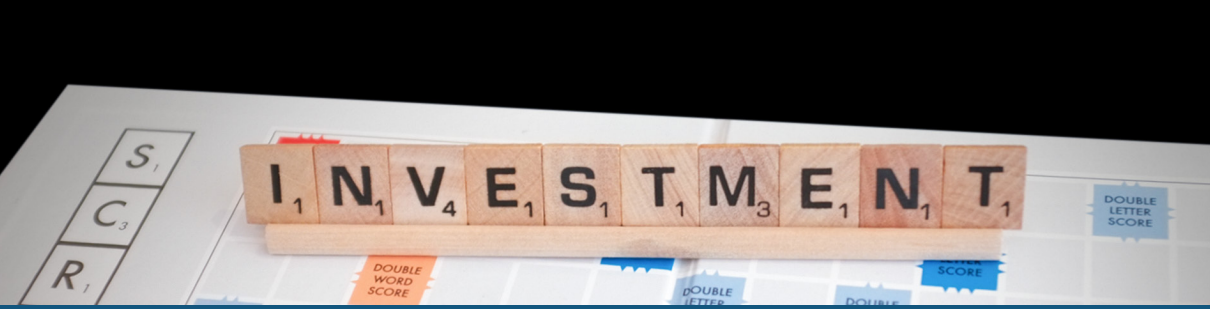

Minerals Council of Australia

Mining tax ratios revisited

CHRIS RICHARDSON

A PUBLIC POLICY ANALYSIS PRODUCED FOR THE MINERALS COUNCIL OF AUSTRALIA

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MINERALS COUNCIL OF AUSTRALIA
March 2015

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The views expressed here are his own.

The Minerals Council of Australia represents Australia's exploration, mining and minerals processing industry, nationally and internationally, in its contribution to sustainable economic and social development.

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Executive summary

Australia had a gut-wrenching 2010 as the mining tax debate of that year argued over the spoils of the resources boom.

The official line was that taxes paid by the miners were growing much slower than their profits. The then Treasurer, Wayne Swan, argued that:

> ...the amount the Australian community charges mining companies for our non-renewable resources has fallen from one dollar in three of profit for the first half of the decade, down to one dollar in seven today. ... even if we include company tax, the point holds. The amount the Australian community charges for its non-renewable resources has halved, as a share of profits, compared to about ten years ago. And the amount the Australian community receive in both taxes and charges for our non-renewable resources has also halved.

Yet:

- **Booms aren't permanent:** The 2008-09 dip in mining tax ratios has long since been outdated by rapidly cooling commodity prices and rising royalty rates – meaning the boom time impact on tax ratios didn't last. (No other boom in profit margins in history proved permanent, yet the nation fought hard over a price boom that was soon to be over.)
- **Show me the money:** The official figures on mining tax ratios that received most coverage in 2010 are hard to replicate. Deloitte Access Economics can almost exactly match the Treasury figuring through to 2006-07, but the falls in tax ratios it estimated for 2007-08 and (especially) 2008-09 seem over the top.
- **Mining tax ratios haven't been falling at all – they've risen:** Whether you look at just the royalty take, or whether you add in company taxes as well, 2012-13 data (the latest available) show mining tax ratios at or above their longer term average. Yes, you read that right. Not only did those tax ratios never fall far, they've actually headed up over

recent years rather than down. And commodity price falls since 2012-13 suggest there have been further increases since then – all on the same measures and methodologies Treasury used in the 2010 tax debate.

- **The royalty bite:** Mining tax ratios always rise as commodity prices cool, as most royalties are tied to revenue rather than profits. But the other factor was that the states boosted royalty rates.
- **Apples-with-apples?** So how can some commentators claim miners pay less than their share of national profits? Because they aren't comparing apples-with-apples. Miners have just invested a trillion dollars in new mines and associated infrastructure. The benefits of that to Australians will last for generations. But that also means measures of profits which don't allow for depreciation costs are more skewed than they have ever been. Accordingly, comparing tax paid against measures other than taxable income (and especially against measures that don't allow for depreciation costs in Australia's most capital-intensive sector) will mislead – badly.

