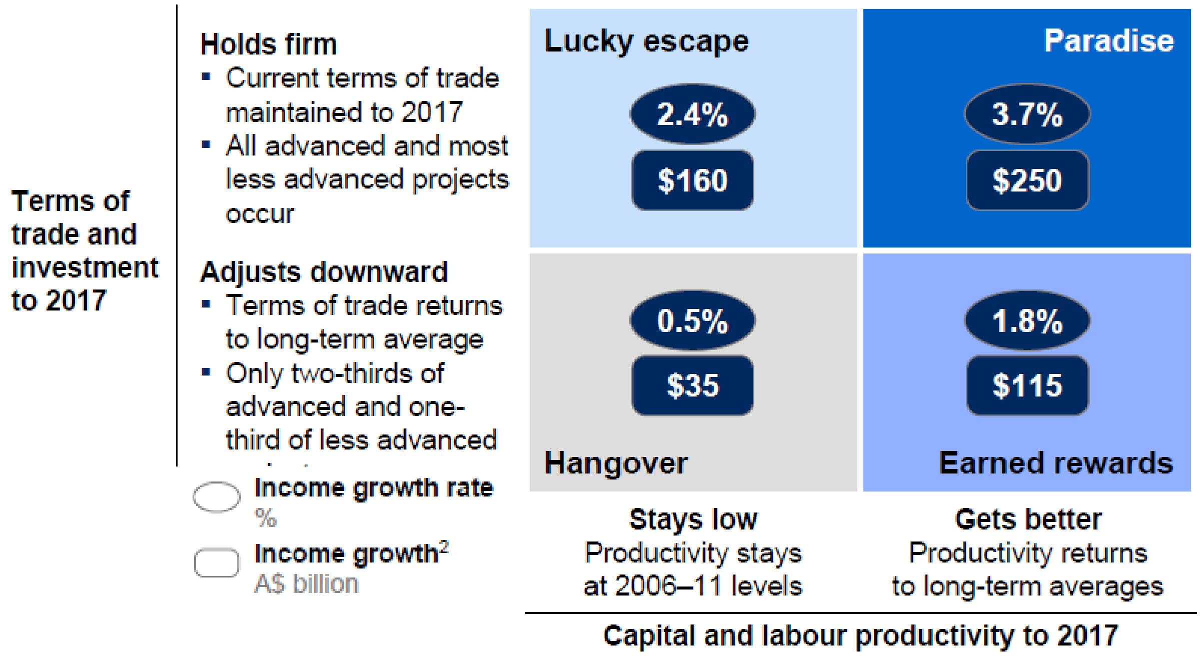
2.4 The cost of inaction

50. While the mining boom is by no means over, its dynamics have changed and the policy challenges have become greater and more urgent. In the past, higher prices underwrote strong revenues but we can no longer rely on sustained high commodity prices to sustain growth. While our terms of trade remain at historically high levels, Australia needs to do the hard yards of increasing productivity to ensure our value growth for the long term.

51. In their 'Beyond the boom' report[18], McKinsey and Co depict four scenarios for the resource industry, dependent upon potential outcomes in our productivity and terms of trade (commodity prices):

[17] Rio Tinto, Presentation to the Australian Resources Conference and Trade Show, Nov 13, 2012
[18] McKinsey & Co, 'Beyond the boom: Australia's productivity imperative' August 2012

Figure 10: McKinsey's 'Four Scenarios' for the Resource Industry



Source: McKinsey & Co, 'Beyond the Boom: Australia's productivity imperative'

52. Looking ahead to 2017, national income could vary up to $A135 billion depending on the direction of our terms of trade.

53. While the commodity price cycle is out of our control, Australia can take meaningful steps to increase our productivity and shore up the certainty of advanced and less advanced project investment. Returning our productivity to long-term averages and the levels experienced in the 1990s is required to 'earn ongoing rewards' in the resource sector and guarantee at least $90 billion of income growth over the next five years.

Key takeaways:

- Australia's international competitiveness ranking has declined in part due to the Fair Work Act with two independent global studies citing poor labour relations as highly problematic for our global competitiveness.
- In a global survey conducted by the World Economic Forum, restrictive labour regulation was singled out as the most problematic barrier to doing business in Australia
- The competition for global capital has intensified, with resource-rich economies such as Mongolia and Myanmar emerging as genuine competitors with a distinct cost advantage over Australia.
- Resource projects in Australia also operate at a cost disadvantage compared to our fellow developed economies and can cost between 38 to 200 per cent more than those on the US Gulf Coast.
- Recent project scale backs indicate that cost escalations are of major concern for Australia's attractiveness as an investment destination.
- The resource sector is at a crossroads and responsible workplace reform can assist in addressing cost blowouts, and increasing productivity.

