The Secretary

Inquiry into the Minerals Resource Rent Tax Bill 2011 and related bills

Senate Standing Committees on Economics
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Please treat this email as a submission to the inquiry into the *Minerals Resource Rent Tax Bill 2011 and related bills* being considered by the Senate Economics Committee.

The Australia Institute has a record of critically assessing the impact the mining industry on the Australia economy. The Australia Institute is pleased to take this opportunity to make this research available to the Committee. This research includes:

Mining the truth (2011) which showed that on the one hand the importance of the mining industry has been vastly over-rated in the Australian context and, secondly, the mining boom has actually resulted in net costs for the rest of the Australian community.

An analysis of the economic impacts of the China First mine (2011) which examined the published economic analysis commissioned by the owner of the proposed mine. The report highlighted that, although the mine will generate economic benefits for Australia the net benefits of the China First mine are considerably reduced by offsetting costs elsewhere in the community.

Submission on mining taxation (2010), was a submission to the Senate Select Committee on New Taxes in 2010. This submission is particularly relevant to the Economics Committee's present inquiry. The final paragraph of the submission says:

> *The Henry Report proposed a theoretically pure resource rent tax. The political negotiations that followed resulted in some important compromises and perhaps too many concessions to the mining industry. The biggest anomaly is that the resource rent tax, in practice, has three rates: 40 per cent for oil and gas, 22.5 per cent for iron and coal and zero for all other minerals. It would seem there is an important unfinished agenda here.*

Those three publications are attached to this email.

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The Australia Institute
Research that matters.

Mining the truth

The rhetoric and reality of the commodities boom

Institute Paper No. 7
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David Richardson and Richard Denniss

TAI

Institute Paper

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Summary

> *"The future is in our hands, and it will be defined by the way we handle the current minerals boom. Get it wrong, and we falter. Get it right, and we set the nation up for decades to come."*
>
> Prime Minister, the Hon. Julia Gillard[1]

The Australian economy, like all modern economies, is diverse and ever changing. In 1951 agriculture accounted for just over 30 per cent of Australia's GDP—much bigger than mining has ever been—but today agriculture represents just 2.6 per cent of GDP. Sixty years ago it would have been inconceivable to imagine agriculture shrinking to less than a tenth of its size as a share of the economy. By the same token, nobody would have predicted that the telecommunications sector would become so large; the mobile phone industry employed virtually nobody in the 1980s. But change is a signature feature of a healthy economy, and these things did indeed take place.

Recently the mining industry in Australia has boomed, surging from around four per cent of GDP in 2004 to around nine per cent today. But the rise of the mining industry is neither inexorable nor universally beneficial. While the high exchange rate associated with the mining boom has brought down the price of imports, at the same time it has ensured that trade-exposed industries such as tourism, manufacturing and education will find it harder to compete internationally.

Much has been said about the changing face of the mining industry, where the effects of the boom have been both substantial and positive. But until very recently there has been far less discussion of the impact of the mining boom on the rest of the economy, including those areas which have suffered as a result. While one might assume that any expansion in the mining industry simply adds to the overall size of the Australian economy, in reality the operation of the macro economy is far more complex. Indeed, much of the growth in mining comes at the direct expense of expansion in other parts of the economy.

This paper seeks to describe the various ways in which the mining boom is changing the Australian economy. In particular, it highlights some of the negative consequences of the boom which are rarely acknowledged in public discussion of economic issues.

[1] Quoted in Shanahan, D 2011. 'Back to work junking two-speed economy'. *The Australian.* 4 February.

Key facts about the mining boom

Commodity prices have surged

The world is increasingly willing to pay higher and higher prices for those raw materials that Australia owns in abundance. The world price of coal and gold have, for example, all surged rapidly in recent years. A fourfold increase in the prices received for mineral commodities over the past decade is driving the rapid growth in the contribution of mining to GDP, not big increases in actual tonnages of mining output.

Mining is a big exporter

Mining exports in the year to March 2011 were worth $155 billion, or 11.4 per cent of GDP. Mining exports make up 52.8 per cent of the value of total exports from Australia.

Mining is predominantly foreign owned

It is not just iron ore and coal that Australia exports in large quantities; we export a lot of dividend payments as well. In 2009-10 mining profits were $51 billion, of which 83 per cent, or $42 billion, accrued to foreign investors. Over the next ten years pre-tax profits for mining will likely be around $600 billion; at present levels of foreign ownership around $500 billion of these profits will end up in the hands of foreign owners.

Prices have boomed, but not employment or output

While the rate of growth of the mining industry has been very high (from a very small base), the overall level of employment in the mining industry is surprisingly small. ABS figures show that in May 2011 total mining employment was 217,100 in a workforce of over 11 million. Mining is, in fact, one of the smallest sectoral employers in Australia, offering work to fewer people than that employed in the arts and recreation services sector. As only a tiny proportion of the Australian workforce is employed in mining, very few Australians benefit directly from employment increases or wage increases in the mining industry.

How the mining industry likes to portray itself

The art of spin is to ensure that people view a situation from exactly the right direction. Just as a piece of paper looks very thin when viewed from the side and much wider when viewed from above, or an object can be made to look large by surrounding it with small things, so too can the apparent size and influence of an industry be influenced by distorting the direction from which it is viewed and carefully selecting the context in which it is evaluated.

The mining industry has developed its own website,[2] as well as a range of paid advertisements, which are designed to depict the mining industry in a favourable light. In these materials and in their public statements the industry tends to focus heavily on the amount of employment in mining, the amount of tax paid, the benefits of rising share prices and the level of mining exports.

Employment

In order to ensure that employment in mining appears larger than official statistics suggest, the mining industry generally makes reference to both direct jobs in the sector itself and the indirect jobs that sit upstream or downstream from the sector.

The process of converting the amount of direct employment into a much larger number of direct and indirect jobs relies on the use of industry 'multipliers'. ABS figures allow analysts to estimate the nature and extent of the interconnections between industries and, in turn, estimate the different multipliers for each industry. It is important to remember that the same 'multiplier effect' applies in virtually every sector; whether it is teachers, plumbers or miners spending their incomes, additional jobs will inevitably be created. Industries such as mining are much more willing to pay economists to estimate the size of their industry's multiplier and, in turn, to quantify the level of indirect job creation that results.

Given the circular nature of economic activity, however, if the number of indirect jobs associated with every industry were calculated in this way and summed together, the total number of jobs in the economy would be more than 30 million—around three times the size of the Australian labour market.

It is true that employment in mining has been growing rapidly, but from a very small base. The mining industry has played a very small role in the growth in employment in Australia over the past seven years. In fact, the increase in employment in the mining industry accounts for only seven per cent of total employment creation over that period.

Taxes paid

The mining industry pays corporate tax like every other industry. However, the average rate of corporate tax paid by the mining industry in 2008-09 was 13.9 per cent, substantially below the theoretical 30 per cent tax rate. One reason for this is the generous tax deductions available to the mining industry, particularly in relation to research and development and accelerated depreciation provisions for capital expenditure.

[2] See the 'This is our Story' website (Minerals Council of Australia 2011), supported by a wide range of mining organisations and companies, at <http://www.thisisourstory.com.au/about-us.aspx>.

Superannuation and savings

The mining industry is fond of arguing that Australian households benefit from the mining boom through increased prices for their shares, which are held either directly by households or indirectly through superannuation funds. While it is true that there have been some large gains in mining share prices (up to 170 per cent in the S&P/ASX Resources index since 2004), it is also the case that share ownership in Australia is largely confined to higher income households. The wealthiest 20 per cent of households own 86 per cent of shares, and a very small number of shareholders own substantial holdings in Australian mining companies. For example, 67 individual shareholders own 68 per cent of all Rio Tinto shares. Similarly, 78 shareholders own 59 per cent of BHP.

The median fund balance in superannuation among those about to retire is $71,731. A fall in the value of Australian mining activity of ten per cent would only cost that group around 0.4 per cent of their fund balance—that is, a fall of around $287. This is because the average super fund, with 43 per cent of its funds invested in Australian shares, only has around four per cent of its portfolio exposed to the Australian mining sector.

Such a reduction can be contrasted with the average monthly movement of the ASX 200 share price index, which would shift a balance of $71,000 by around $1403 a month. For the typical superannuant, everyday share market fluctuations have a much greater material impact on retirement savings than the amount of profits or made tax paid by mining companies.

Exports

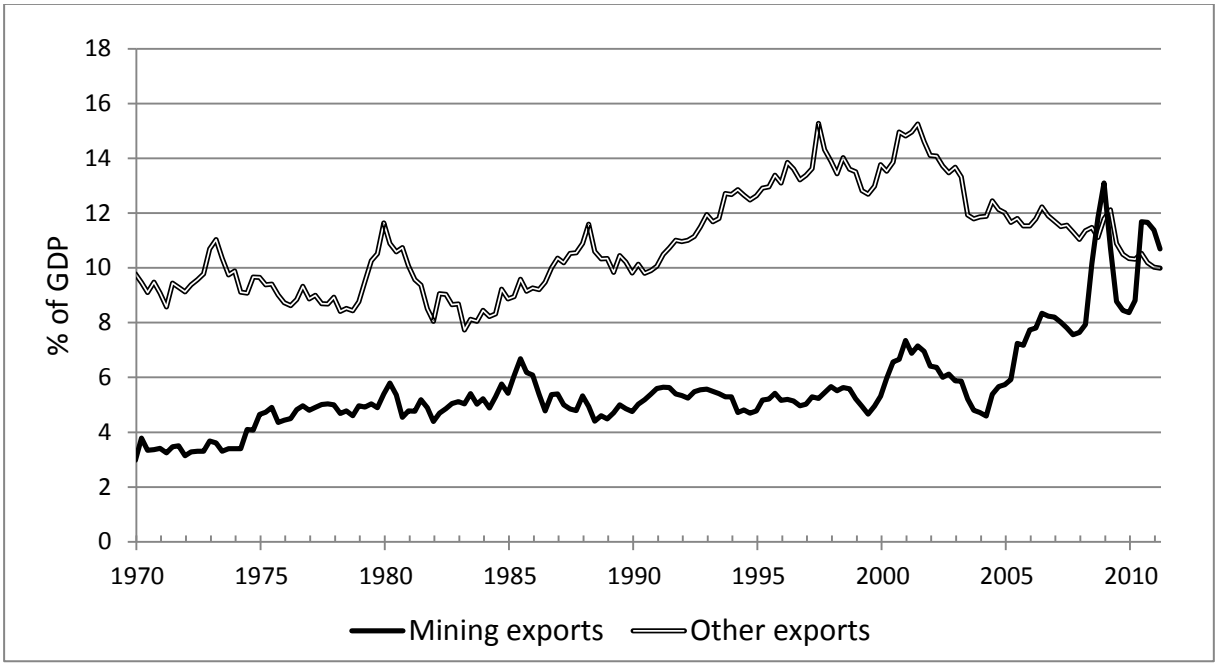
While no spin is required to make the mining export figures appear large, the mining industry is careful to ensure that the macroeconomic consequences of the large size of and rapid growth in mining exports are seen in a positive light. In fact, the consequences of mining exports for other Australian industries, as well as the impact of mining on Australia's current account deficit, are more mixed than is usually understood.

One of the biggest adverse impacts that the mining boom has had on other sectors of the economy is through the exchange rate. While mining exports have increased by around five per cent of GDP over the period since the beginning of the mining boom, non-mining exports have declined by around five per cent of GDP over the same period. Indeed, the recent mining boom coincides with the largest and longest sustained decline in non-mining exports in the past 40 years. These trends are shown in Figure 1.

The mining industry is obviously an important and large exporter but, to the extent that mineral exports displace other Australian exports, mining exports are a mixed

blessing for the Australian economy. Indeed, in employment terms the net impact of growth in mining exports may well be negative if mineral exports displace more labour-intensive exports elsewhere in the economy.

Figure 1: Mining exports and other exports (% GDP)



Source: ABS 2011c. *Balance of Payments and International Investment Position, Australia, March.* Cat no 5302.0. 5 May.

What the mining industry doesn't want to talk about

While the mining industry is keen to talk about the levels of employment, exports and taxes paid it is less enthusiastic in drawing attention to other consequences of the mining boom, such as profits and the adverse impact of the mining industry on other industries.

Profits

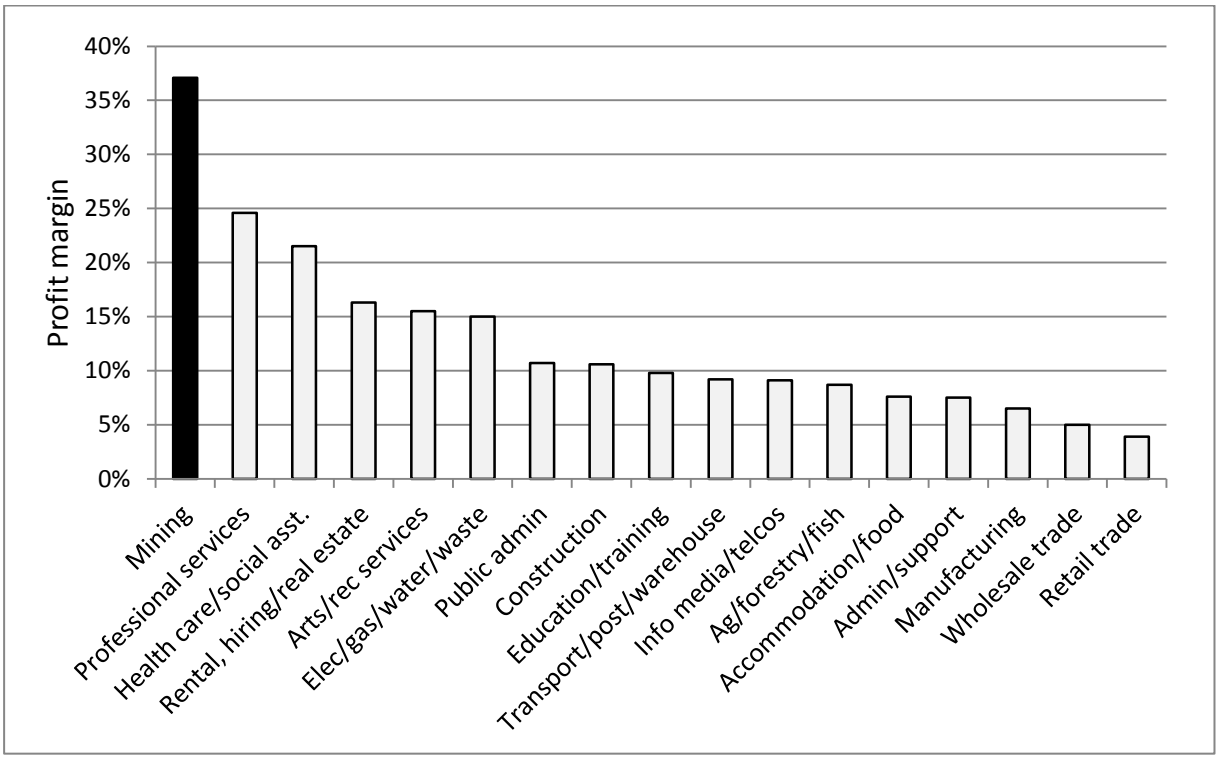
According to the ABS the total pre-tax profits earned by mining firms operating in Australia was more than $51 billion in 2009-10. If these profits were distributed evenly across Australian households the dividend cheque received by each household would come to more than $5,000. But of course the ownership of Australian mining companies is far from evenly distributed across the Australian community, as already noted. Indeed, around 83 per cent of profits will in fact be sent offshore to the foreign owners of mining operations in Australia.

Over the next ten years, profits in mining are likely to exceed $600 billion if world prices remain high. The original version of the mining tax, the Resource Super Profits Tax (RSPT), would, at current commodity prices, have collected more than

$200 billion in additional mining taxes over the coming decade. Unfortunately, the $22 million advertising campaign run by the mining companies against the RSPT resulted in a much less effective, and much less equitable, mining tax being negotiated. According to Treasury, the new Mineral Resource Rent Tax (MRRT) will raise an extra $38.5 billion in taxes from miners over the coming decade. The dividend of the $22 million advertising campaign for the mining industry was, therefore, more than $160 billion—equivalent to a 730,000 per cent return on investment.

Figure 2 shows the relative profitability of the Australian mining industry.

Figure 2: Profit margins by industry 2009-10 (Earnings before interest, tax, depreciation and amortisation)*



Source: Australian Tax Office.

* Finance and insurance have been excluded from this figure because of the conceptual difficulties in defining 'sales'.

The impact of the mining boom on other industries

The mining boom has affected other industries in various ways, both positive and negative. The mining industry is effective in highlighting the spill-over benefits for other industries associated with mining activity, for example by estimating the impact of the multiplier effect on employment in other industries. However, it is not keen to focus on the negative impacts of the boom on other sectors of the economy. These include:

- Driving up the exchange rate
- Driving up the costs of skilled labour for businesses in other sectors[3]
- Driving up the prices of raw materials used in mining (for example concrete)
- Driving up the cost of other services (for example construction).

A high exchange rate makes it more difficult for Australian exporters to compete in some world markets. In addition, the high degree of volatility of an exchange rate that is strongly linked to world commodity prices creates an additional challenge for the non-mining sectors of the Australian economy. For example, companies in the automotive industry need to make investment decisions up to a decade before new construction can begin. In deciding whether to manufacture a car domestically or to source cars from overseas for sale in Australia, car manufacturers need to make long-run predictions about the exchange rate. The more volatile the domestic exchange rate is, the greater the risk associated with domestic investment and, in turn, the lower the probability that such investments will go ahead.