Just as an army marches on its stomach, good policy is reliant on good data. This Monograph

“Comparing tax paid against measures other than taxable income (and especially against measures that don't allow for depreciation costs in Australia's most capital-intensive sector) will mislead – badly.”

aims to shed light on what was happening to mining taxes at the time Australia tore itself apart on that very subject, and to update for developments since then.

And, in turn, good data – along with good process and appropriate consultation – will help to ensure that Australia has a meaningful and much needed debate on tax reform in 2015.

SECTION

01

Introduction

SECTION 1

Introduction

Of Australia's major policy debates in recent years, few have been as intense as the 2010 mining tax debate.

The then Australian Government argued at the time that:

> ...the amount the Australian community charges mining companies for our non-renewable resources has fallen from one dollar in three of profit for the first half of the decade, down to one dollar in seven today. ... even if we include company tax, the point holds. The amount the Australian community charges for its non-renewable resources has halved, as a share of profits, compared to about ten years ago. And the amount the Australian community receive in both taxes and charges for our non-renewable resources has also halved.[1]

The key tax-take ratios released by the then government (reproduced in Chart 1) showed royalties paid by the mining sector accounted for only 14 per cent of profits in 2008-09 (versus 32 per cent in earlier years), and that royalties plus company taxes were 27 per cent of profits (versus 55 per cent previously).[2]

Chart 1 **Treasury resource tax shares**

Charges for non-renewable resources as a proportion of mining profits

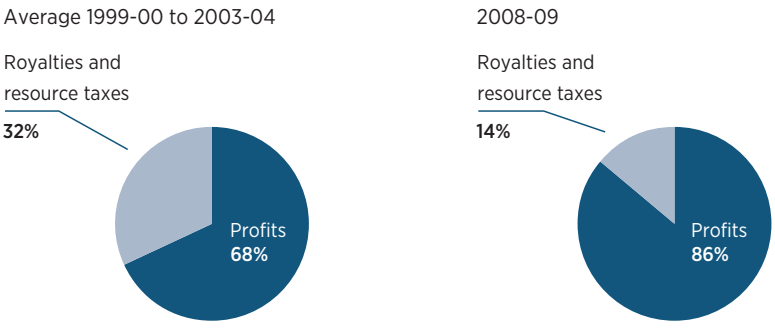
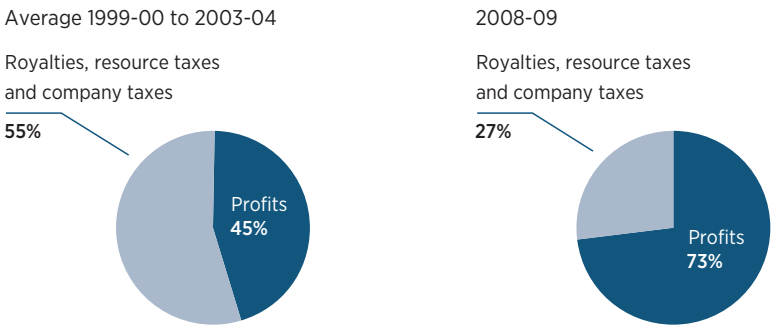


Chart 1 **Treasury resource tax shares *(continued)***

Charges for non-renewable resources plus company tax as a proportion of mining profits



That led the then Treasurer to make the 'one dollar in three down to one dollar in seven' statement noted above.

That claim travelled the airwaves and was leapt on by commentators and lobbyists alike.