3 Productivity Initiatives – Non WR Legislation

54. This section focuses on ideas and initiatives to increase productivity in the resource industry separate to any consideration of amending the Fair Work legislation, or pursuing workplace relations reform. AMMA members report that driving productivity gains within their respective organisations is very much on their agenda as a corporate priority.

55. The Telstra Productivity Indicator 2012[19], a survey of organizational attitudes towards productivity, found that over the next 12 months, productivity improvement is rated as the highest priority by organisations in the agriculture, mining, resources and utilities sectors (93%).

56. Six non-legislative productivity initiatives are now advanced for consideration.

	Productivity driver	**Initiative**
1	Investment	Develop a productivity index to provide baseline data to support the business case for employer investment in employee engagement, process improvements and ICT.
2	Work practices	Research paper on innovative work practices that investigates how rostering schedules can increase productivity at FIFO worksites.
3	Leadership	Rolling out of recent landmark findings to resource employers on the management and leadership drivers of High Performing Workplaces.
4	Technology	Creation of an inter-industry technology forum that brings together experts and practitioners in logistics, operations and technology from both resource and manufacturing industries to share and cross-fertilize ideas.
5	Bargaining	Placing productivity back on the bargaining agenda through a global study drawing together the '20 most innovative practices' around the globe to reignite the creativity and commitment of employers and employees to address productivity gains in bargaining efforts.
6	Human Capital	The integration of 'enhancing productivity and efficiency' modules into various levels of vocational education and training, in order to instill a productive culture, mindset and relevant skills at a workplace level. The first step would be a scoping study and consideration by national skills authorities.

[19] See: http://www.telstra.com.au/business-enterprise/resources-insights/telstra-productivity-indicator/

3.1 Development of a productivity investment index

57. Employers recognise the role of investment in driving productivity. Respondents to the Telstra Productivity Indicator survey, including resource employers, rated investment in information and communications technology (ICT), process improvements, employee engagement and customer communications as all equally important in driving productivity improvements.

58. However, research suggests that one of the most significant challenges to investment in productivity is to secure buy-in from management. Uncertain or inefficient data to support a genuine 'business case' in favour of productivity investment appears to be a substantial barrier to its implementation.

59. AMMA therefore proposes the establishment of a 'productivity investment index. The index would establish baseline data for productivity investment in the resource industry, developed from of a survey of resource industry enterprises. The index would collate industry best practices in the key areas of employee engagement, process improvement and technological adaption. Case studies would be utilised to illustrate the qualitative and quantitative benefits of productivity-driven investment.

60. The index would serve the dual purposes of showcasing productivity initiatives by resource employers as well as providing a road map for future investment. AMMA understand that many of its members are developing their own internal productivity measurement processes, and an industry wide measure would neatly complement current industry decision making frameworks.

3.2 Innovative work practices: FIFO rostering research

61. Given the capital intensive nature of the resource industry, work arrangements can have a crucial influence on capacity utilisation[20]. For example, the introduction of 12-hour shifts was a key factor in labour and capital utilisation in the resource industry, and by the end of the 1990s it was estimated that around one half of all production and maintenance employees were working 12-hour shifts.

62. Fly-in fly-out (FIFO) work arrangements are an essential mechanism for accessing key skills in remote areas. A question that arises out of this labour supply mechanism is how it affects productivity. A study by the Centre for Social Responsibility in Mining identified labour turnover as a significant threat to the productivity of FIFO operations[21].

63. A critical factor in managing turnover at FIFO sites is the particular roster schedule used. Early research indicates that providing a longer time-off ratio appears to reduce turnover. However, shortened rosters such as '4 days on, 4 days off' have been associated with employees taking less task ownership. There is a need for further research in this area, as flagged by both academics and practitioners.

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[20] Productivity Commission (2008), Productivity in the Mining Industry

[21] Workforce Turnover in FIFO Mining Operations in Australia: An Exploratory Study. Summary Report. University of Queensland, 2003

64. AMMA therefore proposes a research project aimed at identifying innovative work practices to increase productivity at FIFO work sites. A mixed-method study would draw upon direct interviews with mine site managers, FIFO employees and be supplemented by production data from selected sites. This grass-roots approach to productivity is likely to discover innovative and practical ways to increase productivity 'at the coal face'.

3.3 Leadership and productivity

65. On 14 October 2012, the Minister for Employment and Workplace Relations announced the Australian Government, in collaboration with industry, would provide $12 million over four years to establish a new Centre for Workplace Leadership[22]. Focusing on leadership 'as it happens at the enterprise level every day', the Centre's activities would lead the public debate on the importance of leadership and drive a broader movement to 'do things differently at work'.