Productivity

Contrary to popular belief labour productivity is growing rapidly in the non-mining sectors of the economy. As a result of the unprecedented haste with which the mining industry is expanding, however, labour productivity in the mining industry fell by half between 2000-01 and 2009-10. Once the impact of the massive decline in labour productivity in the mining industry is controlled for, there is no apparent slowdown in the rate of productivity growth in the non-mining sectors of the economy.

It would be inequitable if policy makers were to confuse this measured decline in average productivity with some failing on the part of employers and employees in the non-mining sector.

Interest rates

In Australia the RBA is responsible for adjusting official interest rates in order to achieve macroeconomic stability in general and stable prices in particular. In order to achieve these goals it increases interest rates when the economy is speeding up and lowers rates when the economy is slowing down.

While most people in Australia probably understand that higher interest rates are bad news for home owners, few people realise that a major cause of Australia's very high interest rates is the sustained boom in the mining industry. While they may not be widely read outside of financial circles, the RBA publishes its reasons for increasing interest rates and rising commodity prices and the mining boom

[3] Wage rises are of course a good thing for those workers whose incomes increase due to greater demand for labour.

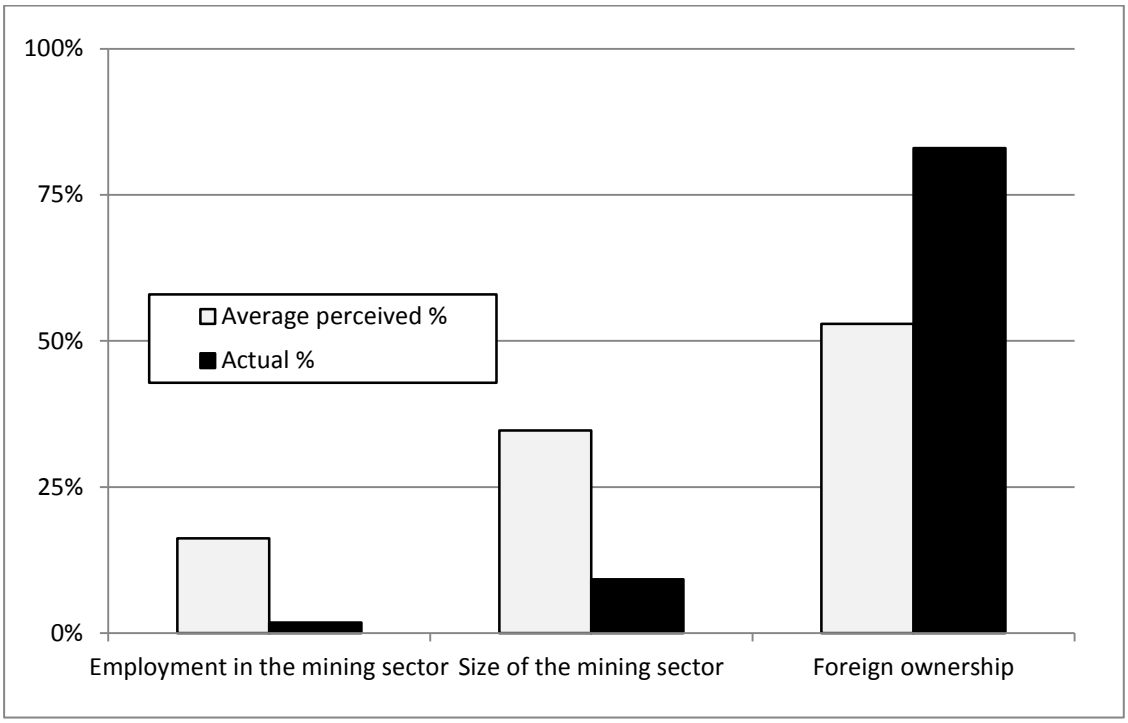
have featured strongly in their justifications. For example, between May 2006 and March 2008, the RBA steadily increased official interest rates from 5.50 per cent to 7.25 per cent in seven steps of 0.25 per cent. On each occasion, high or rising commodity prices were mentioned explicitly.

When interest rates peaked before the GFC higher mortgage interest rates were taking an additional $24 billion per annum from the household sector compared to the pre-boom interest rates that prevailed in 2004. At the time, this was equivalent to a three per cent reduction in living standards for the household sector as a whole – much of which can be attributable to the mining boom.

Public perceptions of the mining industry

To measure public perceptions of the mining industry, the Australia Institute conducted a survey of 1,370 members of the community in June 2011. The survey results show that the beliefs that many Australians have about the mining industry diverge radically from the facts.

Figure 3: Public perceptions of the mining industry compared with key facts



Survey sample size = 1,370

When asked what percentage of workers were employed in the mining industry, the average response was around 16 per cent; according to the ABS the actual figure is 1.9 per cent. While the mining industry accounts for around 9.2 per cent of GDP – about the same contribution as manufacturing and slightly smaller than the finance industry – a typical Australian believes that mining accounts for more than one third (35%) of economic activity. And while on average respondents said that

53 per cent of Australian mining activity is controlled by foreign companies, in reality the figure is actually 83 per cent. These findings are summarised in Figure 3.

To sum up, Australians believe that the mining sector:

- Employs nine times more workers than it actually does
- Accounts for three times as much economic activity as it actually does
- Is 30 per cent more Australian-owned than it actually is.

Who really benefits from the mining boom?

The mining boom has obviously created new jobs in mining, higher wages for those who have remained in the mining industry, very high dividends and share price gains for shareholders and a range of spill-over benefits, such as an increase in upstream and downstream jobs.

However, just as rising house prices in Perth are good for those who already own a home and bad for those hoping to buy one (and especially the vast majority who don't work in the mining industry), so too the 'benefits' of the mining industry are mixed blessing for the economy overall.

Strong world demand for Australia's minerals has driven up the exchange rate which, in turn, has reduced world demand for our manufactured and agricultural goods as well as for our tourism and education export services.

So who benefits and who loses?

Mining workers have of course experienced the direct effect of the mining boom as have some of the firms and their workers that have experienced the ripple effects of the mining boom.

Ordinary wage and salary earners have seen no boom in the rate of growth in their real wages.

Pensioners receive indexed pensions and, by definition, indexed payments do not increase in real terms so there is no extra benefit for pensioners. (The exception was the $30 a week increase in the 2009-10 budget as part of the government's response to the global financial crisis.)

Homeowners are forced to pay higher interest rates across the board as the Reserve Bank seeks to control overheating which is actually concentrated largely in the resource-intensive regions of Australia.

Shareholders have experienced increases in the value of resource stocks and reductions in the value of investments in retail, manufacturing and other sectors that have been adversely impacted by the rising Australian dollar.

Superannuants with the median balance of those approaching retirement would be better off by around $2 a week, or 0.6 per cent of the age pension, as a result of the mining boom.

Workers in others sectors of the economy that are trade exposed, such as those working in manufacturing, tourism and education, are experiencing reductions in employment and less job security.

Foreign owners of resource stocks have seen their profits rise enormously and the capital value of their Australian investments increase as the exchange rate has risen.

1 Introduction

The Australian economy, like all modern economies, is diverse and ever changing. In 1951 agriculture accounted for just over 30 per cent of Australia's gross domestic product (GDP), much bigger than mining has ever been.[4] Today agriculture is 2.6 per cent of GDP.[5] Sixty years ago it would have been inconceivable to imagine agriculture shrinking to less than a tenth of its size as a share of GDP. Yet it happened.

The mobile phone industry employed virtually nobody in 1980 and the internet industry employed few in 1990. It would have been hard to imagine 30 years ago the prevalence of both of these technologies today.

The mining industry has recently boomed in Australia, surging from around four per cent of GDP in 2004 to around nine per cent today. This rise of the mining industry is neither inexorable nor universally beneficial. The high exchange rate associated with the mining boom makes imports cheaper for some Australians, but at the same time it ensures that trade-exposed industries such as tourism, manufacturing and education will be harmed.

Much has been said about the impact of the mining boom on the mining industry; the effects have been both large and positive. But there has been far less scrutiny of the impact of the mining boom on the rest of the economy.

It is easy to assume that growth in the mining industry would lead directly to growth in the economy overall. Similarly, it is easy to imagine that increased employment in the mining industry leads to increased employment across the economy. And it is easy to conclude that, if the economy has grown, we must all be better off. But the reality of the way the Australian economy operates is, in fact, quite different to the picture painted by the mining industry. Indeed, in many instances the expansion of the mining industry has come at the direct expense of other industries.

While the mining industry is very effective in communicating what they see as the benefits to the broader economy that flow from the mining boom, the public hears far less about the harmful macroeconomic consequences that result from such a large expansion of one part of the economy. For example, in the words of a former senior Reserve Bank of Australia (RBA) economist:

> *[The interest rate] needs to be set in line with overall activity…You don't want mining to be going gangbusters, and other sectors of the economy, such as*

[4] ABS 2004. 'Feature article—100 years of change in Australian industry'. *Australian National Accounts, 2003-04,* Cat no 5204.0, 10 November.

[5] ABS 2010i. 'National Income, Expenditure and Product'. *Australian National Accounts*, Dec 2009, Cat no 5206.0, 3 March.

> *construction and finance, also growing rapidly so the whole economy is growing well above trend. Labour costs would be bid up, prices would accelerate, and you could eventually run into problems with rising inflation expectations.*[6]

Put simply, the RBA believes that if the mining industry is growing faster than average, interest rates should be increased to slow down the growth in other parts of the economy. Otherwise, rapid growth in the mining sector where other parts of the economy were also growing rapidly would place upward pressure on wages and inflation.

When the mining industry talks about the benefits of the mining boom and the importance of the skills shortages it faces, it tends not to focus on the impact of interest rate movements and, in particular, that rate increases will be used by the RBA to slow down the growth of other sectors in order to 'free up' labour to work in mining.

This paper will present key facts about the mining industry in order to develop an evidence base from which the claims of the mining industry can be evaluated. It then provides a critical analysis of the key claims made by the mining industry concerning their contribution to the economy—in particular their claims about employment, exports and tax contributions.

The paper then draws attention to a range of issues that the mining industry highlights less frequently, such as the size of its profits, the extent of foreign ownership and the ways in which a boom in mining activity actually harms economic activity in other sectors of the economy.

Having presented survey data that shows that the Australian public believes that the mining industry is far bigger—and contributes far more to the Australian economy—than the official statistics indicate, the paper then answers the question 'who really does benefit from the mining boom?'.

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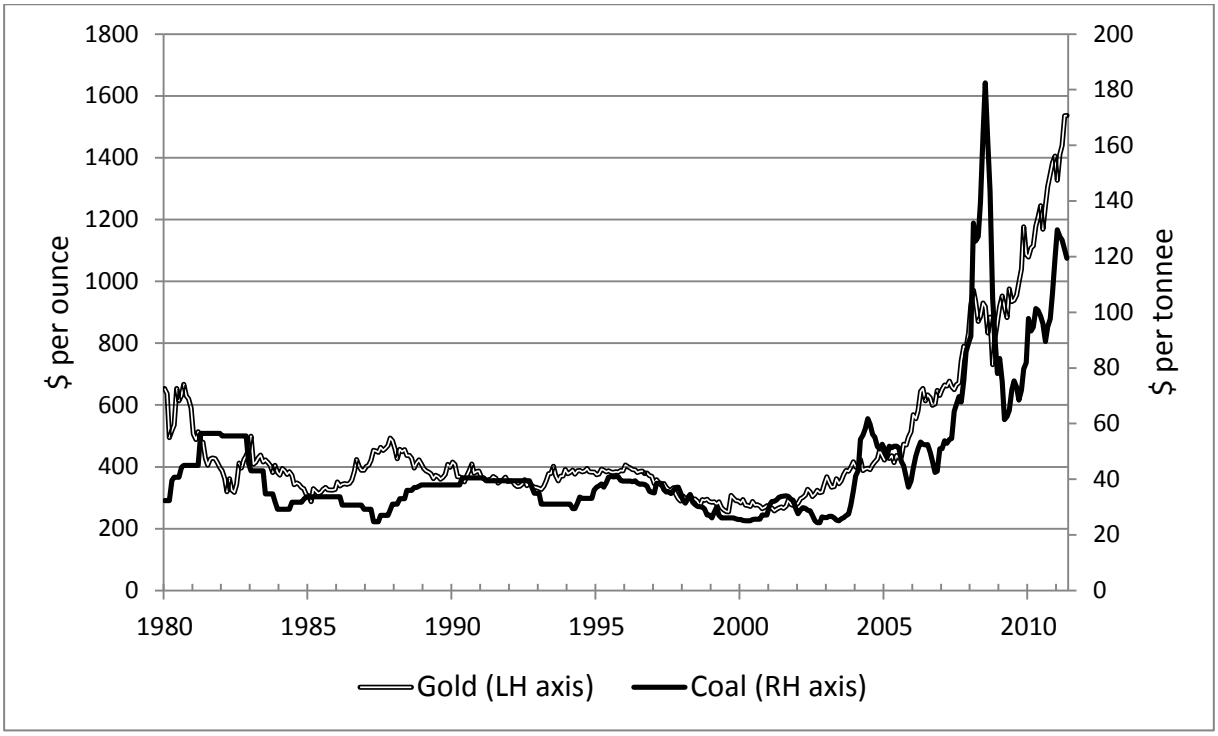
[6] Cornell, A and Kehoe, J 2011. 'Stevens style: a new direction for rates'. *The Australian Financial Review*, 7 July.

2 Key facts about the mining boom

Commodity prices have boomed

The world is increasingly willing to pay higher and higher prices for those raw materials that Australia owns in abundance. For example, Figure 4 shows that the world price of coal and gold have both surged rapidly in recent years.

Figure 4: Trend coal and gold prices, 1980-2011



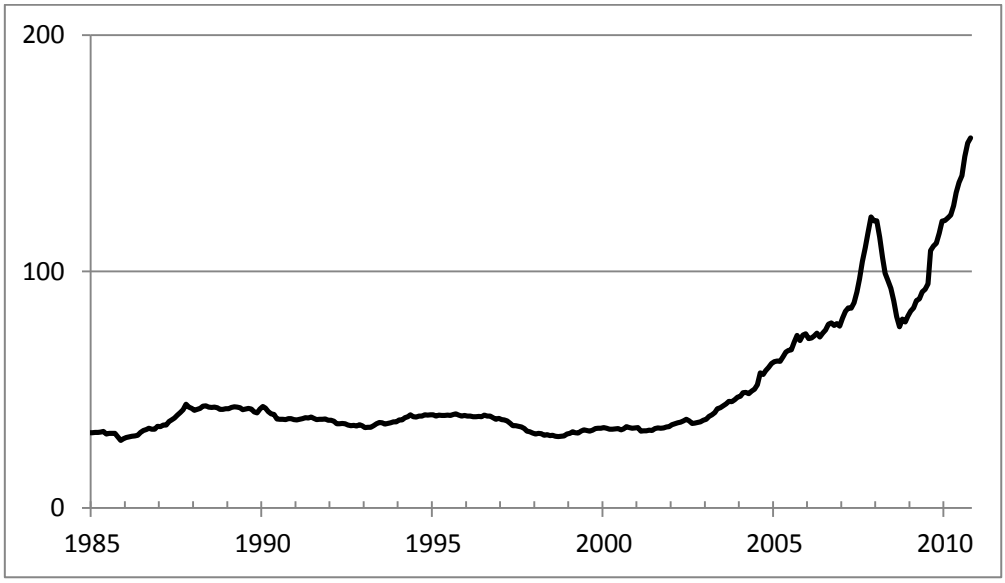
Source: Reuters.

Figure 5 provides data on a summary index compiled by the RBA to reflect Australia's specific mix of commodity exports. It shows that overall the prices received by those who mine Australian mineral resources has grown by more than 300 per cent. This rapid growth was briefly interrupted by the global financial crisis (GFC), but this setback was very brief.

This surge in commodity prices has resulted in a spectacular increase in the value of Australia's mineral resources and, in turn, the profits of those who mine our resources. The Australian Bureau of Statistics (ABS) publishes estimates of the value of Australia's minerals. The estimates are based on the value of the mineral resources less the costs of mining them (including a provision for companies to earn a competitive return on their investments). Between June 2004 and June 2010 the value of Australia's mineral resources was estimated by the ABS to

increase from $240 billion to $560 billion.[7] The most recent figure is likely to be a significant underestimate because it is based on the average commodity price for the previous five years and, as shown in Figure 4 and Figure 5, the five-year average is significantly below current prices. Adjusting the ABS figures in light of recent price increases suggests that Australia's mineral resources are actually worth approximately $1500 billion at today's prices.[8]

Figure 5: RBA index of commodity prices, 1982-2011



Source: RBA Statistical Tables.

The recent commodity price boom means that the value of mining output has grown rapidly in recent years from 4.2 per cent of GDP in 2003-04 to 9.2 per cent in the four quarters ending March 2011.[9] It is important, however, to understand that the majority of this increase was due to increases in commodity prices, not the quantity of mining output. In GDP terms mining is about the same size as manufacturing and wholesale and retail trade combined, but smaller than financial and insurance services.[10]

Mining production levels increased 27 per cent between 2003-04 and the four quarters to March 2011. Over the same period production levels rose by 21 per cent in all other industries and 22 per cent across the economy as a whole. The increase in mining output in recent years, and the increase in output in other sectors of the economy, is shown in Figure 6.