This paper provides background on the use of tax ratios in informing Australia's policy debate. It:

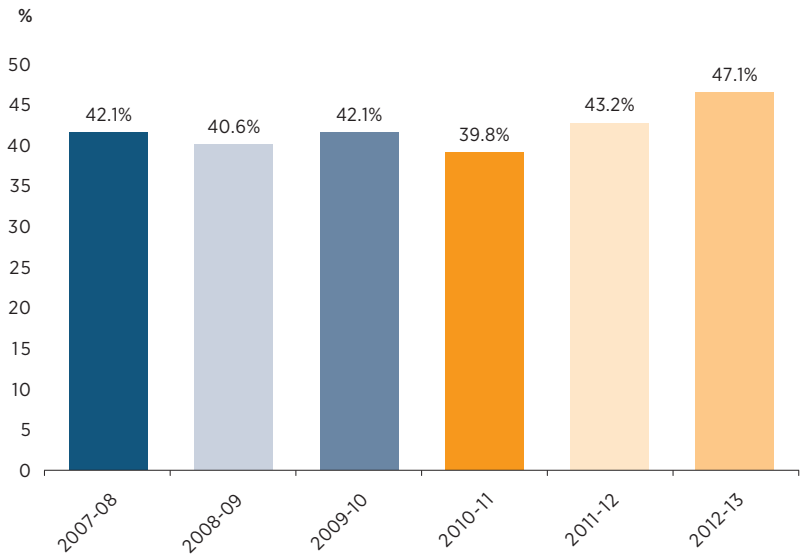
- Tries to match the Treasury ratios as published in 2010
- Extends the Treasury ratios through to 2012-13 (the latest available)
- Explains that the updated Treasury tax ratios have risen over time because profits have fallen alongside commodity prices, and because the states have raised royalty rates
- Identifies a range of core guiding principles for the development of tax ratios
- Assesses the Treasury ratios as published in 2010 against those core principles
- Discusses the claim that the mining sector doesn't pull its weight in paying taxes.

Taxation in the mining sector

Like every other industry, the mining sector pays corporate tax at the rate of 30 per cent of taxable income.

And like every other industry, company tax liabilities in mining move in accordance with the

Chart 2 **Total tax ratio (2014 MCA tax survey)**



business cycle – rising in good times and falling in bad times – because they are directly linked to profits.

In addition to company tax, however, state and territory governments levy a charge on mining companies' rights to dig up their natural resources. These royalties used to be linked to output, but are now mostly based on a share of revenue. Company tax, by contrast, is a share of profits. As revenues are less cyclical than profits, royalties tend to form a higher share of profits when the latter are weak, and a lower share of profits when the latter are strong.

Partly as a result of falling commodity prices and partly as a result of state governments increasing their royalty rates, miners are now paying an increasing share of their taxable profits in royalties. In fact, the most recent Minerals Council of Australia (MCA) tax survey found that, for the first time since that survey began, the effective royalty rate in 2012-13 exceeded the company tax rate.[3] Meanwhile, the total tax take ratio estimated in that tax survey has risen to its highest recorded level of 47.1 per cent (see Chart 2).

> *Partly as a result of falling commodity prices and partly as a result of state governments increasing their royalty rates, miners are now paying an increasing share of their taxable profits in royalties.*

In general the tax take from companies should be cyclical – it should rise when times are good and fall when times are bad. Thus, the situation that Australia has at present, with the majority of the mining sector's effective tax rate being driven by royalties, is less than optimal.

To be clear, miners should indeed compensate the community for their use of natural resources. The appropriate questions are 'how' and 'how much'.