66. The Minister's media release stated 'that ensuring that Australian jobs and workplaces of the future continue to lift productivity is a key priority for the Gillard Government.' It further stated that, for too long, the workplace relations debate in Australia has focused on conflict between unions and employers and the transactions involved in setting pay and conditions. As a result, relationships at work have been given insufficient attention.

67. Meanwhile, landmark research is being undertaken in a DEEWR-funded cross-disciplinary study into High Performing Workplaces (HPWs) in the services sector. That study has found that, compared with Low Performing Workplaces, HPWs:

   a. Are more productive – having a 12% higher total factor productivity when ranked in terms of their intangible asset performance.

   b. Perform significantly better financially – with profit margins nearly three times higher.

   c. Have significantly higher levels of innovation performance, for example – HPWs dedicate more resources to fund new strategic initiatives (46.9% higher).

68. The report found that improving productivity is largely a function of commitment to develop leadership and management capabilities.[23] The HPW study is now working with a small number of study participants to design and trial tailored intervention strategies to lift workplace performance and improve management of intangible assets, productivity and profitability.

69. This could be replicated for the resource industry. Resource industry employers could be informed of the significant benefits from increased productivity by way of enhanced leadership and management capabilities, as reported in the DEEWR study. Working in partnership with members, AMMA could develop

[22] 'Centre for Workplace Leadership', 14 October 2012, Media Release, The Hon Bill Shorten MP

[23] Leadership, Culture and Management Practices of High Performing Workplaces in Australia: The High Performing Workplaces Index.
See: http://www.deewr.gov.au/Skills/Programs/WorkDevelop/Documents/SKEHPW.pdf

strategies, tailored to each organisation, to enhance workplace performance, improve the management of intangible assets and increase productivity and profitability.

3.4 Fostering technological innovation

70. New ore reserves are becoming more technically challenging than at any time in history, and are located in more remote regions[24]. Business imperatives to improve performance and contain costs, combined with a chronic shortage of skilled labour, compound the difficulty of operating profitably in these inhospitable locations. Mining companies thus need to find new ways to achieve increases in productivity to meet demand.

71. Recent advances through driverless trucks, remote operations and control systems, enable resource employers to produce many times the ore with fewer workers and better safety than ever before. However, the challenge is that the last step-change of technology has now been exhausted: infrastructure is being pushed to its limits.

72. Other industries, such as manufacturing, have been able to make quantum leaps in productivity and responsiveness through new technology paradigms such as assembly lines, automation and just-in-time methodologies[25]. As mining enterprises aspire to achieve similar gains, elements of these concepts are now being investigated for their application in mining through emerging technology that includes 'intelligent production' and 'demand-driven planning'.

73. AMMA proposes the formation of an 'inter-industry technology forum' that brings together experts and practitioners in logistics, operations and technology from both the manufacturing and mining sectors, to capitalize on this trend. We live in an era of 'open-source innovation' where the best ideas are those that are spread and shared. A technology forum would enable industry and thought leaders to discuss how innovation can cross-fertilize between industries to drive ongoing productivity growth. This would create industry flow-on effects between sectors, boosting productivity and competitiveness by fostering an innovation mindset.

3.5 Putting productivity back on the bargaining table

74. Productivity improvement is simply off the bargaining agenda in too many, if not nearly all negotiations. We have ended up in a situation in which bargaining fatigue has given way to no practical scope to bargain for increased productivity. Employers and trade unions have lost capacity and creativity in this area and they need both reinvigoration and reequipping to pursue productivity increases.

75. There are three ways in which AMMA proposes to get bargaining back on the bargaining agenda.

76. Firstly, AMMA proposes that a study be undertaken into the barriers to productivity bargaining at the workplace level. In 2008, the Productivity

[24] 'Four Must Have Productivity Increasing Technologies', Mining Australia, 29 October 2012
[25] Ibid

Commission released a report on productivity in the mining industry[26]. As we approach the five-year anniversary of that report in 2013, the time is right to ask the Productivity Commission to produce, in liaison with a committee comprised of employer groups and unions, a report identifying barriers to productivity bargaining and recommending solutions.

77. Secondly, funding needs to be used to support employer organisations and unions in delivering innovative enterprise bargaining. In the 2010-11 budget the Federal Government announced $20 million over two years for a Productivity Education and Training Fund to assist trade unions and employer organisations to achieve better productivity outcomes through enterprise bargaining under the Fair Work Act[27]. This funding should be continued, expanded and targeted towards 'productivity-at-risk' industries such as the resource sector. This funding should be linked with productivity outcomes and employer associations should be play a primary role in progressing initiatives.