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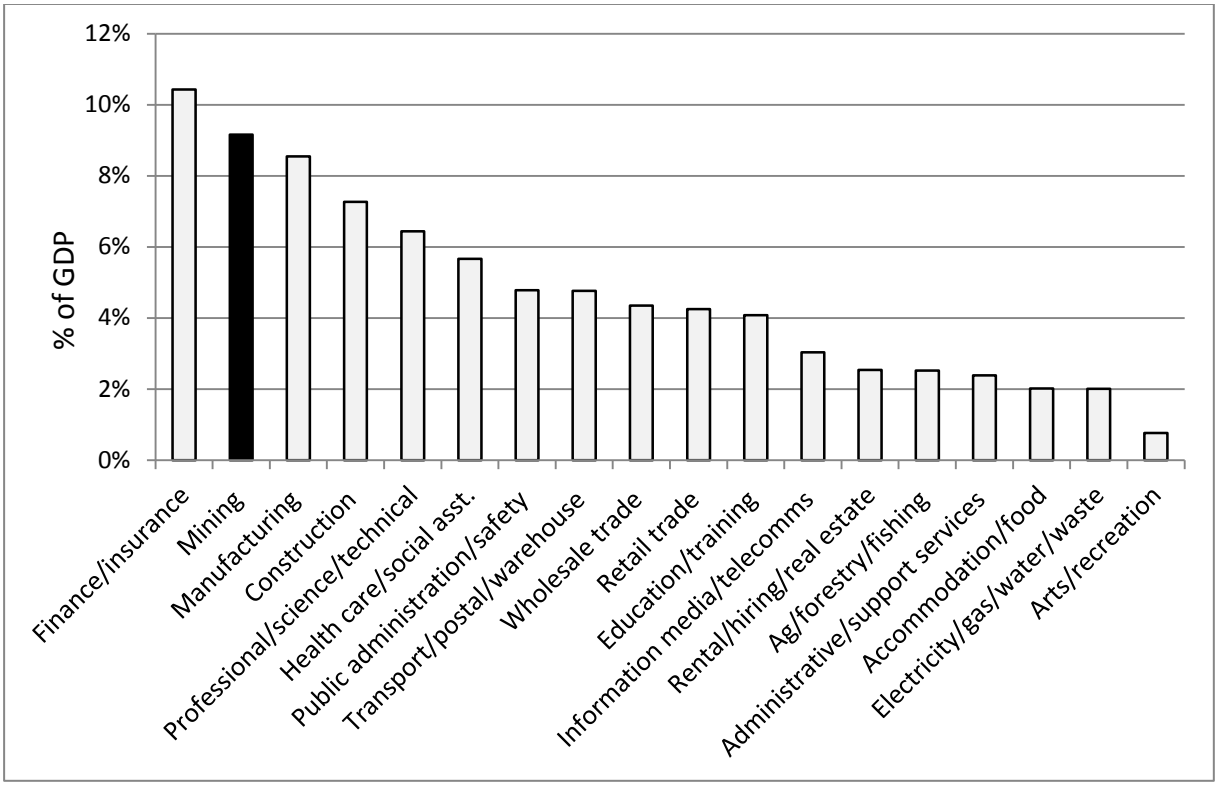
7 ABS 2010a. *Australian system of national accounts, 2009-2010.* Cat no 5204.0. 29 November.

8 These calculations are explained below.

9 ABS 2011i. *Australian national accounts: National income, expenditure and product, Mar 2011.* Cat no 5206.0. 1 June.; ABS 2005. *Australian national accounts: National income, expenditure and product, Dec 2004.* Cat no 5206.0. 2 March.

10 ABS 2011i. *Australian national accounts: National income, expenditure and product, Mar 2011.* Cat no 5206.0. 1 June. Figure refers to share of value added.

Figure 6: Comparison of mining production levels to production in selected industries



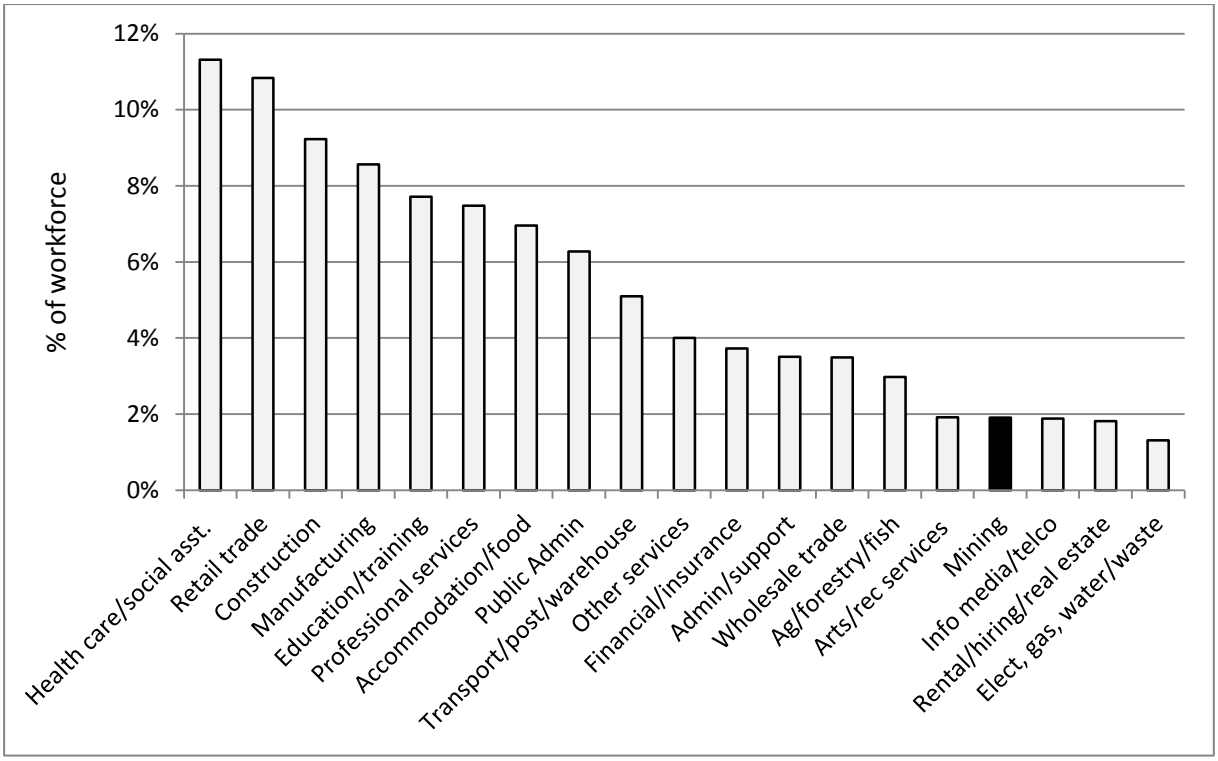
Source: ABS (2011) Australian National Accounts, Cat no 5206.0.

As indicated above, the large disparity between the significant growth in the proportion of GDP attributable to mining and the much more modest growth in the actual level of mining production is due to the large increases in the prices received for mining output. The contribution of an industry to GDP is estimated by multiplying the quantity of production in an industry by the price received for that production. In the case of the mining industry the fourfold increase in prices received for mineral commodities over the past decade is driving the rapid growth in the contribution of mining to GDP, not big increases in the actual tonnages of mining output.

Mining doesn't employ many people

While the rate of growth of the mining industry has been very high, off a very small base, the overall level of employment in the mining industry is actually very small. The latest ABS figures show that in May 2011 total mining employment was 217,100 in a workforce of over 11 million. Figure 7 compares the number of people employed in mining to employment in other Australian industries.

Figure 7: Employment by industry, May 2011



Source: ABS 2011j. Labour force, Australia, Detailed, Quarterly, May 2011. Cat no 6291.0.55.003. 16 June.

Mining is, in fact, one of the smallest employers in Australia, offering work to just 1.9 per cent of the population—fewer people than the number employed in the arts and recreation services industry.

Mining is a big exporter

It is the case that the mining industry contributes significantly to the value of Australia's exports. In the four quarters to March 2011, mining exports totalled $155 billion, equivalent to 11.4 per cent of GDP. Indeed, mining exports make up 52.8 per cent of total exports.[11] [12]

While there is no doubt that the mining industry is a major exporter, the rapid growth in these exports is placing increasing pressure on other sectors of the economy. In particular, the surge in world demand for mineral resources has driven the Australian exchange rate to record highs which have, in turn, reduced

[11] Interestingly, the ABS reports that mining exports are larger than the mining industry (9.2 per cent of GDP). That is because the export figures include significant inputs from manufacturing, transport and other sectors. The most dramatic example is the processing of bauxite which sells for around $100 per tonne but when converted into aluminium sells for over $2000 per tonne. Source: ABARES 2011. *Australian Commodities, March quarter*.

[12] Figures are from ABS 2011g. *Balance of payments and international investment position, Australia, March*. Cat no 5302.0. 31 May.; ABS 2011i. *Australian national accounts: National income, expenditure and product,* Mar 2011. Cat no 5206.0. 1 June.

the ability of other Australian industries to compete on the world market. The nature and extent of this 'crowding out' is discussed in detail below.

Mining is predominantly foreign owned

It is not just iron ore and coal that Australia exports in large quantities: we export a lot of profit as well. The proportion of foreign ownership in the mining sector is 83 per cent.[13]

The distinction between foreign ownership and foreign control

In this section, we use the terms 'foreign ownership' and 'foreign control'. Both terms are related but it is important to understand the distinction between them. Foreign *ownership* in a corporation or a sector refers to the proportion of a company or sector that is actually owned by foreign shareholders (that is, shareholders who reside overseas). A foreign *controlled* company, by contrast, has a level of foreign ownership that means foreign owners are able to exercise control over the company – in other words, more than 50 per cent. However, in some circumstances a controlling stake in a company can be as little as 15 per cent under Australian law.

While on average foreign ownership of mining in Australia is around 83 per cent, for some mineral resources foreign ownership is in fact much higher. According to the ABS, in 2009-10 mining profits totalled $51 billion. Taking the average rate of foreign ownership in the mining sector of 83 per cent, $42 billion worth of pre-tax mining profits flowed to out of Australia to foreign investors in the last financial year alone. Over the next ten years pre-tax profits for mining will likely be around $600 billion; at present levels of foreign ownership around $500 billion of these profits will end up in the hands of foreign owners.

Figure 8 gives the level of foreign domination of selected Australian commodities as calculated by Rio Tinto. These are based on the proportions controlled by majority foreign-owned companies and majority Australian-owned companies. For some minerals 100 per cent of production is due to companies that are majority foreign-owned. However, because of the way Rio Tinto compiled this data the results may well suggest higher foreign control than the actual level of foreign ownership.

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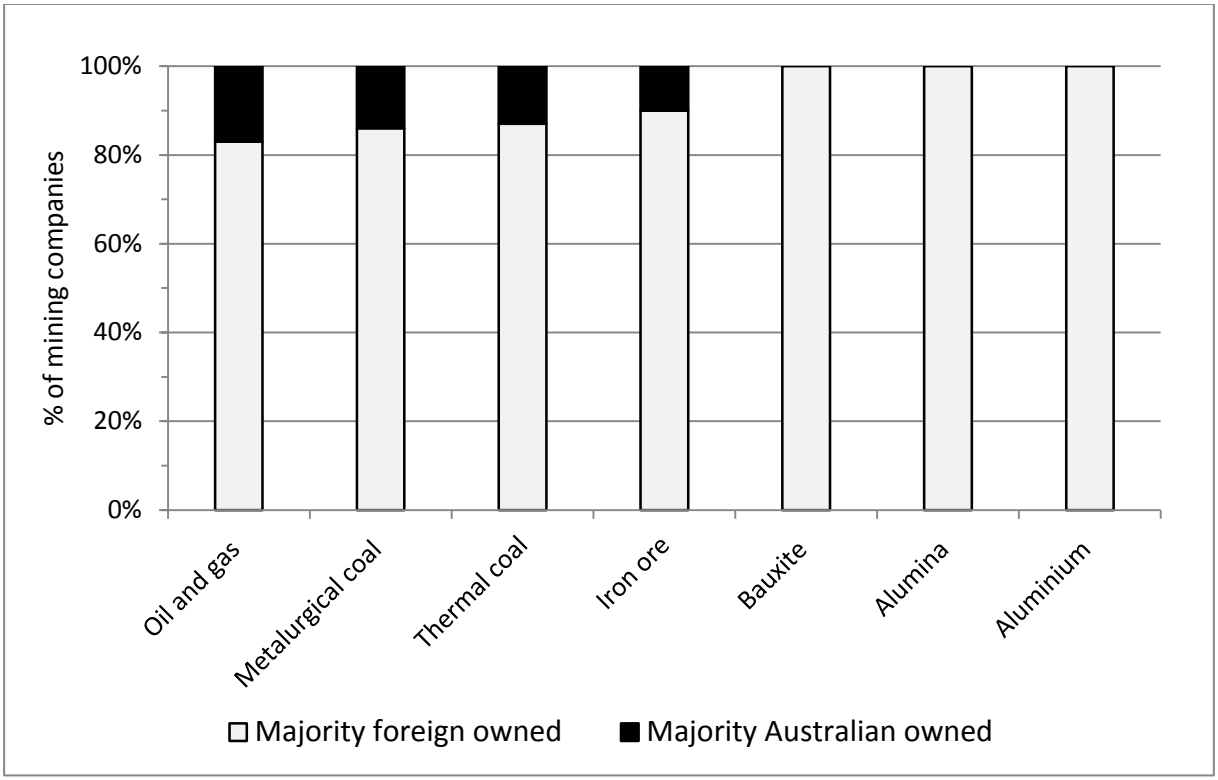
[13] See Edwards, N 2011. *Foreign ownership of Australian mining profits.* The Australian Greens.

last financial year alone. Over the next ten years pre-tax profits for mining will likely be around $600 billion; at present levels of foreign ownership around $500 billion of these profits will end up in the hands of foreign owners.

Figure 8: Foreign control of key mineral commodities in Australia



Source: Rio Tinto Australia (2009)

As explained above, the boom in the Australian mining industry has been driven by big increases in the prices paid for Australian resources, not by a big increase in the volume of the resources being extracted. Similarly, as only a tiny proportion of the Australian workforce is employed in mining, very few Australians benefit directly from increased demand for mining labour or wage increases in the mining industry. The big increase in the prices received for minerals, combined with a comparatively modest increase in expenditure on staff, has driven a big increase in the profits earned by mining companies operating in Australia. While the profits earned by foreign mining entities are included in the ABS measure of GDP, dividends earned and spent outside our borders obviously deliver far fewer benefits to Australians than dividends earned and spent domestically.

In sum, while the minerals that are the source of the mining boom are in theory owned by the people of Australia, the significant level of foreign investment in Australian mining operations means that the beneficiaries are largely located offshore.

The implication of high foreign ownership is that non-resident owners of Australian mining companies receive most of the windfall benefits of surging commodity prices. There are two main ways for Australians to recapture some of these benefits. We can either increase the price that we charge mining companies for access to mineral resources—for example by increasing the 'royalties' paid—or we can increase the tax paid on the windfall profits earned as a result of high world prices. Or we can do both.

3 Spinning the truth – how the mining industry likes to portray itself

The art of spin to ensure that people view a situation from exactly the right direction. Just as a piece of paper looks very thin when viewed from the side and much wider when viewed from above, or an object can be made to look large by surrounding it with small things, so too can the apparent size of the mining industry be influenced by distorting the direction from which it is viewed and the carefully selecting context in which it is placed.

The mining industry has developed its own website,[14] as well as a range of advertisements, designed to depict the mining industry in the light that, presumably, it considers the most favourable. The industry tends to focus heavily on the amount of employment in mining, the amount of tax paid, the benefits of rising share prices and the level of mining exports. This section discusses each of these areas and highlights how the mining industry uses accurate statistics to create an inaccurate picture of its contribution to the Australian economy.

Employment

Mining employs only 1.9 per cent of Australian workers. The latest ABS figures show total mining employment of 217,100 at April 2011 which is comprised of:

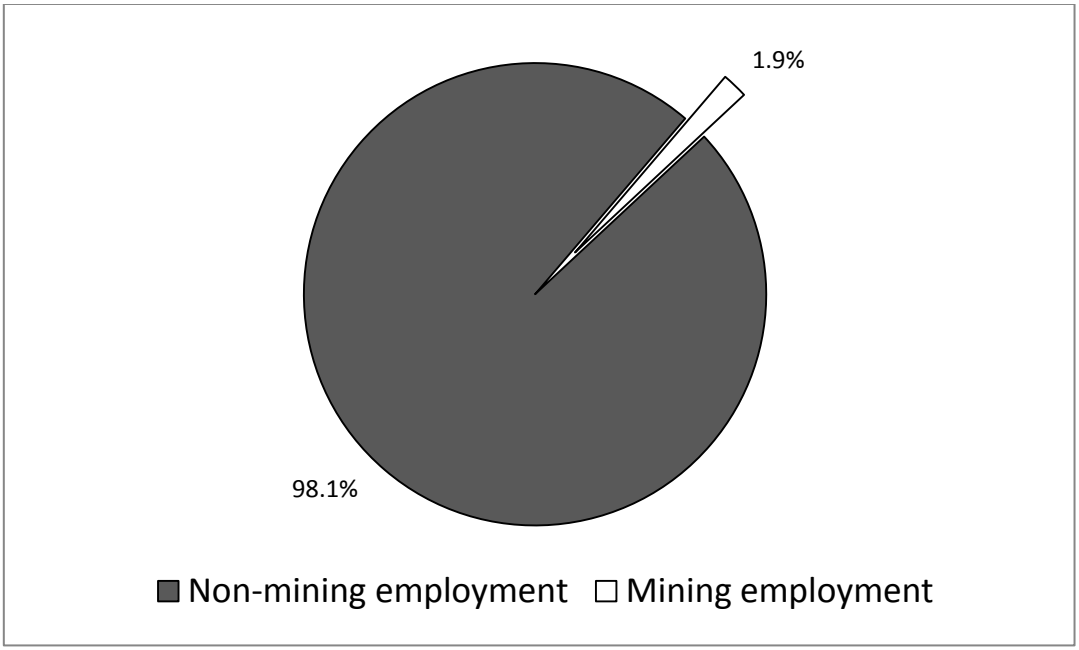
- 51,900 in coal
- 12,600 in oil and gas
- 79,500 in metal ores
- 7,300 in non-metallic mining and quarrying
- 45,800 in exploration and other mining support services
- 19,900 in other unclassified areas.