The Henry Review, the RSPT and the MRRT

The Henry Review set a backdrop to the proposal for a Resource Super Profits Tax (RSPT) and the resulting tax debate of 2010. As the Review noted:

> The finite supply of non-renewable resources allows their owners to earn above-normal profits (economic rents) from exploitation. Rents exist where the proceeds from the sale of resources exceed the cost of exploration and extraction, including a required rate of return to compensate factors of production (labour and capital). In most other sectors of the economy, the existence of economic rents would attract new firms, increasing supply and decreasing prices and reducing the value of the rent. However, economic rents can persist in the resource sector because of the finite supply of non-

> renewable resources. These rents are referred to as resource rent.[4]

The Review recommended a tax designed to capture some of these supernormal profits:

> A uniform resource rent tax should be set at a rate of 40 per cent. It would use an allowance for corporate capital system, with taxable profit associated with a resource project equal to net income less an allowance for undeducted expenses or unused losses. The allowance rate would be set by the long-term government bond rate, as the government would share in the risks of projects by providing a loss refund if the tax value of expenditure is otherwise unable to be used.[5]

The Australian Government's response to the Henry Review, released on 2 May 2010, was dominated by the proposed RSPT. The new tax was proposed to be 40 per cent of the estimated 'super profits' of mining companies, where super profits were defined as profits above the level required to earn a return on investment equal to the government's long term bond rate (LTBR).

Under the RSPT the government was to fund a share of the exploration and development costs incurred by miners, in return receiving the same share of the 'super profits' (directly from companies, plus an extra share from the remaining income in the hands of individual investors).

The government's payment of its share of expenditure would not have occurred immediately, but was instead to be deferred as a tax credit on future RSPT tax liabilities. In recognition of this deferral, the government provided for an uplift allowance to compensate for the delay in accessing the tax credit.

There were contentious aspects of the proposed tax's design, including:

- **The tax base:** While resource rents exist in theory, they aren't easy to measure in practice. Profits don't emerge from Australia's mines in separate buckets labelled 'earned by the miner' and 'earned by the mineral'. As it was impossible to measure the contribution of miners' experience and expertise to mining profits, the proposed formula would necessarily have led to additional tax being paid when miners worked harder or smarter.
- **The rate of the tax:** Associated with the impossibility of taxing only pure economic rents, the initially proposed 40 per cent tax rate would likely have made prospective mining investments in Australia more costly than some prospects in other countries, leading miners to rank

Australian project prospects worse than previously.

- **Transition issues:** The RSPT aimed to see the government sharing risks with miners – getting more tax from a successful project, but handing back its share of the losses on unsuccessful projects. However, by definition, the mines in existence in 2010 were the successful ones. In other words, the government would have been creaming off its share of the successes while avoiding its share of past losses.

So the proposed RSPT had several important flaws. Its tax base was problematic, picking up more than pure resource rent, while the RSPT's grandfathering – or effective lack of it – increased sovereign risk and hence reduced long-run expected incomes.

But it was the RSPT's proposed tax rate which was central to the policy debate, and ultimately formed the basis for the Minerals Resource Rent Tax (MRRT) compromise emerging from consultation with major Australian miners.

Major changes under the MRRT (versus the RSPT) included:

- Only iron ore and coal projects with annual resource profits above $50 million were subject to the tax
- The headline tax rate was reduced to 30 per cent (rather than the 40 per cent under the RSPT proposal).
- An extraction allowance of 25 per cent of taxable profits was provided, effectively reducing the tax rate further still to 22.5 per cent
- MRRT losses were able to be transferred to other iron ore or coal projects or carried forward at the LTBR plus 7 per cent
- Improved arrangements for existing projects, including choice of book or market value, and accelerated depreciation provisions
- Unused credits were able to be uplifted at LTBR plus 7 per cent
- State royalties were creditable but not refundable or transferable.

Those changes addressed a number of the concerns surrounding the RSPT outlined above. In particular, the changes recognise that entrepreneurial effort was unfairly included in the tax base for the RSPT, that the proposed uplift rate was too low, and that the tax lacked fairness for existing investments.

That said, the MRRT was – necessarily – a compromise crafted amid election-related pressures, and it too had its flaws.