78. Thirdly, AMMA proposes that a rapid research project be undertaken by DEEWR on the 20 most innovative business practices and initiatives from around the globe as a catalyst to place productivity back on the bargaining agenda. For example, 'new works agreement' are now commonplace in the German automobile industry and rely on cooperation between management and the union to secure investment projects. In one instance, Ford management signed to promised new investments at the five German Ford plants at Cologne, Düren, Berlin, Wülfrath and Saarlouis. In return the union agreed to a tapering of 'payments above contract wages' and a flexibilisation of working time[28]. Ford announced that the new works agreement will bring savings amounting to $US120 million per year and will secure jobs at Ford Germany for the next 10 to 15 years.

3.6 Skills development and productivity

79. Skills shortages are a well-documented threat to productivity in the resource industry. PricewaterhouseCoopers has reported that, with an underemployment rate of only 1 per cent, compared to the national average of 11.1 per cent, the resource industry is operating at close to full labour capacity[29]. This can undermine productivity through increased labour turnover and difficulties experienced by employers in attracting and retaining skilled labour. This is exacerbated by the remote nature of many resource industry projects.

80. In response, AMMA has developed industry initiatives aimed at domestic skills and training, as well as attraction and retention:

    a. Miningoilandgasjobs.com is an electronic platform that matches the correct skill set with employer requirements.

[26] See: Productivity Commission (2008), Productivity in the Australian Mining Industry: measurement and interpretation
[27] Commonwealth Government, 2011-2012 Budget: Building Australia's future Workforce
[28] Eurofund- European Foundation for the Improvement of Living and Working Standards: New practices in industrial relations, 2002
[29] PriceWaterhouseCoopers (2012), Productivity Score: Mining edition, May 2012

b. AMMA Skills Connect brings together specific training and development, apprenticeship and cadetship programs, verification of competency to international skills assessments at one point of service delivery to employers.

c. AWRA is a jointly funded initiative led and managed by AMMA with the goal of increasing women's participation in the mining sector.

81. To further drive productivity through skills development, AMMA proposes that the teaching of productive work practices be integrated into vocational training programs. This will encourage future generations of trained employees to develop and implement and productivity improvement, and has already been flagged as a valuable initiative by employers. The Telstra Productivity Indicator reported that over the past year there has been a significant increase in the perceived impact of investment in staff training on driving productivity improvement, from 35% in 2011 to 46% in 2012 by employers[30].

82. A curriculum on "managing for efficiency and productivity" for managers in particular, as well as across various levels of trades, sciences and engineering roles on site should be developed. The Minister's 14 October 2012 media release on Centre for Workplace Leadership stated that 'productivity happens at work'. To facilitate this, vocational training needs to incorporate the productivity agenda and illustrate to future employees the methods and benefits of improved productivity.

[30] http://www.telstra.com.au/business-enterprise/resources-insights/telstra-productivity-indicator/

4 Labour Productivity – The Case for WR Reform

83. Resource industry employers continue to report deteriorating labour productivity under the Fair Work laws.

84. AMMA's ongoing Workplace Relations Research Project, conducted in conjunction with RMIT University, is a survey-based analysis that has revealed a story of reduced flexibility, increased union power, productivity being forced 'off the table' in bargaining, project delays and a climate of industrial uncertainty, all combining to threaten projects of national significance.

85. The respondents to these surveys, which have been conducted twice a year since 2010, are resource companies operating in every part of the industry across Australia. Respondents are asked every six months to rate their perception of current levels of labour productivity at their worksites. This is then converted into an index score out of 100. The higher the index, the more positive the perception of labour productivity. Results are provided below.

Figure 11: What is your perception of the current level of labour productivity at your worksite(s)?

Survey date	Extremely low (%)	Quite low (%)	Low (%)	Acceptable (%)	High (%)	Quite high (%)	Extremely high (%)	Index score out of 100
April 2010	0.0	4.6	7.7	16.9	30.8	33.8	6.2	66.7
Oct 2010	0.0	0.0	8.8	38.2	30.9	20.6	1.5	61.3
April 2011	0.0	2.9	20.0	28.6	32.9	14.3	1.4	56.7
Oct 2011	1.2	3.5	11.6	31.4	31.4	15.1	5.8	59.5
April 2012	1.0	5.0	14.0	27.0	27.0	22.0	3.0	58.8

Source: AMMA Workplace Relations Research Project – Fifth Report: for the period from 1 November 2011 to 30 April 2012, prepared by Dr Steven Kates, RMIT University

86. As the table above shows, the benchmark level is that reported in the first survey conducted in April 2010, shortly after the Fair Work Act commenced. Employers' perceptions of labour productivity then dropped in the second and third surveys in October 2010 and April 2011 respectively, with the index falling a full ten points from 66.7 in April 2010 to 56.7 one year later.