In fact, mining is a smaller employer than the gambling industry,[15] and despite public perceptions that the manufacturing industry is in steep decline, the manufacturing industry in Australia actually employs around five times as many people as the mining industry. Figure 9 shows mining as a share of total employment in Australia.

[14] Minerals Council of Australia 2011. *This is our story.*

[15] See Productivity Commission 2010. *Gambling: Inquiry Report, No 50.* 26 February.

Figure 9: Share of employment in the mining and non-mining industries, May 2011



Source: ABS (2011) *Labour force Australia, detailed quarterly, May 2011*, Cat no 6291.0.55.003, 16 June.

The inclusion of indirect employment in mining sector employment figures is frequently used by the mining industry as a device to make employment in mining appear substantially larger than it otherwise would if we relied on official ABS statistics.

In order to convert the level of direct employment into a figure which includes both upstream and downstream jobs industry 'multipliers' are used. These multipliers are typically calculated with reference to 'input-output tables' published by the ABS. These tables allow analysts to estimate the nature and extent of the interconnections between industries and, in turn, estimate the different multipliers for each industry.

It is important to remember that the 'multiplier effect' is just as real when teachers or plumbers spend their incomes as when miners do. The only difference is that industries such as mining are more willing than others to pay economists and consultancy firms to estimate the size of their industry's multiplier and, in turn, the amount of indirect job creation associated with their industry's output.

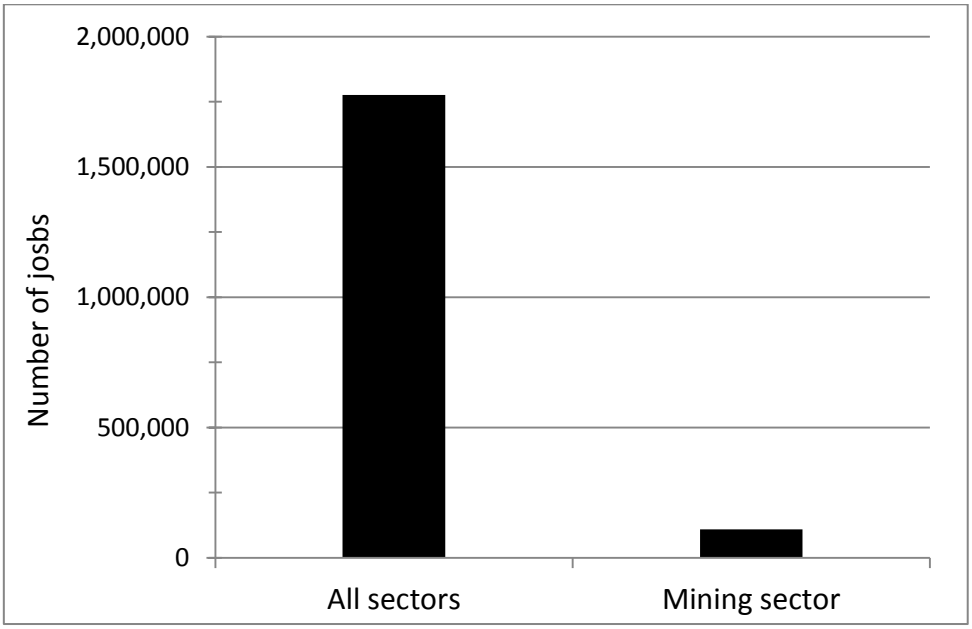
Given the interrelationships between sectoral activities, there is a significant amount of double-counting associated with summing the indirect jobs associated with each industry. In fact, if the number of indirect jobs associated with every industry were totalled, the number of jobs in the economy would exceed 30 million—almost three times the size of the Australian labour market.

It is also important to note that the proportionate share of indirect employment for each industry would not be substantially different from the proportionate share of direct employment, as the multipliers for each industry do not vary widely.

Put simply, the multiplier effect only makes employment in the mining industry look significantly larger when the sum of direct and indirect jobs in the mining industry is compared with *only the direct jobs* in other industries. Once the multiplier is applied to all other industries, mining once again returns to being a very small employer in Australia.

While it is true that employment in mining has been growing rapidly, from a small base, Figure 10 shows that the mining industry has played a very small role in the growth in employment in Australia over the past seven years. In fact, the increase in employment in the mining industry accounts for only 7 per cent of total employment creation over that period.

Figure 10: Economy wide employment growth compared to mining employment growth, 2004-2011



Source: ABS 2011j. *Labour force, Australia, Detailed, Quarterly, May 2011.* Cat no 6291.0.55.003. 16 June.

Finally, it is important to note that employment in the mining sector is characterised by large turnover. Each year the mining industry loses an average 26 per cent of its workforce which, at present employment levels, would imply employment separations of 53,000 workers per annum, with those leaving the mining industry being readily absorbed into the broader labour market.[16]

[16] Chapman, B and Lounkaew, K 2011. *How many jobs is 23,510, really? Recasting the mining job loss debate.* [Online] The Australia Institute, Technical Brief No 9, June. [Cited: 30 August 2011.] https://www.tai.org.au/index.php?q=node%2F19&pubid=862&act=display.

This high degree of turnover is significant for a number of reasons. The first is that mining employment is clearly not regarded as desirable by a large number of employees, suggesting that even the high wages paid are not sufficient to compensate many workers for the risks, social isolation and other negative features often associated with the work.

Second, rather than reflecting some form of policy failure on the part of the Federal Government, much of the so-called 'skills crisis' in the mining industry could be solved if the mining industry was better able to retain experienced staff.

Third, any reduction in either the rate of growth of employment in the mining industry, or even of the absolute size of the mining industry, could be easily accommodated by natural attrition within the industry.

Any future decline in the size of the mining industry, while of obvious concern to the very small number of employees and shareholders, is unlikely to be any more noticeable throughout the labour market than the decline in the printing industry, blacksmiths, and switchboard operations.

Taxes paid

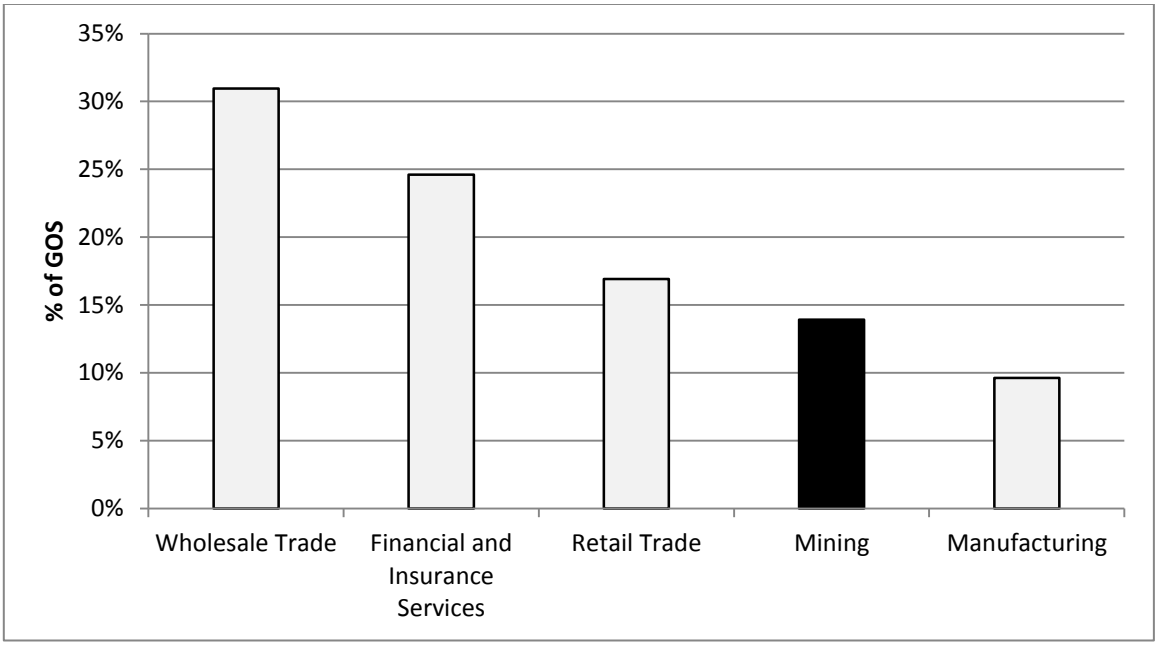
The mining industry pays corporate tax like every other industry. However, as shown in Figure 11, the average rate of corporate tax paid by the mining industry in 2008-09 was 13.9 per cent of the industry's gross operating surplus,[17] substantially below the theoretical 30 per cent company tax. One reason for this is the generous tax deductions available to the mining industry, particularly in relation to research and development and accelerated depreciation provisions for capital expenditure (see the discussion of subsidies below). Figure 11 also compares the actual corporate tax rate for mining with selected other industries. These industries were selected because they tend to be dominated by big business, so we can be confident that most of the ABS estimate of 'gross operating surplus and mixed income' will in fact be corporate income.

Figure 11 clearly shows that mining's actual corporate tax rate is below wholesale and retail trade as well as financial and insurance services.[18] However, manufacturing is lowest 9.6 per cent. All of these industries tend to be dominated by big businesses.

[17] Gross operating surplus is a broad measure of profit used by the ABS in the national accounts.

[18] Wholesale actually exceeds the theoretical 30 per cent company tax rate. The ATO definition of taxable income seems to have produced a figure higher than the ABS estimate for gross operating surplus in the wholesale trade sector for 2008-09.

Figure 11: Average corporate tax rate paid by the mining industry and selected other industries (% of gross operating surplus)



Source: Authors' calculations based on ATO 2010. *Taxation Statistics*, 2008-09; ABS 2010a. *Australian national accounts, 2009-2010.* Cat no 5204.0. 29 November.

One area in which the tax treatment of the mining industry is quite different to other industries is in the payment of 'royalties' to state government as a proxy for the price they pay for the actual minerals they extract. While restaurants pay suppliers for the food they sell and builders pay suppliers for bricks they use, coal miners and iron ore miners do not have to pay suppliers for the coal or iron ore they extract. Rather, miners are typically required to pay a royalty to state governments for the product that they will ultimately sell on the world market.

The ABS has broken down the royalties collected by mineral type for 2006-07:

> *Natural resource royalties expenses include payments under mineral lease arrangements, and resource rent taxes and royalties. In 2006-07 these mining royalties expenses totalled $6,573m. The greatest proportion of royalties was paid by the oil and gas extraction industry ($2,990m or 46%). Metal ore mining businesses (comprising copper, gold, mineral sands, silver-lead-zinc, bauxite, nickel and other metal ore mining) paid $947m or 14% of total mining royalties in 2006-07. The coal mining industry paid $1,696m (26%) and iron ore mining businesses $849m (13%). The remaining royalties were paid by non-metallic mineral mining and quarrying, and exploration and other mining support services businesses.*[19]

These royalty figures are interesting, especially when compared with the gross value mineral production for each commodity type. As Table 1 shows, oil and gas

[19] ABS 2010c. 'Mining industry'. *Yearbook Australia, 2009-10.* Cat no 1301.0.

producers pay a much larger share of their revenues in royalties. The amount paid in 2006-07 by oil and gas producers includes payments of $1,594 million in petroleum resource rent taxes and $525 million in excise duty on crude oil and condensate payable to the Australian government.[20] All the remaining royalties are collected by State and Territory governments.

Table 1: Industry revenues and royalties, 2006-07

Industry	Royalties ($million)	Revenue ($million)	Royalties as share of revenue (%)
Coal	1,696	25,389	6.7
Iron ore	849	15,958	5.3
Oil and gas	2,990	25,988	11.5
Other	947	38,881	2.4

Source: ABARES (2010) *Australian Commodities.*

In describing the amount of tax that they pay, the mining industry typically combines the corporate tax paid on profits with the royalties paid for the raw materials extracted. This has the effect of generating figures that suggest that the mining industry is more heavily taxed than other industries.[21] While such a claim is true in the technical sense—that is, royalties are classified as taxes in the national accounts—the approach is misleading because royalties are essentially an input cost, not dissimilar to raw materials costs faced by other industries.

Despite the protestations of mining companies about the impact of the proposed minerals resource rent tax (MRRT), big mining companies were willing to invest in Australia in the 1970s when the effective rate of tax paid on corporate profits by a shareholder in the top tax bracket was 81 per cent. For example, BHP (now BHP Billiton) and Conzinc Riotinto (now Rio Tinto) were both enthusiastic investors in the extraction of Australian resources when such high tax rates prevailed, but today we are told that the combination of the corporate tax rate and the proposed MRRT will be a major deterrent to investment. This is despite the fact that 'super' profits in the hands of shareholders will be taxed at a maximum of 58.5 per cent.[22]

[20] Australian Government 2008. 'Statement 5: Revenue'. *2008-09 Budget Paper No 1.* 13 May.

[21] See, for example, Minerals Council of Australia 2010. *Minerals resources, Tax and the prosperity of all Australians.* June.

[22] This figure is based on calculations detailed in Richardson, D 2010. *Submission on mining taxation to the Select Committee on new taxes.* The Australia Institute.

Superannuation and savings

The mining industry often suggests that Australian households benefit from the mining boom through the impact of increases on shares held either directly by households or indirectly through superannuation funds. While it is true that there have been some large gains in mining shares (up to 170 per cent in the S&P/ASX Resources index since 2004) it is also true that share ownership in Australia is largely confined to higher income households. The wealthiest 20 per cent of households own 86 per cent of shares;[23] and only a very small number of shareholders own substantial equity in Australian mining companies. For example, 67 individual shareholders own 68 per cent of all Rio Tinto shares. Similarly, 78 shareholders own 59 per cent of BHP Billiton.

While the ownership of the two biggest mining companies listed on the ASX is highly concentrated, both also have a large number of small shareholders. For example, around 130,453 people or 87 per cent of Rio Tinto shareholders own just eight per cent of Rio Tinto, while 308,000 people or 59 per cent of BHP shareholders own just four per cent of BHP.[24] The benefits of rising mining share prices to these 'mum and dad' investors will obviously be distributed according to their relative shareholding, with the vast bulk of the benefit going to the small number of very large shareholders.

In addition to direct share ownership, most working Australians also hold an indirect ownership interest in mining companies through their superannuation funds. However, the benefits of the mining boom for someone with an average superannuation fund balance are trivially small.

On average superannuation funds have 43 per cent of their funds invested in shares.[25] Given that approximately 20 per cent of the stock market is accounted for by resources stocks, this implies that only around 8.6 per cent (that is, 20 per cent of 43 per cent) of superannuation assets are invested in resource stocks. Furthermore, because Australian resource companies have large investments in other countries (for example only 55 per cent of BHP's worldwide assets are invested in Australia), even the 8.6 per cent figure overstates the importance of Australian mining operations to Australian superannuation funds. After adjusting for the foreign investments of Australian mining companies it appears that only around four per cent of superannuation balances would be sensitive to Australian-based mining operations.

The median fund balance in superannuation among those about to retire is $71,731. A typical superannuant in this group would have benefitted by

[23] ABS 2007. *household wealth and wealth distribution Australia 2005-06.* Cat no 6554.0. 9 November.

[24] BHP Billiton Limited 2010. *Annual report*; Rio Tinto Limited 2010. *Annual report*.

[25] ABS 2011f. *Managed funds, Australia, March 2011.* Cat no 5655.0. 26 May.

approximately $2,238 since June 2005 through the increase in the value of mining shares to June 2011. Someone who retires at 65 on that balance might be better off by around $2 a week, or 0.6 per cent of the age pension, as a result of the mining boom. Even these gains are likely to have been offset by the poor performance of the Australian share market, in part because of the resources boom and its impact on the exchange rate.

Similarly, a fall in the value of Australian mining activity of 10 per cent would cost that group around 0.4 per cent of their fund balance–that is, a fall of around $287. Such a reduction can be compared with the average monthly movement of the ASX 200 share price index (1.96 per cent each month),[26] which would shift a balance of $71,000 by around $1,403 a month. With these figures in mind, we can conclude that policy decisions which influence the profitability of mining have minimal implications for the typical superannuant.

Exports

There is little doubt that the mining industry generates substantial exports, both in absolute terms and as a percentage of total exports. As shown above, more than half the value of all of Australia's exports are now accounted for by mining output.

While no spin is required to make the mining export figures appear large, the mining industry is careful to ensure that the macroeconomic consequences of the large size, and rapid growth, in mining exports are seen in a positive light. In fact, the consequences of mining exports for other Australian industries, as well as the impact of mining on Australia's current account deficit, are far more complex than is usually suggested by the mining industry.