Indeed, the reduction in the headline

rate to 30 per cent was a de facto recognition that those flaws existed, and that they were magnified by a higher tax rate. In fact the very existence of the extraction allowance was a recognition that 'rents' cannot be separately identified, that any 'resource rent tax' necessarily taxes more than 'resource rents', and that the effective rate of tax needed to acknowledge this unintended side-effect – taxing the entrepreneurial effort of miners.

Yet this Monograph isn't one that focuses on the specifics of the taxes considered and adopted.

Rather, its focus is on understanding the numbers that fed the 2010 debate, and what those numbers look like when they are updated.

SECTION

02

Understanding Treasury's numbers

SECTION 2

Understanding Treasury's numbers

Treasury's numbers started a storm. As the department noted in questioning before Senate estimates in 2010, its numbers had been developed by Treasury using Australian Bureau of Statistics (ABS) and Australian Tax Office (ATO) data for the Henry Review Panel (also known as the AFTS – Australia's Future Tax System Review).

As Treasury also noted, this material was central to the subsequent policy announcements:

> The Government has presented the same data that was presented by the AFTS panel to explain that resource royalties and taxes have fallen, as a proportion of estimated resource rents, from around one in three around the first half of the decade, to one in seven today.
>
> The chart was included on page 47 of the AFTS report and the identical data was included in a number of the Stronger, Fairer, Simpler announcement documents, including on p12 of the tax policy statement.
>
> The chart plots actual royalty and resource tax receipts (sourced from State and Commonwealth budget papers), and a measure of resource rents (labelled "resource profits") that was developed by Treasury for the AFTS Review Panel using ABS and ATO data.[6]

Resource rents

So where exactly did Treasury's numbers come from? For the profit measure (the denominator in their calculations), the department used resource rents.

However, the measurement of resource rents is contentious. For example, KPMG Econtech noted: 'The main challenge in implementing a tax on resource rents is that those rents are generally not directly observable.' [7] Similarly, Henry Ergas noted that 'Pure rents are not of this world.' [8]

But Treasury had to do something, not the least so as to help estimate how much money the new tax might raise. Accordingly, as the department noted in response to questions at Senate estimates, it adopted the following formula:

> Resource rents are the denominator for the percentage calculations in the pie charts, where the percentages are averages over the periods stated. Resource rents have been calculated taking into account total mining sales and service income; operating costs (including depreciation and excluding mining royalties and interest expenses) and an allowance for corporate capital. These calculations have been made by Treasury, based on data from ABS publications, state government budget papers, Commonwealth Budget papers, the Australian Taxation Office and internal Treasury estimates.[9]

Those words suggest that Treasury turned to the basic estimates available in the ABS publication 8155.0, *Australian Industry* and/or the matching numbers in its more detailed counterpart 8415.0, *Mining Operations, Australia.*

Treasury also provided Senate estimates with its final numbers in table form – as seen in Table 1.

As Treasury notes above, they began with the mining sector revenue and expenses figures from the ABS data, and then made a couple of adjustments:

- Taking away interest and royalties from expenses
- And then adding back an 'allowance for the cost of capital'.

At a simple level, Treasury was therefore removing a charge related to a type of capital (interest) and replacing it with a different charge related to capital (the 'allowance for corporate capital', or ACC).

Chances are that Treasury's ACC figuring was pretty straightforward. Given the view expressed by the Henry Review was that the long term bond rate (the return on 10 year Treasury bills) was the appropriate uplift rate for identifying resource rents, that suggests Treasury may have simply taken the mining sector's capital base from ABS data and multiplied that by the long term bond rate.[10]

Table 1 **The data underlying Treasury's 'resource rents' and related tax calculations**

$billion	1999 -00	2000 -01	2001 -02	2002 -03	2003 -04	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09
Resource rents	8.0	20.2	13.4	14.2	9.4	14.6	28.7	34.7	40.7	91.2
Royalties & other resource rents	3.3	5.3	4.2	4.6	3.7	5.3	6.6	6.7	7.1	12.3
Company tax paid	1.8	2.7	3.2	3.8	3.5	3.6	6.8	9.2	8.1	11.9
Company + Resource taxes	5.1	8.0	7.4	8.4	7.2	8.9	13.5	15.9	15.2	24.2