87. A telling statistic is that between April 2010 and April 2012, the number of resource industry employers who perceived their workplace productivity as 'high' or better dropped from 70.8% to just 52%.

88. The level of satisfaction with workplace productivity in April 2010 could arguably be attributed to actions taken by resource workplaces to lock in pre-Fair Work agreements before July 2009. But going forward, as hundreds of these agreements expire and more employers are exposed to bargaining under the Fair Work Act, we expect to see reported labour productivity levels drop further.

4.1 Bargaining for productivity 'off the table'

89. The above survey has also found that four in five companies that have tried to negotiate productivity improvements in exchange for wage increases under the Fair Work Act have been unable to do so[31]. AMMA's members are reporting that productivity has been forced off the bargaining table by unions who have been empowered under the Fair Work Act, resulting in a return to workplace restrictions that have not been seen for decades. AMMA members have reported roster schedules being union driven rather than employee driven, which is not in the interests of fatigue management or productivity.

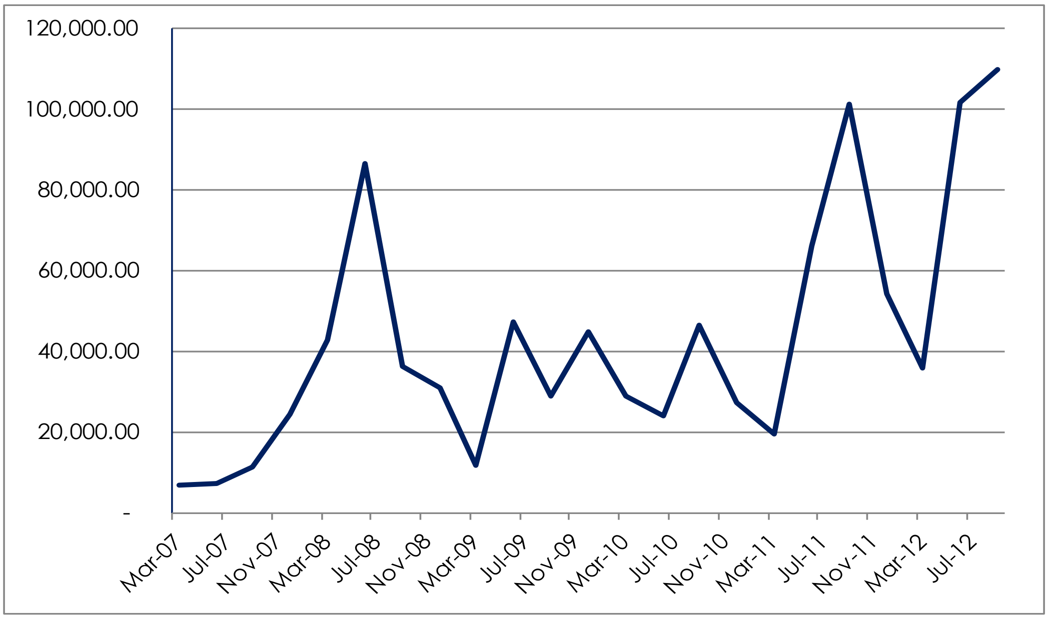
4.2 A combative labour environment

90. The Fair Work Act has also led to resource industry employers reporting a rising incidence of conflict in the workplace. In the AMMA surveys, the numbers of resource employers who rated their industrial environment as unacceptable due to conflict have increased fivefold between April 2010 and April 2012.

91. The current industrial relations system broadens the capacity for unions to take protected industrial action. For example, union claims now commonly include clauses restricting the use of contractors and labour hire workers, which were prohibited content under the previous IR system.

92. ABS data on recent levels of industrial action indicate a more combative labour environment. In the March quarter 2010, soon after the commencement of the Fair Work Act, there were 54 disputes incurring 28,800 working days lost. This leapt to 68 disputes incurring 110,000 working days lost in the September quarter 2012, the highest level since 2004[32]. The graph below shows the trajectory in working days lost to industrial action over the past five years.

***Figure 12*: Working days lost to industrial action**



[31] The AMMA Workplace Relations Research Project – Fifth Report

[32] Data source: ABS 6321.0.55.001 - Industrial Disputes, Australia, Sep 2012

93. While some of these recent spikes can be attributed to large public sector bargaining rounds, industrial action in the construction and coalmining sectors has also contributed to the increase in days lost, with coal mining recording the highest number of working days lost per 1000 employees for the September quarter 2012.