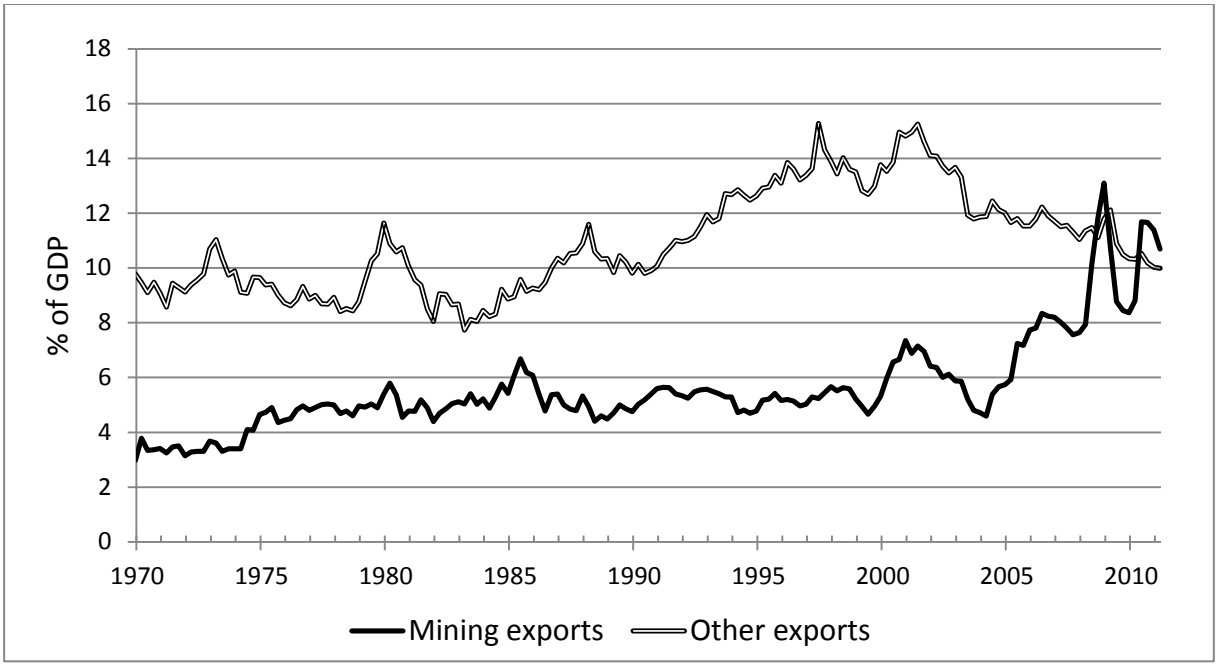
For example, as world demand for Australian mining output grows the Australian dollar tends to increase in value. This delivers advantages for many Australian consumers but also places substantial pressure on Australian exporters. As the Australian dollar increases in value relative to other currencies our exports become more expensive for customers in other countries. As a result, demand for our non-mining exports declines.

The magnitude of this effect is shown in Figure 12, which illustrates the pattern of mining and non-mining exports between September 1969 and March 2011. While mining exports have increased by around five per cent of GDP over the period since around the beginning of the mining boom, non-mining exports have declined by around five per cent of GDP over the same period. Indeed, the recent mining

[26] Authors' calculations based on RBA Statistical Tables at RBA 2011b. *Statistical tables: Share markets.* [Online]. [Cited: 31 August 2011.] http://www.rba.gov.au/statistics/tables/index.html#share_mkts.

boom corresponds to the largest and longest sustained decline in non-mining exports in the past 40 years.

Figure 12: Mining exports and other exports (% GDP)



Source: ABS 2011c. *Balance of Payments and International Investment Position, Australia, March.* Cat no 5302.0. 5 May.

The mining industry is obviously an important and large exporter, but given that mineral exports displace other Australian exports, mining exports are a mixed blessing for the Australian economy. Indeed, in terms of employment, the net impact of growth in mining exports may well be negative if mineral exports displace more labour intensive exports elsewhere in the economy.

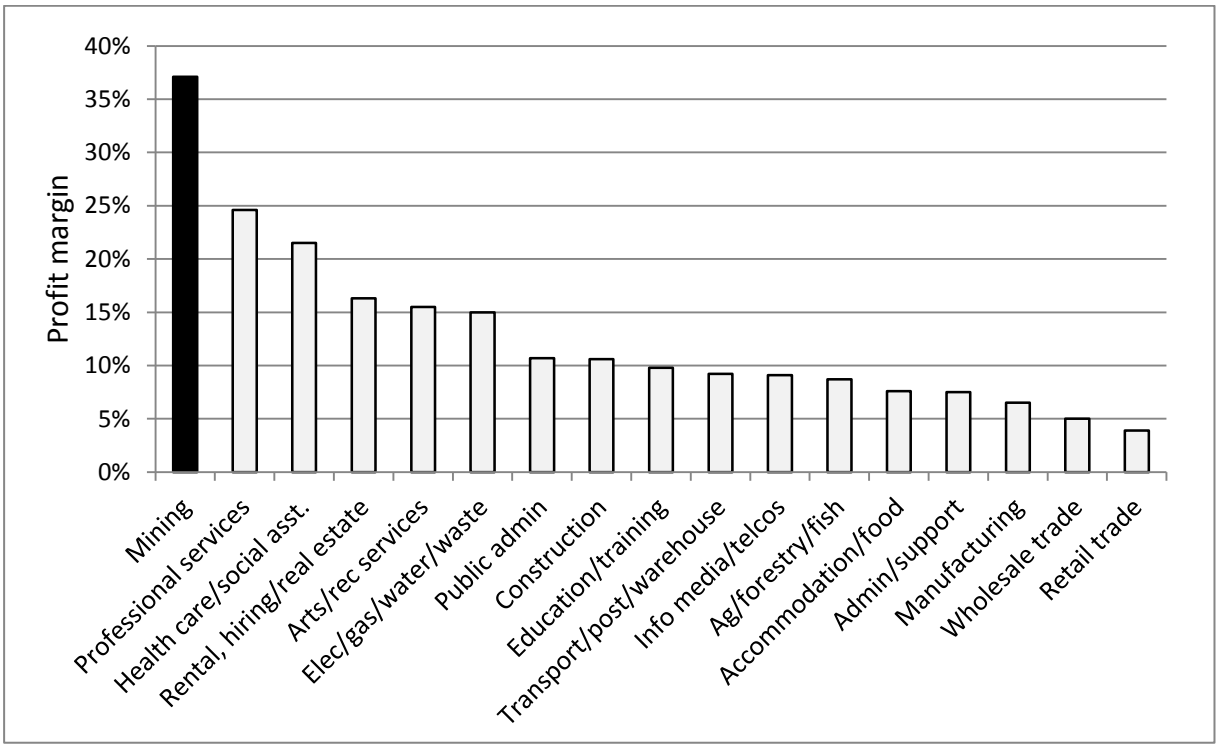
4 What the mining industry doesn't want to talk about

While the mining industry is keen to talk about how many people it employs, how much it exports and how much it pays in taxes, it is less enthusiastic in drawing attention to various other consequences of its activity, in particular its profits and the adverse impacts of mining on other industries. This section provides an overview of some of these less frequently discussed features of the mining industry.

Profit

Mining companies like to highlight the contribution that they make to the community by focussing on the amount of tax they pay in absolute terms. However, they are less forthcoming about the size of the profits they generate and on which their taxes are levied.

Figure 13: Profit margins by industry 2009-10 (Earnings before interest, tax, depreciation and amortisation)*



Source: Australian Tax Office.

* Finance and insurance have been excluded from this figure because of the conceptual difficulties in defining 'sales'.

According to the ABS total pre-tax profits earned by mining firms operating in Australia were more than $51 billion in 2009-10. If this profit were distributed evenly across Australian households, the dividend cheque received by each household would have been more than $5,000. But of course the ownership of

Australian mining companies is far from evenly distributed across the Australian community. Indeed, the vast majority of those profits will in fact be distributed to shareholders overseas.

Figure 13 shows that Australian mining is far more profitable than any other industry. The main source of the extraordinary profits being earned by mining operations in Australia is the sharp rise in the world price of Australia's resources, combined with the fact that the royalties the miners pay to access those resources remain comparatively low.

Over the next 10 years profits in mining are likely to exceed $600 billion if world prices remain high. The original version of the mining tax proposed by the Henry review into Australia's future tax system[27] the Resource Super Profits Tax (RSPT), would, at current commodity prices, have collected more than $200 billion in additional mining taxes over the coming decade.[28] Unfortunately, the $22 million advertising campaign run by the mining companies against the RSPT resulted in a much less effective, and much less equitable, mining tax being agreed to by government.[29] According to Treasury the new mining tax, the new Mineral Resource Rent Tax will raise an extra $38.5 billion in taxes from miners over the coming decade.[30] The return on the $22 million advertising campaign is likely to be in the order of $160 billion – or some 730,000%.

The history of foreign ownership

BHP was once known as 'the Big Australian'. Indeed, it once ran television advertisements featuring high profile Australians to ensure that the population saw the mining company as one of 'us'. Given that BHP is now 76 per cent foreign owned, it would be difficult to imagine such an advertisement being screened today. Yet the mining industry's desire to be seen as one of 'us' rather than one of 'them' remains.

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[27] Treasury 2010. *Australia's future tax system: Report to the Treasurer, December 2009.*

[28] The original modelling for the 2010 budget showed the RSPT producing revenue of $99 billion over a nine year period (Source: Senate Select Committee on Scrutiny of New Taxes 2011. *Mining Tax: A bad tax out of a flawed process*. 29 June). Those figures assume a reduction in commodity prices over that period. However, since then and by the time the MRRT was costed commodity prices had increased. Indeed, commodity prices have increased 50 per cent since early 2010 (see Figure 5). Most of that increase in commodity prices would go directly into companies' bottom lines so that profits are likely to increase by much more than 50 per cent. Assuming profit margins were already 50 per cent in early 2010 the 50 per cent increase in prices would imply a doubling of profitability. However, the figure of $200 billion in the text should be taken as giving the rough estimate only and depends critically on assumptions about future prices.

[29] Irvine, J 2011. 'A $60b riddle: how miners took taxpayers to the cleaners'. [Online] 18 February. [Cited: 30 August 2011.] http://www.smh.com.au/opinion/politics/a-60b-riddle-how-miners-took-taxpayers-to-the-cleaners-20110217-1ay3g.html.

[30] Senate Select Committee on Scrutiny of New Taxes 2011. *Mining Tax: A bad tax out of a flawed process*. 29 June.

The development of the current 'This is our story' advertisements by the mining industry would appear to have been specifically designed to reduce the emotional distance between 'ordinary Australians' and the world's biggest, and largely foreign-owned, mining companies. By focussing on stories about individual workers and the role that mining companies play in local communities, the advertisements seek to create the perception that anything that harms the mining industry will likewise harm ordinary Australians. Put another way, the mining companies are saying that you can't hurt them without hurting yourself.

The desire to be seen as 'part of the community' is an important element in the mining industry's strategy to protect itself from the introduction of more stringent environmental standards, from having to make greater investments in the social infrastructure of the communities it mines in, and, of course, from paying a higher price for the minerals that it extracts from the ground.

Discussion of the foreign ownership of mining operations in Australia is, therefore, generally avoided by the mining industry. It is certainly not mentioned in any of the 'our story' advertisements.

Mining in Australia has always been heavily foreign owned, but there have been some attempts to address foreign control of mining and other industries. Some examples include:

- The Gorton Government setting up the Australian Industry Development Corporation with the intention of using it to fund Australian resource projects as an alternative to foreign investment
- Gough Whitlam proposing to 'buy back the farm' during the 1972 election campaign. Whitlam later wrote that 'We set about reversing the "open door" policies of our predecessors. The Australian people have nothing to gain from the wholesale overseas ownership of their resources' [31]
- The Fraser government establishing the Foreign Investment Review Board (FIRB) to vet foreign investments according to strict guidelines with respect to resources (especially uranium mining proposals).

Despite these interventions, by 1981 there had been little change in the level of foreign ownership in mining. The then Leader of the Opposition, Bill Hayden, gave a speech on foreign investment that reflected a popular feeling in Australia at the time. Hayden stressed the need for '(A)n appropriate foreign investment policy that encourages partnership. It must be a policy that allows all Australians to share in the development and benefits of our mineral wealth.' He further lamented that Australia would soon be turned into a 'clapped-out quarry in the south-west Pacific

[31] See Whitlam, EG 1985. *The Whitlam Government: 1972–75.* Ringwood, Vic : Viking. p. 219.

while other countries will have built up the strength of their economies on the basis of the wealth generated here.'[32]

The bipartisan support in the 1960s and 70s for majority Australian equity has now all but evaporated. The last major decisions by an Australian Treasurer against foreign investment proposals had virtually nothing to do with levels of foreign investment itself. Rather, Shell's attempt to take over Woodside Petroleum was knocked back because of Shell's perceived conflict of interest in developing the North West Shelf gas deposit as compared with its other natural gas projects around the world.[33] The fact that oil and gas are 83 per cent foreign owned did not appear to influence the Treasurer's decision.

The magnitude of foreign ownership

Australian mining is now more foreign owned than ever. Between the mid 1960s to early 1980s the Australian Bureau of Statistics published foreign ownership figures, and from this data we know that in the 1980s foreign investors accounted for between 52 per cent and 58 per cent of the mining industry.[34] However, such publications were discontinued in the 1980s.

Since then large Australian companies such as Western Mining and MIM Holdings have either disappeared (bought out by BHP Billiton and Xstrata respectively) or merged with overseas interests (BHP itself merged with Billiton to form BHP Billiton, with approximately 40 per cent being the former Billiton).

While the exact magnitude of foreign investment in Australian mining operations today is difficult to determine due to the absence of official statistics, it is clear the Australian mining industry is now more than ever dominated by foreign mining companies.

Of all the mining companies listed on the Australian Stock Exchange just five companies account for 75 per cent of the market value of Australia's resource sector. Those five are BHP Billiton Limited, Rio Tinto Limited, Woodside Petroleum Limited, Newcrest Mining Limited and Fortescue Metals Group Ltd.

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[32] Hayden, W 1981. 'Foreign Investment: discussion of matter of public importance'. *House Hansard.* 11 March, p. 641.

[33] Costello, P 2001. Foreign Investment Proposal – Shell Australia Investments Limiteds (Shell) Acquisition of Woodside Petroleum Limited (Woodside)'. *Press Release No. 025*.

[34] ABS 2004b. *Economic Activity of Foreign Owned Businesses in Australia, 2000-01, 2000-01.* Cat no 5494.0. As mentioned, those publications showed that foreign ownership was around 50 per cent in the mining industry. The last publication seems to be ABS 1985. *Foreign ownership and control of the mining industry.* Cat no 5317.0.

The figures in Table 2 would imply 52 per cent foreign ownership of the resources index even if all other listed companies were 100 per cent Australian owned. But there are also a number of large companies that, while operating in Australia are not listed in Australia, for example Xstrata, Anglo American, Peabody and Newmont. Likewise there are a number of companies that are Australian-owned but not listed on the stock exchange. When the ownership of those companies is included the estimate of foreign ownership of Australian mining operations rises to around 75 per cent.[35]

Table 2: Degree of foreign ownership of major Australian mining companies

Company	Market capitalisation ($billion)	Share of the resources index (%)	Foreign Ownership (%)
BHP Billiton	134.8	44.5	76
Rio Tinto	34.2	10.8	83
Woodside Petroleum	33.6	8.0	24
Newcrest Mining	27.8	8.7	75
Fortescue Metals Group	18.7	2.4	40

Source: Market figures reported in The Weekend Australian 2011, BHP Billiton 2010, Rio Tinto 2009; 2010, Woodside Petroleum 2010, Newcrest Mining 2010, Fortescue Metals Group 2010.

This estimate is supported by indirect evidence which points to a similar level of foreign ownership in mining. For example, ABS figures show that foreign liabilities in the mining industry are 76 per cent of the value of the mining industry capital stock.[36] While Treasury does not publish its estimates, it has indicated that this figure is consistent with the estimates it uses for internal purposes.[37] Furthermore, while all of the figures above are based on 'top-down' approaches using industry-wide data, a recent study that examined the foreign ownership of individual Australian mining operations in detail came to the conclusion that 83 per cent of Australian mining was foreign owned.[38] By this estimate, if Australia's mineral resources (valued by their potential mining super profits) are worth $1500 billion, then foreign interests control $1245 billion, with just $255 billion being Australian-owned.

[35] The companies in the above list have many Japanese and other customers that have also entered joint venture arrangements for individual projects. Included here would be companies such as Mitsui, Sinosteel Corporation and Mitsubishi. These figures also take account of those Australian-owned companies that are not listed on the Australian stock exchange.

[36] ABS 2010d. *Australian System of National Accounts, 2009-10.* Cat no 5204.0; ABS 2011c. *Balance of Payments and International Investment Position, Australia, March 2011.* Cat no 5302.0. 5 May.

[37] Private correspondence from Australian Treasury.

[38] Edwards, N 2011. *Foreign ownership of Australian mining profits.*

Subsidies

The mining industry receives substantial assistance from Australian taxpayers, with both state and federal governments providing a wide range of direct financial assistance, tax concessions and public provision of infrastructure such as the ports, rail, and road assets that mining operations require.

The Productivity Commission has described, but not quantified, a wide range of ways in which state governments provide assistance or favour to the mining industry.[39] These include:

- tax holidays or concessional treatment with respect to payroll tax, rates and other taxes and levies
- in-kind assistance through the provision of cheap or free water and power
- lax regulation of the environmental impacts of a project
- fast-track development arrangements
- the construction of airports and other site-specific infrastructure including the entire infrastructure that a mining company needs in order to house and look after workers and their families.

In addition to the direct assistance to individual mining companies, state and federal governments also provide substantial assistance to the mining industry in general through, for example, direct government investment in mining industry research and development and geological mapping.

The issue of subsidies for fossil fuel extraction and use has been widely discussed in Australia, with a number of different researchers estimating the value of these subsidies at more than $10 billion per annum.[40] However, the focus here is on the benefits that subsidies deliver to mining companies alone. While subsidies for fossil fuel use, such as fringe benefits tax concessions for company cars, will deliver some advantages to producers of petrol and diesel, the major beneficiaries are employees who are able to lower their income tax liabilities.

That said, a number of subsidies to the mining industry have not been included in existing estimates of taxpayer assistance to the fossil fuel industry. For example,

[39] Productivity Commission 2011, *Trade & Assistance Review 2009-10,* Annual Report Series, Productivity Commission, Canberra, May.