Source: Senate Standing Committee on Economics, Budget Estimates, 1–3 June 2010

Not surprisingly, those latter adjustments appear to be something of a wash. If you:

- Take the ABS data on revenues less expenses for the mining sector
- Take away interest and royalties from expenses
- Add back an 'allowance for the cost of capital' at the long term bond rate
- Compare that to Treasury's estimates of 'resource rents'

... then you pretty much get a match.

That is what Chart 3 below shows.

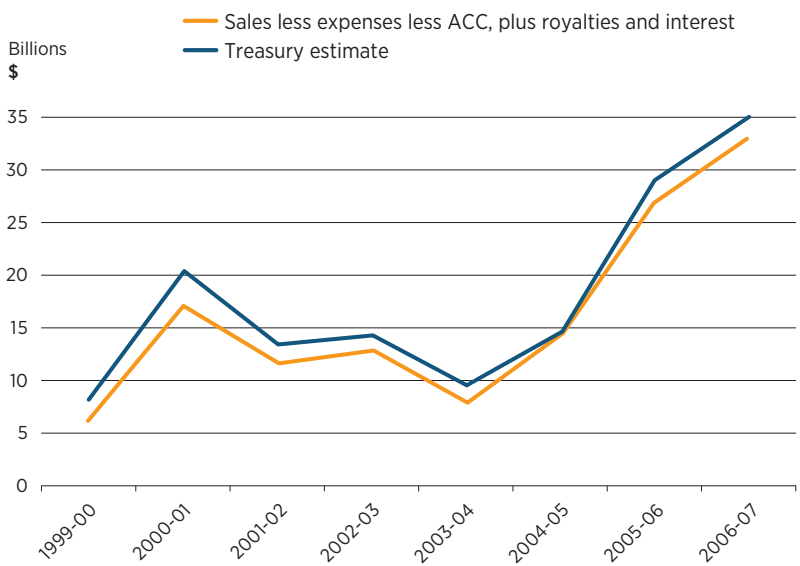
Or, in other words, although Treasury's numbers might have involved the hard-to-pin-down concept of 'resource rents', the actual figures they used seemed straightforward enough, flowing mostly from the key numbers on the mining sector produced by the ABS.

The tax data that Treasury used is also straightforward.

Treasury noted that they drew upon:

> Resource taxes (such as royalties, PRRT, crude oil excise and the RSPT) are all deductible for company tax, in the same way as other input related costs. These data have been sourced from state

Chart 3 **Treasury's 'resource rents' vs ABS sales less expenses and ACC, plus royalties and interest to 2006-07**



> government budget papers and from Commonwealth Government budget estimates. The company tax paid series … is obtained from unpublished Australian Taxation Office (ATO) data, comprising estimates updated from those published in the ATO Taxation Statistics to more accurately allocate tax paid to industry groups and preliminary unpublished company tax data for mining companies for 2008-09.[11]

Those numbers are also given in Table 1 above.

And, despite the quibbles noted later, Deloitte Access Economics also estimates the tax take from these sources to be broadly similar to the numbers that Treasury produced.

However, there are still some important loose ends to be tied up in understanding the Treasury numbers and the influence they have had on the mining tax debate in Australia.

The rest of this chapter addresses two key issues:

- Whether or not royalties are taxes
- Whether or not it is possible to replicate Treasury's resource rent figuring beyond 2006-07.

Are royalties 'taxes'?

The initial charts released by the Treasury quite appropriately included royalties in with resource and other taxes in considering the mining sector's total contribution to the coffers of the public sector.

Accordingly Treasury itself – as just quoted – referred to 'Resource taxes (such as royalties, Petroleum Resource Rent Tax (PRRT), crude oil excise and the RSPT)' in putting together its figures.