94. The financial cost of industrial action is a function of the resource project, its size, the stage of development it is at, and the duration of any stoppage or work bans. But not only does industrial action directly affect the hip pocket of employers, industrial uncertainty and the threatened industrial action causes investors and other stakeholders to question the viability of future resource projects in Australia.

95. The Grocon dispute in September 2012 was indicative of an increasing culture of militant unionism. Unionists started picketing in the Melbourne CBD in August 2012 in an effort to halt work on Grocon's Emporium site. The picket continued in spite of a Supreme Court injunction to end the blockade. Fair Work Australia also recommended a cooling off period, recommending the union stop its blockade of the site.

96. Grocon has said the dispute cost the company about $500,000 a day[33]. Consequently, its only option was to sue the union for damages given the costs of the industrial action and blockades were not factored into its service contracts. Work disruptions arising from strikes also erode productivity levels.

4.3 Unsustainable wage claims

97. The reduced number of agreement options available to employers under the current system as well as reduced measures discouraging militancy has also allowed unions to pursue and obtain unsustainable wage increases in bargaining rounds, and to do so with no productivity dividend.

98. In the 2010/11 vessel operators' dispute in the offshore oil and gas industry, maritime unions were able to secure, on the back of ongoing strike action, 37 per cent pay rises plus a $200 a day construction allowance in return for no productivity improvements. MUA national secretary Paddy Crumlin actually criticized employers seeking productivity offsets in the last enterprise bargaining negotiations as being 'dinosaurs'[34].

99. Another employer was forced to accept the following indicative pay rates for three week on, three week off rostered employees in the offshore construction sector:[35]

- $317,734 per annum for a laundry hand.
- $334,408 per annum for a cook.
- $337,484 per annum for a tradesperson.
- $373,701 per annum for a barge welder.

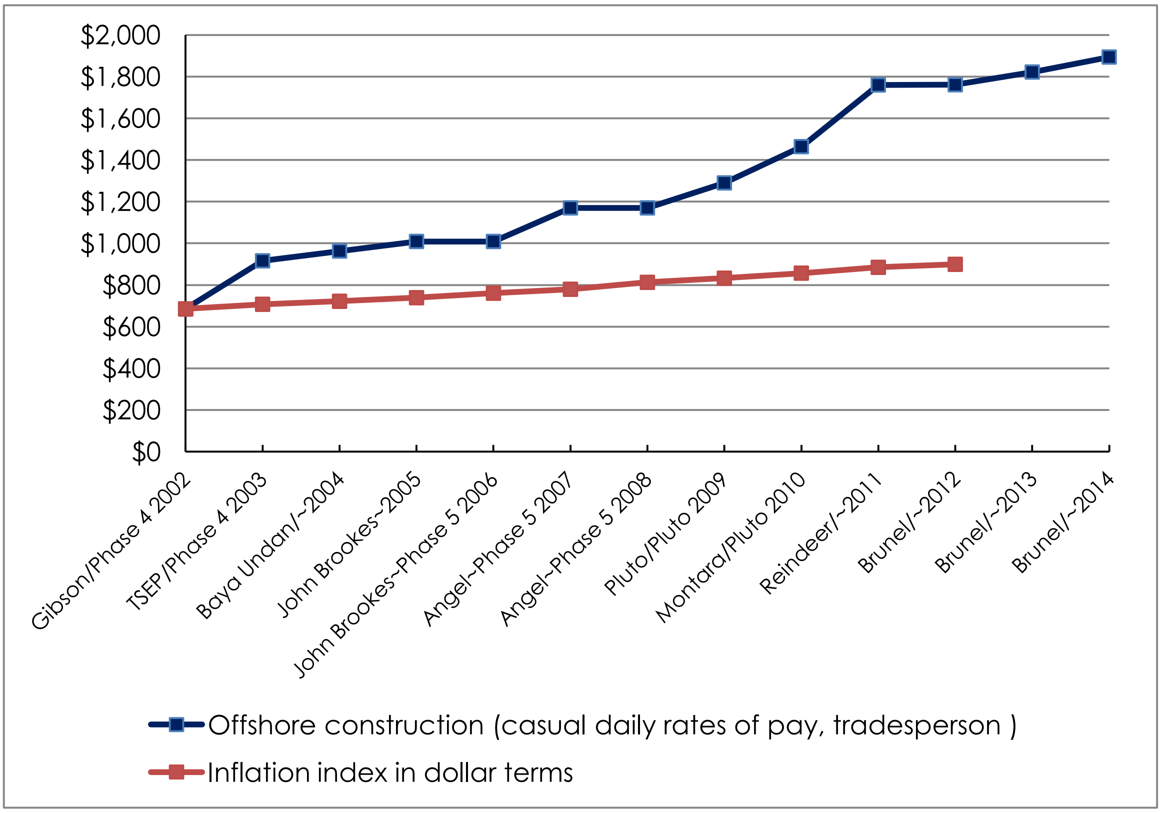
[33] 'Grocon to sue CFMEU as police smuggle workers through CBD blockade', 31 August 2012

[34] 'Union leader claims `dinosaur' employers out of touch', 3 February 2010, The Australian online

[35] Based on typical Enterprise Agreement established in offshore oil and gas vessel operators negotiations, 2010

100. Across the board, casual daily pay rates for offshore construction trades have seen phenomenal growth in the past 10 years, as shown in the graph produced using data obtained from AMMA members below.