[40] See for example Denniss, R and Macintosh, A 2011. *Complementary or contradictory? An analysis of the design of climate policies in Australia.* [Online] 9 February. [Cited: 31 August 2011.] https://www.tai.org.au/index.php?q=node%2F19&pubid=831&act=display. and ACF 2011. *Australia spends $11 billion more encouraging pollution than cleaning it up.* [Online] 1 March. [Cited: 31 August 2011.] http://acfonline.org.au/articles/news.asp?news_id=3308.

as recently identified by Nicholas Gruen, while the Australian mining industry is approximately the same size as the Canadian mining industry, Canada provides just one tenth of the tax concessions for mining research and development that Australia does.[41]

Australian mining companies claiming research and development tax concessions in Australia in 2008-09 received approximately $4.8 billion more than they would have in Canada.[42] The main reason for the difference is that the Australian concession arrangements allow not only the development of new production methods but the *use* of those new production methods. Gruen cites the example of a tax concession for the widening of a mine shaft using an innovative technique which is allowable in Australia but not Canada.

Some other specific subsidies and concessions that directly benefit the mining industry include the following.

- According to the ATO, miners in Australia received direct subsidies of $580 million from all levels of government in 2008-09.[43]

- The Tax Expenditure Statement records tax forgone of at least $180 million on account of concessions designed specifically for the mining industry. Those concessions involve $150 million in 2010-11 for the immediate deductibility of exploration and prospecting expenditures as well as expenditure to control pollution and manage waste.[44]

- The mining industry can take advantage of general concessions such as accelerated depreciation allowances. Many of the fuel and energy tax concessions worth $1.6 billion could be described as concessions to mining. For example, in a concession mainly for the North West Shelf project, condensate produced from this and some other fields are subject to a lower excise rate than would otherwise apply. The concessional rate of tax amounts to a gift of $580 million per annum to the oil and gas industry.[45]

[41] Gruen, N 2011. *The BERD in the hand: Supporting business investment in research and development.* Australian Business Foundation, May.

[42] Yeates, C 2011. 'Miners make big R&D claim'. *Sydney Morning Herald.* 6 May.

[43] Australian Taxation Office 2010. *Taxation Statistics 2008-09*. [Online]. [Cited: 30 August 2011.] http://www.ato.gov.au/corporate/content.aspx?menuid=0&doc=/content/00268761.htm&page=3. These figures include only those subsidies that need to be declared as income to the ATO.

[44] Australian Government 2011a. *Taxation expenditure statement.* [Online] January. [Cited: 31 August 2011.] http://www.treasury.gov.au/documents/1950/PDF/2010_TES_consolidated.pdf.

[45] Australian Government 2011a. *Taxation expenditure statement.*

- Accelerated depreciation provisions for planes, oil and gas assets and commercial vehicles cost $915 million in 2010-11. It is not clear, however, what proportion of this concession accrues to oil and gas assets.[46]

- The Fuel Tax Credits Scheme for vehicles used in mining, agriculture and other non-road purposes cost government $5.1 billion in 2010-11. Again, while it is not possible to determine accurately the proportion of this concession going to mining, the relative size of the mining industry compared to agriculture and the fact that much of the construction activity would be involved in building mining assets suggests that a substantial proportion of this concession would accrue to mining companies.[47]

Given the size of the research and development concessions and the fact that, in addition to all of the estimates listed above, the value of infrastructure, water and power subsidies is likely to be substantial, we can conclude that subsidies to the mining industry are likely to be well in excess of $10 billion per year.

Economic rents (super profits)

In addition to the subsidies listed above the most significant subsidy received by mining companies operating in Australia is the very low prices they pay for the raw materials they extract from the ground. That these minerals can then be sold on the world market at record world prices means that mining companies can earn substantial 'economic rents'.

Economic rent refers to the profits available to companies that extract resources beyond the returns that would be sufficient to attract the mining activity under competitive conditions. In other words, if it takes a 10 per cent return to attract a mining investment, then any profits beyond that are the 'economic rents'. It is possible to estimate such rents in the following manner.

The ABS estimates that the net capital stock in the Australian mining industry is $300.4 billion at June 2010. If we assume that in a competitive environment companies would be earning 10 per cent per annum on their investment, we should expect to see profit of $30.0 billion. Any actual profit above that could be ascribed to mining rents which can then be calculated, as shown in Table 3.

[46] Australian Government 2011a. *Taxation expenditure statement.*

[47] Australian Government 2011a. *Taxation expenditure statement.*

Table 3: Mining capital stock, profit and rents

	Net capital stock, Current prices ($ Millions)	Operating profits before tax ($ Millions)	Mining rents ($ Millions)
2008-09	275,663	63,155	35,588
2009-10	300,418	51,291	21,249

Source: ABS 5204.0 and authors' calculations.

By the figures given in Table 3, a 10 per cent return would generate a $30 billion profit and any profit that the owners of the resources allow the mining companies to retain could be considered a subsidy to the industry. That means the subsidy was $21.3 billion in 2009-10 (a relatively poor year) and at least $33.2 billion in 2008-09. With the recovery following the global financial crisis future economic rents are likely to be even higher.

What is a 'normal' level of profit?

The risk-free interest rate in Australia is presently the 4.39 per cent being earned on 10-year government bonds. Over the last decade this has averaged 5.57 per cent.[48] If a reasonable estimate of the equity premium is added to the risk-free rate of return, a figure of approximately 10 per cent can be used to approximate 'normal' profits for firms. Such an approximation is supported by, for example, the Australian Competition and Consumer Commission, which relies on a figure of 6 per cent as the equity premium. Another recent study identifies an equity premium of 6.2 per cent going back to 1883.[49] These estimates are consistent with the Australian stock exchange accumulation index growing at a compound 12 per cent since 1979.[50] However, estimates based on actual Australian stock exchange data will be biased on the upside because they are skewed towards monopolies and oligopolies in industries such as banking, telecommunications, retail, insurance and of course mining.[51]

There is another way of looking at this issue. The most recent ABS estimate of the value of subsoil assets in Australia is $559.7 billion.[52] This is the net present value

[48] Reserve Bank of Australia 2011a. *Statistical tables: Interest rates.* [Online]. [Cited: 31 August 2011.] http://www.rba.gov.au/statistics/tables/index.html#interest_rates.

[49] See Brailsford, Handley and Maheswaran, K 2008. *Re-examination of the historical equity risk premium in Australia* which includes the references to the ACCC.

[50] Authors' calculations based on Reserve Bank of Australia 2011a. *Statistical tables: Interest rates.*

[51] See Brailsford, T, Handley, J C and Maheswaran, K 2008. *Re-examination of the historical equity risk premium in Australia.*

[52] ABS 2010a. *Australian national accounts, 2009-2010.* Cat no 5204.0. 29 November.

of the mineral resources at expected production rates, taking account of the costs of extracting them and after giving the companies a 'normal rate of return'. In that sense the value of the subsoil assets can also be thought of as the present value of the economic rents if none of this value were captured by governments in the process of extraction or sale. Most of this value will be given away to miners or has already been given away; only a relatively small percentage will be recouped through royalties, corporate taxes and the mining resource rent tax. That amounts to a huge subsidy for mining companies.

The ABS figure of $559.7 billion is an estimate based on commodity average prices at June over a five-year period. The value imputed for black coal is $109.60 per tonne, well below recent values of around $220 per tonne expected for 2011.[53] The difference could well increase the value of Australia's black coal assets from $142 billion to over $800 billion, gold up from $22 billion to $70 billion and iron ore from $77 billion to over $300 billion.[54] For this reason, the ABS estimate, based on the average prices over the past five years, is likely to be a serious underestimate of the value of Australia's resources at present prices. Adjusting the ABS figures for commodity price increases, an estimate of $1500 billion would appear to be conservative.

The mining industry tends to focus on the contribution that it makes to the economy and to the community. However, the industry in fact receives substantial direct and indirect assistance from Australian taxpayers. It would appear to be in the public interest to make these subsidies more transparent. Indeed, there may be a case for governments at all levels to recover at least some of those hidden subsidies through a variety of mechanisms.

[53] ABARES 2011. *Australian Commodities, June quarter.* [Online]. [Cited: 31 August 2011.] http://adl.brs.gov.au/data/warehouse/pe_abares99010609/AC11.2_June_REPORT_11b.pdf.

[54] Not enough is known about ABARES's calculations to give a precise new estimate based on a different price for these commodities. The figure here assumes the value of the reserves is approximately proportional to the difference between price and mining costs. While the precise numbers are uncertain the orders of magnitude should be reasonable.

5 Macroeconomic issues

Economists usually distinguish between 'microeconomics', which considers how individual consumers and individual industries behave, and 'macroeconomics' which is concerned with how the economy as a whole operates, including how different parts of the economy interact.

This paper has so far focussed largely on the microeconomics of the mining industry, for example the amount of employment and production generated by the industry. This section explains the macroeconomic interactions between the mining industry and other parts of the economy.

Macroeconomics can often seem counterintuitive. For example, it is easy to assume that an increase in Australia's mining exports would lead to an increase in Australia's exports overall. In fact, it is quite possible for exports from one part of the economy to 'crowd out' exports from another. It is vital to consider such macroeconomic interactions in order to properly understand the real impact of the mining boom on the Australian economy.

The exchange rate

It has often been observed that the Australian dollar is a 'commodity currency' in the sense that movements in the Australian dollar reflect commodity price movements.[55] It is clear that movements in commodity prices have been associated with movements in the value of the Australian dollar.

Figure 14 plots the Australian dollar against the US dollar. As the Australian dollar rises against other currencies, Australians buying imports from those countries observe reductions in price while overseas customers experience an increase in the relative price of Australian goods and services. Since the beginning of the mining boom (from late 2004 onwards) there has been a persistent and upward trend in the value of the Australian dollar against the US dollar.[56] The same trend is apparent against other major currencies.

The impact of a significant increase in the exchange rate is to reduce the cost-competitiveness of other exporting or export-exposed industries, with Australian manufacturing being particularly hard hit. Pacific Brands (which makes well known Australian brands from Hush Puppies shoes to Bonds underwear) closed down virtually the last of its manufacturing in Australia in 2009.[57] BlueScope Steel

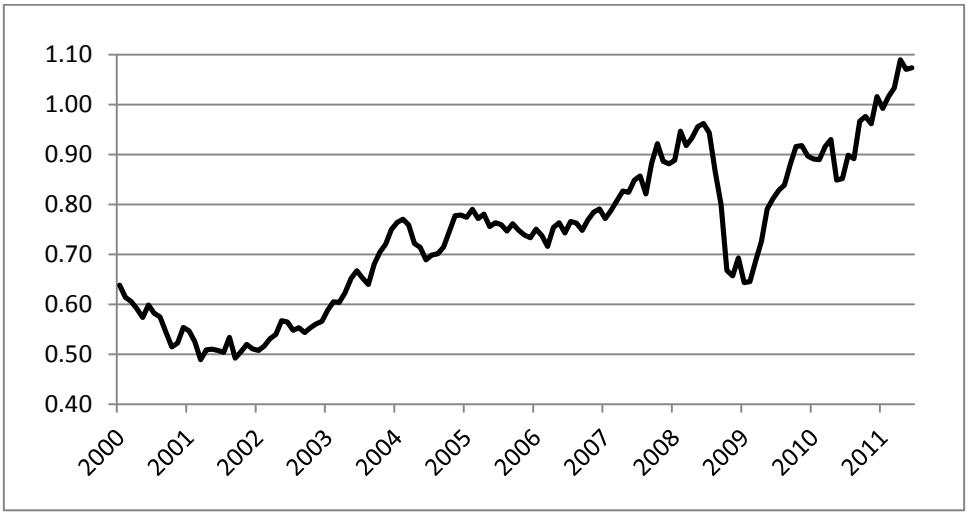
[55] Cashin, P, Cespedes , L and Sahay, R 2003. 'Commodity currencies'. *Finance and Development.* IMF, March. Vol. 40, 1.

[56] With the exception of the decline in the value of the A$ arising from the GFC in 2008 which also corresponded with a fall in Australian commodity prices.

[57] ABC News 2009. *Pacific Brands jobs head overseas.* [Online] 26 February. [Cited: 31 August 2011.] http://www.abc.net.au/news/2009-02-26/pacific-brands-jobs-head-overseas/1601536.

recently announced the closure of one of its Port Kembla steel furnaces and the cutting of one thousand jobs.[58] Upward pressure on the exchange rate has also reduced the competitiveness of Australian agriculture and tourism. Tourism in North Queensland in particular suffered from the high Australian dollar due to both a reduction in inbound international tourists and an increase in the number of Australians choosing to purchase overseas holidays at historically cheap prices.[59]

Figure 14: The rise of the Australian dollar valued in US dollars



Source: RBA Statistical Tables.

Volatility

While a high exchange rate makes it more difficult for Australian exporters to compete in some world markets, the high degree of volatility of an exchange rate that is strongly linked to world commodity prices creates an additional challenge for the non-mining sectors of the Australian economy. For example, the automotive industry needs to make investment decisions up to a decade before new construction can begin. In making the decision whether to develop a car for domestic manufacture or to source cars from overseas, firms need to make long-run predictions about the exchange rate. The more volatile the domestic exchange is, the greater the risk associated with domestic investment and, in turn, the lower the probabilities that such investments will go ahead.

Volatility in output, employment, inflation and the exchange rate, due to huge fluctuations in commodity prices, is a problem long associated with resource-dependent economies. One recent observer noted that 'volatility thus seems the

[58] Chambers, M 2011. 'BlueScope to shut furnace, mill and cut 1000 jobs'. *The Australian.* 22 August.

[59] Carmody G and Associates 2009. *Australian Tourism: How Deep the Recession?* Report for the Tourism & Transport Forum, March.

quintessence of the resource curse'[60] and is associated with poor macroeconomic performance, lower rates of economic growth and higher levels of income inequality. Resource dependence has also been found to crowd out human capital investment (that is, training and education) and other forms of investment and to drive contractions in the rest of the traded sector of the economy.[61]

When it comes to things that governments can influence, such as a price on carbon, business insists it needs certainty about future arrangements. However, businesses in a resource-dependent economy have to adapt to a much higher degree of additional uncertainty if the mining industry continues on its current growth trajectory.

All sectors of the economy will have to accommodate changes in the value of the Australian dollar and other variables brought about by fluctuating commodity prices. Even in the mining sector itself it can be assumed that higher volatility in prices are likely to deter some investors. Even if commodity prices are high, higher volatility increases the risk that a given project will take longer to pay back the initial outlay or earn the required rate of return. Put another way, a mining investment in an economy with a small mining industry will likely be less volatile than a mining investment in an economy with a big mining industry.

The impact of the mining boom on other industries

The mining boom has generated a wide range of impacts on other industries, both positive and negative. As already noted, the mining industry seeks to highlight the spill-over benefits associated with mining activity for other industries, for example by estimating the number of jobs indirectly associated with mining activity.

The mining industry does not, however, readily acknowledge the negative impacts of the mining boom on other sectors of the economy. Such effects include:

- Driving up the exchange rate
- Driving up the costs of skilled labour for businesses in other sectors[62]
- Driving up the prices of raw materials used in mining (for example concrete)
- Driving up the cost of other services (for example construction).

To illustrate these effects, it is worth considering two highly exchange-rate-sensitive industries in Australia, namely tourism and manufacturing. As Table 4 shows, tourism has declined from 3.1 per cent of GDP to 2.6 per cent over the six

[60] van der Ploeg, F 2011. 'Natural resources: Curse or blessing?' *Journal of Economic Literature*, Vol. 49, pp. 366-420.

[61] van der Ploeg 2011. 'Natural resources: Curse or blessing?'

[62] Wage rises are of course a good thing for those workers whose incomes increase due to greater demand for labour.

year period corresponding with the mining boom – a reduction of 20 per cent in the relative size of the industry.

Table 4: Changes in the proportion of tourism employment and share of GDP

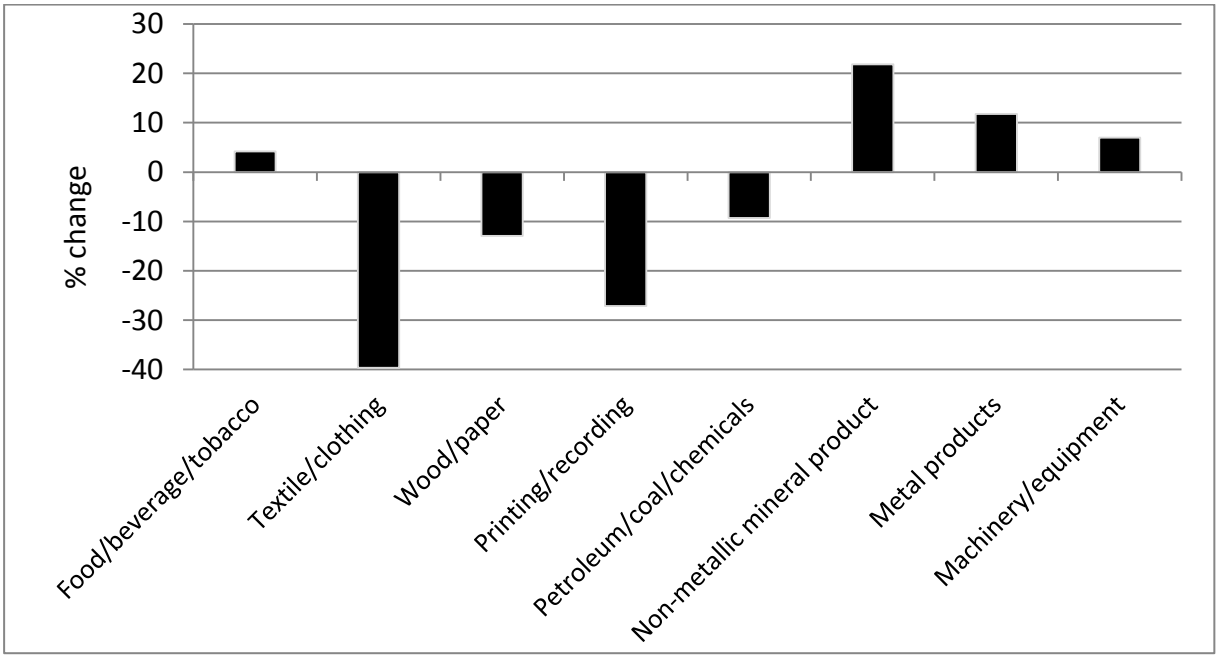
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Share of total employed persons	4.8%	4.8%	4.7%	4.6%	4.6%	4.5%	4.5%
Share of gross domestic product (b)	3.1%	2.9%	2.9%	2.8%	2.8%	2.6%	2.6%

Source: ABS Australian National Accounts; Tourism Satellite Accounts, 2009-10.

Just as the mining boom is geographically concentrated in small parts of the country, so too is the tourism industry. The downward trend in the Australian tourism industry has generated significant rises in regional unemployment in what were once tourism hotspots. For example, in Queensland overall unemployment was 5.3 per cent in May 2011, but in the Sunshine Coast unemployment was 6.2 per cent, in the Gold Coast 6.9 per cent, and in the Far North 10.8 per cent.[63]

The manufacturing industry has experienced even more substantial declines in output. Figure 15 shows that some sectors of the manufacturing industry, particularly those exposed to import competition, have declined substantially in recent years. The textile industry and the wood products industry have suffered particularly large declines.

Figure 15: Percentage change in output in manufacturing sectors, 2004-2010



Source: ABS (2011) Australian national accounts, cat. No. 5206.0.

[63] ABS 2011j. *Labour force, Australia, Detailed, Quarterly, May 2011.* Cat no 6291.0.55.003. 16 June.

The potential for a resources boom to generate adverse macroeconomic consequences for the broader economy is well known and is often referred to as either the 'resource curse' or 'Dutch disease'.[64] This problem, which is typically associated with developing economies experiencing the rapid exploitation of newly discovered resource deposits, is multifaceted. The rapid development of new mining activities both draws skilled labour away from other industries as well as driving rapid exchange rate appreciation. Both of these effects make the development of manufacturing or other value-adding industries more difficult. Developed countries can also suffer from such problems, as the Dutch did after the discovery of North Sea gas deposits.

Productivity

The recent debate about productivity trends in Australia has revolved around the reported decline in labour productivity growth. For example, the new Secretary of the Treasury, Dr Martin Parkinson recently stated:

> *Australia's productivity growth — measured in terms of both labour productivity and multifactor productivity — has slowed, and there is little reason to believe it will improve in the immediate term.*[65]

Similarly, the latest Reserve Bank of Australia (RBA) Board minutes stated 'Australia's productivity growth over the past five to ten years had been weak'.

The national decline in the trend rate of productivity growth has in turn been used to justify the need for further labour market reform, for workers to lower their expectations about future wage rises and for further microeconomic reforms.

The problem is, however, that a detailed examination of the national productivity figures makes it clear that the productivity of Australian workers is actually rising quite rapidly. In fact, the apparent decline in labour productivity vanishes once the data is adjusted for the very large reductions in productivity in the small, but rapidly growing, mining sector.

The problem with the recent commentary about Australia's declining productivity is that commentators are drawing general conclusions from national averages when in fact a closer examination reveals how misleading such an approach is. While much is made of the 'two speed economy', data in Figure 16 shows that it is productivity in the non-mining sectors of the economy that is growing rapidly while productivity in the mining sector has declined dramatically.

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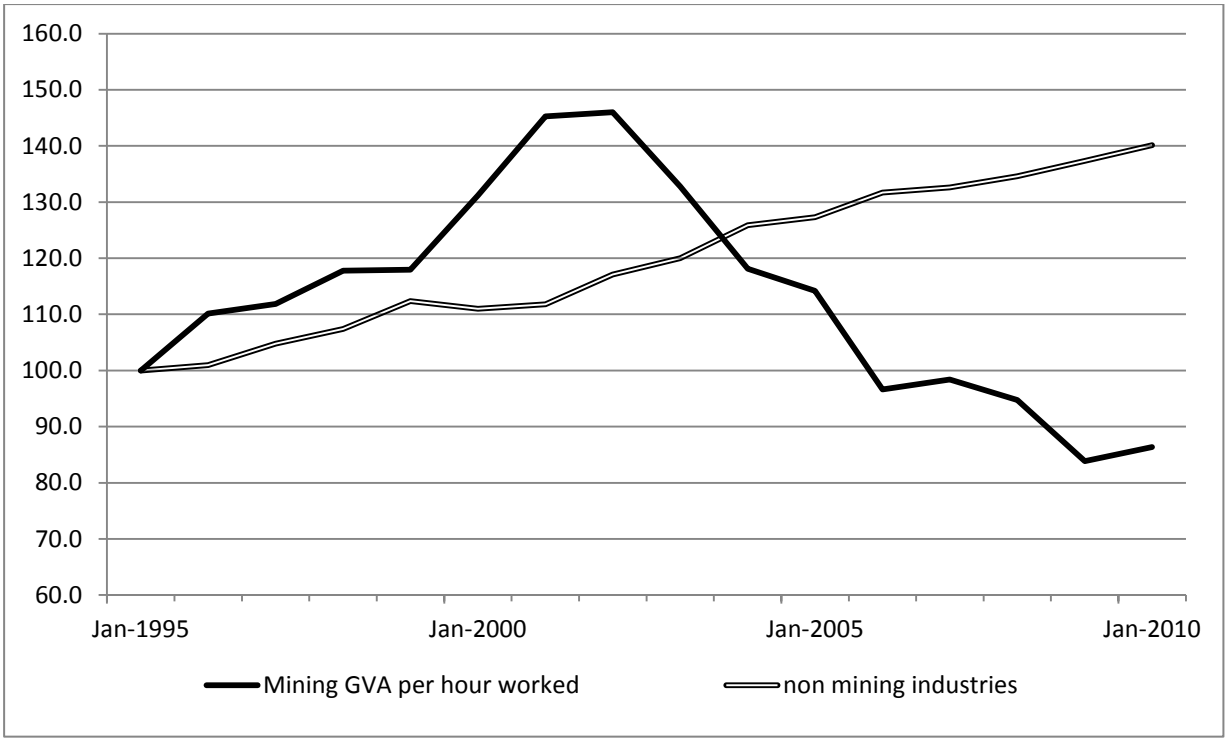
[64] The term 'Dutch disease' refers to the problems arising in the rest of the economy following on the heels of a boom in resources. In the Dutch case it was the discovery of North Sea gas deposits that had the effect of pushing up the value of the currency and making the traditional sectors of the economy less competitive.

[65] Parkinson, M 2011. 'Sustaining growth in living standards in the Asian century'. *Address to the Melbourne Institute and Social Outlook Conference*. 30 June.

Figure 16: Index of mining and non-mining productivity levels, 1995-2010



Source: ABS 2010d. Australian System of National Accounts, 2009-10. Cat no 5204.0.

Since the beginning of the mining boom in the early part of the 2000s output per worker in the mining industry has almost halved. That is, the Gross Value Added (GVA) per hour worked in the mining industry has declined, on an annualised basis and using constant prices from $1,214,000 per annum in 2000-01 to $666,000 per annum in 2009-10. A major explanation of this decline is related to the fact that high commodity prices are encouraging mining companies to pursue less and less productive mine sites.

The results of this disaggregation make clear that the existing industrial relations and wage setting arrangements in Australia are not acting as an impediment to productivity growth. The measured decline in average labour productivity is being caused by the unprecedented haste with which Australia's mineral resources are being extracted. That is, high commodity prices are encouraging mining companies to exploit mineral deposits that require more energy, more capital and more labour to extract an additional tonne of mineral output.

As more and more workers flood into the rapidly growing mining sector the adverse impact on the average rate of productivity growth will be exacerbated. It would be inequitable, not to mention ironic, if policy makers were to confuse this measured decline in average productivity with some failing on the part of employers and employees in the non-mining sector. On the contrary, if it were not for the high rate of productivity growth in the non-mining sectors then Australia's average labour productivity would be much lower.

It is important to note that other analysts have confirmed the analysis provided above. Gary Banks, Chair of the Productivity Commission has, for example, stated that:

> *A key influence on Australia's recent productivity slump has been the massive injection of labour and capital, together with more costly production and resource depletion effects, directed at satisfying minerals demand. However, this can hardly be described as a 'problem', given its flipside of higher prices, profits and national income growth.*[66]

The implications of such observations, to date at least, appear to have been lost on many commentators and policy makers.

The unprecedented haste with which mining companies are seeking to extract Australia's mineral resources is inevitably driving down the efficiency and productivity of our mining industry. As companies rush to build new mines as quickly as possible and dig deeper than they previously considered efficient the output per worker will continue to decline. As more and more people are employed in the mining industry national labour productivity growth will continue to decline.

The current account deficit

Why is the current account important?

The current account on the balance of payments consists of:

- the sum of all exports of goods and services, less the sum of all imports of goods and services (together these two constitute the 'goods and services balance' or the 'trade balance')
- income received from abroad by Australian residents, less income paid to overseas residents by Australian residents (which together give 'net income' or just 'income').

The net balance on current account can be thought of as the extent to which Australia is 'paying its own way' in its dealings with the rest of the world. If Australia runs a current account deficit it means Australia will be increasing its net liabilities with the rest of the world. In practice that involves Australians incurring more debt to foreigners or selling more assets to foreigners.

When describing its contribution to the Australian economy the mining industry typically refers to the large amount of export revenue it generates. As already

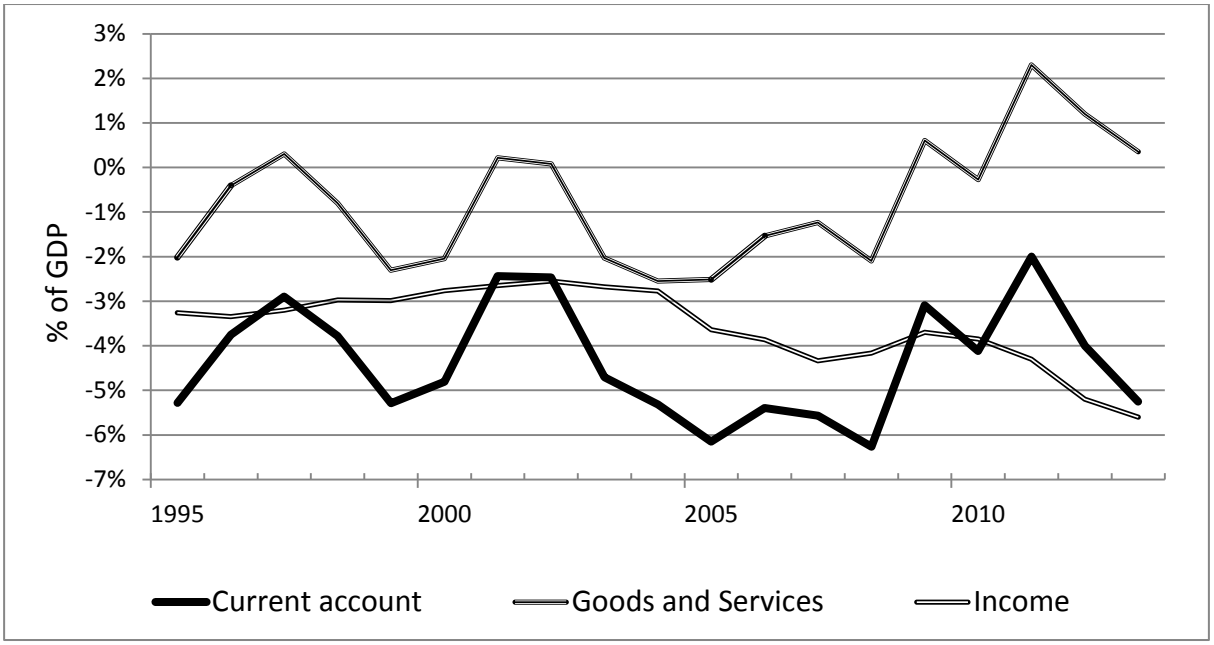
[66] Banks 2011. 'Australia's mining boom: What's the problem?' *Address to the Melbourne Institute and Social Outlook Conference*, 30 June.

noted, there is no doubt that mining exports are very large in both absolute and relative terms, but the contribution of the mining industry to the current account deficit (CAD) is a more complicated issue than whether mining exports have risen or not.

The most important question to ask is why, in the middle of a mining boom, Australia's current account deficit is deteriorating. This question is particularly important when you consider that retail spending in Australia at the moment is quite flat, suggesting that imports of consumer goods are not to blame for the current downward trend in the CAD.

Figure 17 shows that since the boom began in 2004 there has been a tendency for the goods and services balance (also called net exports) to improve and that the effect has been stronger over the past three or four years. The goods and services balance turned positive in 2008-09 and, based on the Treasury's forecasts, looks as if it will have peaked in 2010-11 and will fall back thereafter. The mining boom does not show up in net exports as strongly as might be expected, to the point where net exports in 2013 are expected to be similar to results for 1997 and 2002, when Australia was not experiencing a mining boom. In fact, net exports are set to decline over the next two years.

Figure 17: Trends in goods and services exports, net income and the CAD: 1995 to 2013 (projected)



Source: ABS 2011c. *Balance of Payments and International Investment Position, Australia, March 2011.* Cat no 5302.0. 5 May, Australian Government 2011c. *2011-12 Budget Paper No 1.*

The mining boom has also boosted mining profits and, since mining is overwhelmingly foreign-owned, it has increased income payable abroad in the form of dividends to foreign owners. The result of this surge in offshore profit

payments is that the income balance has moved from a deficit of less than three per cent of GDP at the beginning of the boom to a projected deficit of over 5.5 per cent of GDP by 2012-13. Meanwhile, the International Monetary Fund is expecting the current account deficit to widen 'to about 6.5 per cent of GDP in the medium term'.[67] (This deterioration compares with the average current account deficit of 3.1 of GDP per cent since 1959.) The failure of the resources boom to translate into a large net export surplus combined with the large increase in the income payable abroad will have the effect of dragging the CAD further into negative territory.

Following one of the strongest commodity booms in our history, Treasury is expecting the performance of the balance of payments to be almost as bad they have ever been and as bad as the 'banana republic' days.[68] While many might assume that a mining boom would improve Australia's balance of payments position, in fact the improvement in mining exports is likely to be offset both by a reduction in exports from other sectors and a big deterioration in net income due to the surge in profits being sent offshore.

In May 1965 the Report of the Vernon Committee likened foreign investment to riding 'on to the tiger's back'. [69] It appears that Australia is again riding the tiger's back of foreign investment. Australia's history of relying on foreign investment in mining means that more and more income is payable abroad, which could tempts policy-makers to attract ever more foreign investment to finance the repatriated profits.

Another question arises from this situation: if the current account is worsening why is the exchange rate so strong? The mining industry likes to remind us that most of the profits being earned by the miners are being reinvested in Australia. This means that the export of profits, which appears in the current account, is largely offset by the capital flows coming back into Australia in the form of new mining investment. But what the mining industry does not point out is that the inward flows of capital required to fund new investment are only occurring because the foreign owners expect to generate even greater outward flows of profits in the coming decades. When the boom ends profits will still leave Australia, albeit at more modest levels, but the direct investment in new mining capacity will inevitably dry up, either when the world price falls or when Australia runs out of new mineral deposits.

[67] IMF 2011. Australia – 2011 Article IV consultation concluding statement. 1 August, p 2.

[68] The current account deficit hit 5.5 per cent of GDP in 1985-86, around the time that the then Treasurer, Paul Keating, made his infamous 'banana republic' comments. Source: ABS 2011c. *Balance of Payments and International Investment Position, Australia, March 2011.* Cat no 5302.0. 5 May.

[69] Vernon, J 1965 . *Report of the Committee of Economic Enquiry.* Commonwealth of Australia.

Put simply, exchange rate appreciation can only last as long as the mining boom. The question for policy-makers should then be how much of the boom Australians can capture and how we should invest it for the inevitable time when the boom ends.

Interest rates

In Australia, the RBA is responsible for adjusting official interest rates in order to achieve macroeconomic stability in general and stable prices in particular. In order to achieve these goals the RBA increases interest rates when the economy is speeding up and reduces them when the economy is slowing down. While the ways in which changes in interest rates impact on the broader economy is a source of much discussion among academic economists, it is true that higher interest rates mean that those with large debts, including home loans, are forced to spend more of their money on interest repayments and, in turn, less of their money on goods and services. For businesses, higher interest rates mean that the cost of borrowing to fund new investments in plant and equipment is higher, making such investment less likely. Further, if businesses think that higher interest rates will discourage consumers from spending, they will be less likely to invest in expanding their own operations.