***Figure 13*: Casual daily rates of pay in offshore construction (tradesperson)**



101. As the graph shows, in 2002, the casual daily rate of pay for an offshore construction tradesperson was $685. By 2011, this had nearly tripled to $1,760 a day excluding superannuation and accommodation expenses.

102. While these types of wage rates are clearly not sustainable nor justifiable on productivity grounds, they show the extent of wealth creation for Australians that the mining industry has delivered over the past 10 years.

103. It is worth noting that it is not just in offshore construction that wage rises in the resource industry, even phenomenal ones like those above, are achieved with no productivity improvements for the employer. These types of non-productive outcomes are commonplace and actually encouraged by our current system due in part to the ease with which workers and unions can take protected industrial action.

104. Even the former President of the ACTU Martin Ferguson made the comment that: "In some projects we are getting improvements in wages and conditions that I think are unsustainable over time." He went onto say that warn that future expansion opportunities would "disappear" unless Australia was "conscience of the cost of delivering projects in Australia[36]".

[36] 'Productivity first, not wages', The Australian Online, 3 July 2012

105. Productivity improvement is simply off the bargaining agenda in too many, if not nearly all negotiations. We have ended up in a situation in which bargaining fatigue has given way to no practical scope to bargain for increased productivity. Employers and trade unions have lost capacity and creativity in this area.

4.4 Project delays

106. The Fair Work Act reduces the number of agreement making options available to resource employers for new projects. This has enhanced the capacity for unions to delay major projects, with AMMA surveys revealing that one in five major projects is at serious risk of not being delivered on time and on budget due to ongoing union stalling tactics. Further, the time and costs associated with negotiating agreements have significantly increased under the current framework. Again, these difficulties have created bargaining fatigue and made addressing productivity all but impossible.

4.5 Undermined flexibility

107. More than 60% of resource industry employers report Individual Flexibility Arrangements (IFAs) are of little or no value and that there is no real option for individual flexibility under the Fair Work Act[37]. This is in contrast to the up to 80% of resource industry workplaces in hard rock mining being covered by Australian Workplace Agreements at their peak or employee collective agreements in order to give all parties more flexibility and provide protection against industrial action.

4.6 Six essential WR reforms

108. Australia's Fair Work legislation was intended to increase the productivity, flexibility and fairness of workplaces. In reality, it appears to be one of the single largest barriers to labour market productivity, to rebooting the mining boom, and to increasing Australia's competitiveness.

109. The answer to Australia's productivity challenge is to address the range of productivity determinants, with a realistic acceptance that labour market reform must be at the heart of our efforts. Unless there is an acceptance of the need for workplace relations reform in conjunction with other productivity initiatives, resource industry productivity will continue to decline.

110. The following six priority areas have been identified by major resource employers as requiring .

4.6.1 Protected industrial action

111. **Ensuring protected industrial action during bargaining can only be taken as a last resort and that there is greater access to 'cooling off' periods**. Industrial action can cost employers up to $3.5 million per day through lost working time, jeopardised contracts and commercial agreements, project delays and undermined productivity.

[37] Based on research findings from the AMMA Workplace Relations Research Survey

112. Bargaining should be the central focus of any industrial relations system. The parties' interests being furthered should be those of the employer and their employees, not third parties. It is not conducive to employer-employee relations to have a union as the default bargaining representative: instead, employees should elect in writing if they wish to choose a non-employee representative. Industrial action should be a last resort and the bar should be raised so that bargaining needs to have been exhausted before protected action can be taken.

113. When industrial action is taken, there should be greater access to suspension orders and 'cooling off' periods to bring the parties back to the negotiating table without the federal industrial tribunal arbitrating outcomes. These changes are needed given that unions regularly fail to show any restraint in their wage and condition demands and commonly resort to threats of industrial action at the earliest stages of bargaining.