While most people in Australia probably understand that higher interest rates are bad news for home owners, few people probably realise that a major cause of Australia's very high interest rates is the sustained boom in the mining industry. While they may not be widely read, the RBA publishes its reasons for increasing interest rates, and rising commodity prices and the mining boom have featured strongly in their justifications. Between May 2006 and March 2008, the RBA steadily increased official interest rates from 5.50 per cent to 7.25 per cent in seven steps of 0.25 per cent. On each occasion, high or rising commodity prices were mentioned specifically:

- as producing 'consequent expansionary effects on incomes and spending'
- as 'adding to the growth in Australia's national income and spending'
- as 'add[ing] to incomes and spending in Australia'
- as 'remain[ing] an important source of stimulus to Australia's national income and spending'
- 'Australia's terms of trade are likely to rise further'
- '[they] have further strengthened prospects of Australia's terms of trade'.[70]

In the wake of the GFC, the RBA again has made a series of upward adjustments to the interest rate. In statements since then, it has placed emphasis on getting back to where we were before the crisis, on the growth of our trading partners and

[70] Richardson, D 2009. *The benefits of the mining boom: Where did they go?* Technical Brief No 3, May. Technical Brief No 3, May.

on the consequent implications for commodity markets and the terms of trade. Strong investment in the resources sector has also been referred to. By the time of the last increase in November 2010 the Governor of the RBA, Glenn Stevens, emphasised that 'the terms of trade are at their highest since the early 1950s'.[71] Official interest rates have risen to 4.75 per cent at the time of writing and remain well short of their pre-crisis peak of 7.25 per cent. However, official interest rates are well above equivalent rates in other major developed countries.[72] In the absence of the mining boom, we might expect that Australian rates would be more in line with overseas rates.

The RBA has been using high interest rates to reduce the level of economic activity to 'make room' for the booming mining industry so that, for example, employment growth in other industries (such as construction) falls and mortgage holders will reduce their consumption spending. High interest rates also have the effect of encouraging capital inflows, which tend to appreciate the exchange rate.

When interest rates peaked prior to the GFC, higher mortgage interest rates were removing an additional $24 billion per annum from the household sector compared to the pre-boom interest rates that prevailed in 2004. At the time, that was equivalent to a three per cent reduction in living standards for the household sector as a whole, with new home buyers the worst affected. For a mortgage of $300,000 taken out by someone on average weekly earnings, the increase in mortgage interest rates would have taken away 12.9 per cent of their post-tax earnings in mid-2008. While some of the additional interest costs would have been returned in the form of higher deposit interest rates on some deposit types, for most deposit accounts used by households the effective interest rate is zero or negligible. Those wealthy enough to hold large cash deposits, on the other hand, did well out of the mining boom-fuelled interest rate spike.

Personal incomes

The best way to evaluate changes in wages in Australia is to use the ABS wage price index because it tracks what is happening to a fixed composition of jobs. That index can then be divided by the consumer price index to give a measure of real wages and to assess how real wages behaved before and after the mining boom.

In the four years after the boom real wages increased by slightly more than before the boom. The difference of 0.2 per cent per annum is, given measurement errors, virtually indistinguishable from zero.[73] (If, like the RBA, an alternative measure of

[71] Stevens, G 2010. *Statement by Glenn Stevens, Governor: Monetary policy decision*. Media release, 2 November.

[72] Among the international official interest rates that the RBA reports in its statistical tables (RBA 2011a), Australia's rate at 4.75 per cent is well above the next highest at 1.25 per cent for the 'Euro area Repo rate'.

[73] See Richardson, D 2009. *The benefits of the mining boom: Where did they go?*

price is used to that eliminate volatile components such as fresh food prices, even that 0.2 per cent would disappear.) This tiny increase in wages growth over four years is well short of the nine per cent increase in real incomes that supposedly occurred as a result of the mining boom over the same period.[74]

While it is hard to identify any overall increase in wages using the Australia-wide figures, there is no doubt that wages in some regions—and in some occupations—did increase as a result of the mining boom. For example, average weekly earnings in mining increased by 33 per cent over the four years ending in 2008. On the other hand, workers in 'accommodation, cafes and restaurants' received just a 12.3 per cent increase; indeed, those people actually experienced a real wage cut of one per cent. State by state figures are less dramatic but Western Australian wages experienced the greatest increase at 22 per cent compared with a national average of 17.6 per cent.[75]

Most pensions are now indexed to wages growth or the consumer price index (CPI), whichever is larger. The age pension is the biggest of those pensions in terms of the numbers of recipients. Indexation arrangements allow the pension to gradually increase over time in line with community standards. However, this group is structurally prevented from receiving any benefit from the mining boom if wages themselves have not benefited from the boom. At most, the increase would be the 0.2 per cent discussed above. Again, that is nothing like the increase in real income of nine per cent apparently due to the mining boom. Other government income support payments are indexed and have received no boost through that mechanism.

As it happens pensions and benefits are indexed to the CPI, yet living costs for pensioners and beneficiaries have increased by more than the CPI. The main reason is that those items that have become relatively cheaper, such as overseas holidays and audio visual equipment, do not loom as large in the budgets of the pensioners and beneficiaries as they do for the general population. Since December 2003, the cost of living index for pensioner households has increased by 27.7 per cent; for those on other government benefits it increased by 29.7 per cent; while the general CPI increased 23.7 per cent.[76] Since pensions and other benefits are adjusted for movements in the CPI, pensioners have fallen behind by four per cent while those such as the unemployed on other benefits have fallen behind by six per cent. This seems to be a very unfortunate consequence of the change in Australia's terms of trade. While pensioners received an increase on top

[74] Nine per cent is the ABS estimate of the increase in real incomes in Australia due to the terms of trade effect associated with commodity price increases. Further explanation can be found in Richardson, D 2009. *The benefits of the mining boom: Where did they go?*

[75] ABS 2009. *Average weekly earning, Australia, November 2008.* Cat no 6302.0. 26 February.

[76] Authors' calculations based on ABS 2011d. *Analytical living cost indexes for selected Australian household types, Mar 2011.* Cat no 6463.0.16 May.

of indexation in 2009 as part of the stimulus package, the unemployed and other beneficiaries did not.

History repeating? The mining boom of 1979-86

In the late 1970s the Fraser Government predicted an imminent resources boom and, in turn, the need for a policy agenda to accommodate it. As the boom drove the exchange rate higher Australian manufacturers were threatened by cheaper imports. Policy-makers were, however, largely unconcerned with rising unemployment among the manufacturing workforce as this was seen as 'freeing up resources' for the expanding mining sector.

The boom was important, but nowhere near as important as suggested by the hysteria at the time. This became apparent as the boom did not live up to expectations and the economy lurched into recession in 1981. During the course of that year and into 1982 the headlines were full of factory closures and layoffs.

Official thinking at the time is reflected in a 1979 address by then Treasury Secretary, John Stone, who said in part:

> *The capital investments that we shall seek to undertake will outrun the extent to which, as a nation, we shall be prepared to abstain from currently consuming our real national product.*[77]

For Stone, one of the implications of the expansion of mining was that 'the balance of payments on current account will need to remain in deficit' and Australia will 'have to become more or less equally good at increasing imports.' The essential difference between the situation at that time and the recent developments is that in Stone's time the exchange rate and capital flows were heavily regulated, whereas today they are subject to the whims of the global market.

[77] Stone, JO 1979. *Australia in a competitive world: Some options.* Sydney. Vol. 19 November. Australian Institute of Management Conference.

6 Mining industry claims: rhetoric versus reality

This section evaluates some of the specific claims made by the mining industry about its size and contribution, based on the analysis presented in earlier sections. These claims are sourced primarily from the mining industry's 'This is Our Story' website.

> *Claim 1: 'The mining industry is important to Australia. It brings in billions of dollars of export income.'*[78]

The mining sector does dominate Australia's exports, and does so by squeezing out other sectors of the economy. For example, the commodity boom has had the effect of reducing the exports from manufacturing, tourism, education as well as some parts of the agricultural sector. In fact, while mining exports have grown by five per cent of GDP since 2004, non-mining exports have fallen by exactly the same amount.

Further, while an increase in exports is 'good' for the CAD, an increase in interest and dividend payments is 'bad' for the CAD. Because mining is 83 per cent foreign-owned there has been a large increase in the amount of profit being sent offshore which has put considerable downward pressure on the CAD.

It should be noted that in discussing export income or foreign ownership we are not necessarily referring to actual financial flows. Much of the dealing in Australian commodities conducted by such companies need never touch Australia. As Rio Tinto points out in its annual report, the US dollar is the 'most appropriate currency for borrowing and holding surplus cash, although a portion of surplus cash may also be held in other currencies…' (Rio Tinto, 2010, note 33 to the financial statements). Most likely payments for Australian iron ore are made directly into a London bank account in US dollars and Rio Tinto would only bring to Australia working balances to meet the wage bill and other expenses. While the national accounts record 100 per cent of Australian mining as an export for which Australia is paid, in reality only a small proportion of the money paid by a Chinese steel mill for Australian coal extracted by the Swiss mining giant Xstrata would ever be converted into Australian dollars and arrive on Australian soil.

If mining export income is so important to the Australian economy, then the mining industry should be able to explain to Australians why the current account deficit is approaching an historic high.

[78] Minerals Council of Australia 2011. *This is our story.*

Claim 2: 'It provides work for over 750,000 Australians.'[79]

The mining sector accounts for 217,000 jobs—less than two per cent of total employment. In order to make their industry seem much larger the mining industry uses the 'multiplier effect' to take credit for 'upstream' and 'downstream' jobs such as employment in the construction and café industries.

However, the multiplier effect is just as applicable to money spent building hospitals and factories or to the impact of nurses and builders wages as it is to money spent by the mining industry.

If every industry made tried to claim credit for all of the upstream and downstream jobs in other industries then, collectively, Australian industries would be taking credit for over 30 million jobs despite the fact that the workforce is only around 11 million people.

Finally, as the mining industry has boomed the RBA has used interest rate policy to deliberately slow down the growth in order to control the level of inflation. While there is no doubt that mining industry employment has risen, employment growth in other parts of the economy has been slower as a result.

Claim 3: The mining industry is 'supporting local communities'.[80]

Employment increases associated with the mining boom have been greatest in the communities located nearest to new mining developments. However, many communities are resistant to the development of new mining activities near them.

While mining companies may provide economic support to the communities in which they choose to operate, they are often quite dismissive of the concerns of residents who are reluctant to support new mining development. For example, mining companies have shown little support for the idea that communities should decide whether or not mining exploration and activity should take place near them.[81]

Claim 4: The mining industry is 'investing in our people'.[82]

While the mining industry claims to be responsible for creating 750,000 jobs it admits to placing just 1,000 people into new apprenticeships and traineeships in 2010.[83]

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[79] Minerals Council of Australia 2011. *This is our story.*

[80] Minerals Council of Australia 2011. *This is our story.*

[81] For example, groups such as 'Lock the Gate Alliance Inc' have been formed in protest against the alleged unwanted and uninvited intrusions on farm land by coal seam gas explorers. See http://lockthegate.org.au.

[82] Minerals Council of Australia 2011. *This is our story.*

[83] Minerals Council of Australia 2011. *This is our story.*

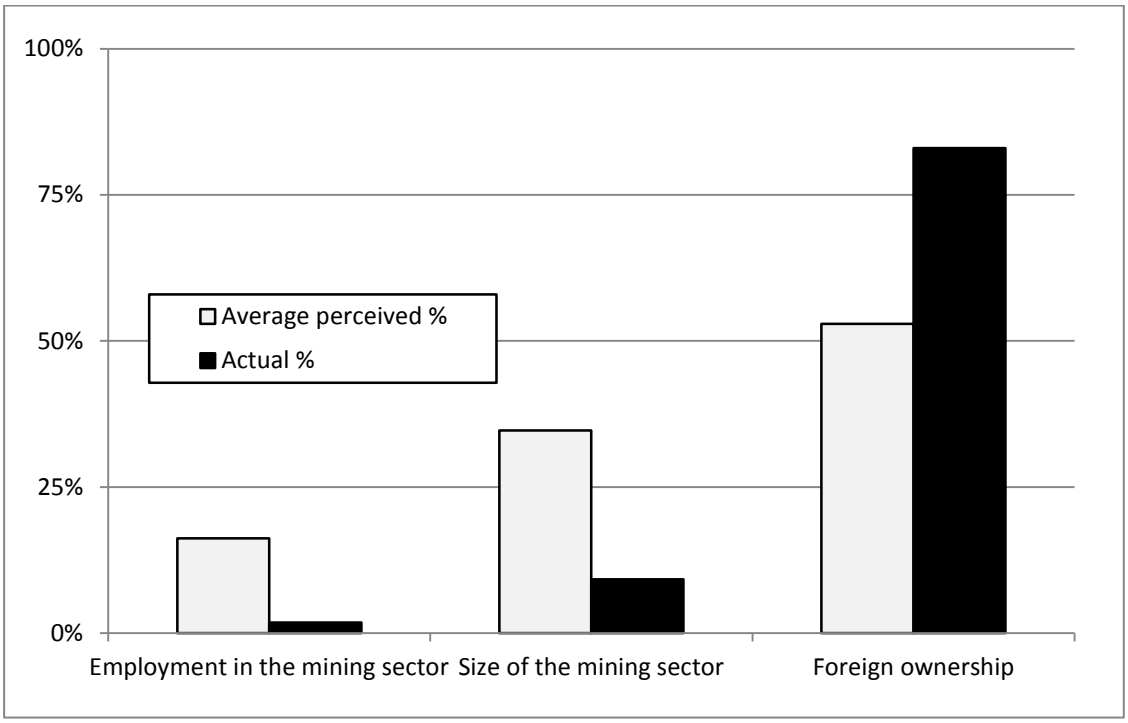
In the meantime, while approximately 33 per cent of workers (around 72,000 people out of 217,000) move into the mining industry each year, 26 per cent of employees (around 52,000 people) will leave.

The small numbers in training and the large movement of people out of the industry each year suggest that the mining industry, rather than Australian governments, should take most of the responsibility for the 'skills shortages' from which it claims to suffer.

Public perceptions of the mining industry

To measure public perceptions of the mining industry, The Australia Institute conducted a survey with a sample of 1370 members of the community in June 2011.[84] This section presents the survey results and evaluates whether the repeated use of exaggerated claims about the size of the mining industry has had any noticeable impact on public perceptions of the size and significance of the mining industry.

Figure 18: Public perceptions of the mining industry compared with key facts



Survey sample size = 1,370

As Figure 18 illustrates, the beliefs that many Australians have about the mining industry diverge radically from the facts. When asked what percentage of workers

[84] The survey was conducted online, with respondents sourced from an independent online panel provider. Quotas were applied so as to get a representative sample, and data have been post-weighted to reflect the broader adult Australian population by age, gender and state/territory.

is employed in the mining industry, the average response was around 16 per cent; according to the ABS the actual figure is 1.9 per cent.

Australians have a similarly misguided perception of the contribution of the mining industry to Australia's GDP. While ABS figures show that the mining industry accounts for around 9.2 per cent of GDP—about the same contribution as manufacturing and slightly smaller than the finance industry—a typical Australian believes that mining accounts for more than one third (35%) of economic activity.

The public also tends to substantially underestimate the degree of foreign ownership. While, on average, respondents said that 53 per cent of Australian mining activity is controlled by foreign companies, in reality the figure is actually 83 per cent.[85]

In summary, Australians believe that the mining sector:

- Employs nine times more workers than it actually does.
- Accounts for three times as much economic activity as it actually does.
- Is 30 per cent more Australian-owned than it actually is.

[85] See Edwards 2011. *Foreign ownership of Australian mining profits.*

7 So who really benefits from the mining boom?

The mining boom has created new jobs in mining, higher wages for those who have remained in the mining industry, very high dividends and share price gains for shareholders and a range of spill-over benefits, such as increasing upstream and downstream jobs.

However, just as rising house prices in Perth are good for those who already own a home and bad for those hoping to buy one (and particularly so for those who don't work in the mining industry), so too the 'benefits' of the mining industry are a mixed blessing for the economy overall.

Strong world demand for Australia's minerals has driven up the exchange rate which, in turn, has reduced world demand for our manufactured and agricultural goods as well as for our tourism and education export services.

The booming Western Australian economy has helped keep unemployment low, but the boom has meant that the RBA increased interest rates in order to 'make room' for the boom by slowing growth in other sectors. The costs of this policy have been borne largely by those with large mortgages, typically young families.

The former Secretary of the Treasury, Ken Henry, suggested that Australians would enjoy the benefits of the boom by way of cheaper import prices.[86] However, for the millions of Australians whose income is indexed to inflation an increase in the exchange rate simply means that they can buy the same bundle of goods and services before and after the boom. Flat panel TVs may have become relatively cheaper, but such a reduction in price means that pensions and other government benefits will not rise as fast as they otherwise would have. For cheaper import prices to improve anyone's living standards there would have to be a commensurate *real* increase in their incomes.

The main sources of household income in Australia are wages and government income support payments. If wage earners were to benefit from the mining boom there would have to be a jump in real wages compared with what workers would have otherwise earned. Unfortunately, there is no evidence that this has occurred.

[86] Henry, K 2008. 'Revisiting the policy requirements of the terms-of-trade boom'. *Address to the Australian Business Economists.* 20 May.

In summary

Mining workers have of course experienced the direct effect of the mining boom as have some of the firms and their workers that have experienced the ripple effects of the mining boom.

Ordinary wage and salary earners have seen no boom in the rate of growth in their real wages.

Pensioners receive indexed pensions and, by definition, indexed payments do not increase in real terms so there is no extra benefit for pensioners. (The exception was the $30 a week increase in the 2009-10 budget as part of the government's response to the global financial crisis.)

Homeowners are forced to pay higher interest rates across the board as the Reserve Bank seeks to control overheating which is actually concentrated largely in the resource-intensive regions of Australia.

Shareholders have experienced increases in the value of resource stocks and reductions in the value of investments in retail, manufacturing and other sectors that have been adversely impacted by the rising Australian dollar.

Superannuants with the median balance of those approaching retirement would be better off by around $2 a week, or 0.6 per cent of the age pension, as a result of the mining boom.

Workers in others sectors of the economy that are trade exposed, such as those working in manufacturing, tourism and education, are experiencing reductions in employment and less job security.

Foreign owners of resource stocks have seen their profits rise enormously and the capital value of their Australian investments increase as the exchange rate has risen.

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