4.6.2 Greenfield (new project) agreement making

114. **Ensuring the capacity to make Greenfield (new project) agreements without exorbitant wage and condition outcomes or unnecessary project delays**. Securing Greenfield agreements in a timely manner with sensible wages and conditions is essential in delivering projects productively on time and on budget because work cannot commence until employment terms are secured. As previously stated, even the former head of the ACTU has warned that future resource sector productivity will disappear if unsustainable wage claims are sought at the expense of long-term wealth creation.

115. The only way an employer can make a Greenfield agreement under the Fair Work Act is with a trade union. The resource industry has a strong desire to make Greenfield agreements with the unions that represent workers but, if employers are not able to strike a reasonable agreement with a union, there must be an alternative.

116. Industry needs a workable set of rules that do not provide unions with unfettered power over the content of new project agreements and which provide employers with some ability to temper extortionate union demands.

4.6.3 Allowable matters

117. **Ensuring allowable matters in enterprise agreements pertain to the direct relationship between employers and employees and not to third parties**. Clauses in enterprise agreements such as those restricting the use of contractors and labour hire workers undermine managerial decision-making and the running of productive workplaces.

118. While such clauses purport to be about increasing job security, they are really about unions controlling who gets to work on projects and under what terms and conditions. This level of unwarranted control by unions over project costs must not be allowed to continue.

119. Industry requires an agreement making system that does not encourage the taking of protected industrial action in support of matters that have nothing to do with the efficient and productive operation of the enterprise, but which

serve only to interfere with legitimate managerial prerogative and shore up union power. Agreement matters must pertain to the employment relationship.

4.6.4 Union right of entry

120. **Ensuring the location and frequency of union right of entry visits is reasonable and for the most part left to employers to determine based on operational needs**. The high frequency of union visits to some sites clearly threatens to undermine productive workplaces as time and attention are absorbed in accommodating union officials and diverted away from management and operational concerns.

121. Given the size, location and type of machinery on various resource projects as well as employers' enormous safety obligations, employers must retain the capacity to reasonably direct permit holders in relation to locations and times of workplace visits. A sense of proportion and reasonableness needs to be inserted back into the Fair Work Act's right of entry rules.

4.6.5 Genuine individual agreement making

122. **Ensuring agreement-making options are broadened through the re-introduction of a workable form of individual agreement**. The failure of the Fair Work Act to provide a statutory individual agreement option or to support other individual agreement making options such as fixed-term IFAs or opt-out clauses must be reformed. Productivity is being undermined as employers have less scope to directly engage their employees in pursuit of 'high-performance, high-reward' arrangements.

123. With the removal of the ability to make new AWAs in March 2008, the recent prohibition of opt-out clauses in enterprise agreements, the prohibition on making an enterprise agreement with one employee, plus existing requirements that a group of workers be 'fairly chosen', means the only form of individual agreements other than common law contracts under the current system are Individual Flexibility Arrangements (IFAs).

4.6.6 Adverse action

124. **Ensuring there is rigor introduced to the threshold for accessing the adverse action / general protections jurisdiction in order to moderate employers' potentially unlimited liability for damages and minimise the incidence of unmeritorious claims.** The prospect of unlimited liability creates great uncertainty for employers and negatively impacts their decision making. The reverse onus of proof in the provisions means that employers must go through a rigorous process of defending claims even if they are unmeritorious. This detracts from the running of productive workplaces by diverting attention away from management and operational concerns.

125. Since the Fair Work Act's adverse action / general protections provisions took effect on 1 July 2009, this has been a serious and growing area of concern among AMMA's membership. They cost employers thousands of dollars, sometimes tens of thousands, to respond to each claim.

126. The adverse action provisions should be removed. If the provisions continue to exist there should be an upper limit on compensation such as a limit of six months' pay under the unfair dismissal jurisdiction. This would discourage employees from 'forum shopping' to get the best financial outcome or have the best chance of 'go away' money.

Key takeaways:

- The Fair Work Act has failed to deliver strong workplace outcomes, with resource employers continuing to report deteriorating labour productivity under the laws.
- 4 out of 5 resource employers have been unable to negotiate productivity improvements in exchange for wage increases under the Act.
- A culture of union militancy has emerged as the current regime widens the capacity for unions to take protected industrial action in search of unsustainable wage claims.
- Restricted agreement options available to employers for new projects have enhanced the power for unions to delay major projects – one in five projects are now at risk due to union stalling tactics.
- Much needed flexibility has been disregarded under the Fair Work Act, with more than 60 per cent of resource employers reporting that Individual Flexibility Agreements are of little or no value and that there is no real option for flexibility under the Act.
- Workplace reform, in the six priority areas of protected industrial action, greenfield agreement making, allowable matters, adverse action, union right of entry and genuine individual agreement making, is required to drive labour productivity growth and restore the competitiveness of the resource industry.