On the other hand, however, some commentators have argued that royalties are not a tax, and so should not be included in ratios aimed at assessing the tax liabilities of the mining sector.[12]

So how many angels are dancing on the head of that particular pin? The debate over whether or not to classify royalties as a tax, a charge, a levy, or something else, is of little consequence. As the IMF puts it:

> From the perspective of the investor, of course, it makes little difference whether a payment is called a royalty or a tax: the economic impact is the same. In terms of policy design too whether one thinks of a royalty as akin to a user fee or as an explicit tax, the determination of its proper level and time path reduces to the same question.[13]

As the IMF also notes, what actually matters is the extent to which royalties share similar characteristics to taxes.

The primary purpose of royalties is to allow the community a return on the use of its raw mineral deposits.

In that context to argue that royalties are not a tax is also to argue that the PRRT, MRRT, or the originally proposed RSPT, are not taxes either – despite all of them having 'tax' in their names.

A number of reputable commentators – including the Henry Review itself, the Australian Bureau of Agricultural and Resources Economics, Ross Garnaut, Henry Ergas, Ben Smith and others – have all discussed the current royalties regime. Yet none of those contributors to the debate have countenanced the view that royalties do not form part of miners' total tax contributions.

> *"Just like other taxes that affect miners, royalties are levied to ensure the community gets a slice of mining companies' revenue."*

Just like other taxes that affect miners, royalties are levied to ensure the community gets a slice of mining companies' revenue. And, just like other taxes, royalties themselves can be useful policy levers. In particular, royalties can help ensure the extraction of that resource occurs at an optimal rate (a point also made by the IMF in 2010).

To the extent that miners' costs of extraction are less than the broader social costs, an appropriately structured royalty regime could alleviate the risk of miners 'over-extracting'. This may be the case, for example, where a miner has rights to extract a resource over a finite time period – naturally the miner will want to extract the entire resource in that period (since

anything left in the ground at the end of the period is worthless to them). A royalty could be used to bring miners' marginal costs and benefits more in line with the broader community's.

Another issue is that, at a time when commodity prices are expected to see further falls, miners may have an incentive to bring forward their operations to take advantage of today's higher prices. This would have the effect of (a) reinforcing the downward cycle in commodity prices; and (b) bringing Australia closer to the point at which it simply runs out of the mineral being extracted.

Royalties may partly counteract this incentive, at least in theory.

Of course, that is not to say that current royalty regimes have these goals in mind – the main purpose of existing regimes is for administrative ease (royalties are far easier to implement than profit-based taxes) and revenue smoothing (royalties pay dividends as soon as mines become operational, irrespective of their profitability).

The point here is simply that royalties are far more than just a cost of production. Rather:

- They are an integral means of government revenue raising
- They contribute to state government programs (such as the 'Royalties for Regions' in Western Australia)
- If structured appropriately and operating in tandem with profit-based taxes, they can have broader economic benefits by ensuring miners extract non-renewable resources at a socially optimal rate.

Notwithstanding this, the current system of royalties is distortionary and levies a significant burden on mining companies, particularly at a time when commodity prices are falling. The 2014 minerals industry tax survey indicated that royalties made up about a quarter of miners' pre-tax taxable income in 2012-13, up from a fifth in 2011-12.[14] And with commodity prices having fallen again since 2012-13, that trend seemingly has further to run.

Yet despite the issues surrounding current royalty regimes, to suggest that royalties are not a tax is to overlook the many similarities that royalties share with other taxes, and to also overlook the good that an appropriately designed royalty regime can do.

Treasury estimates for 2007-08 and 2008-09

Earlier in this chapter it was noted that Treasury's figures for resource rents could be closely matched by

just using ABS data for the revenue and expenses of the mining sector.

Well, yes and no. Chart 3 seen earlier only went as far as 2006-07. Thereafter the story gets less clear.

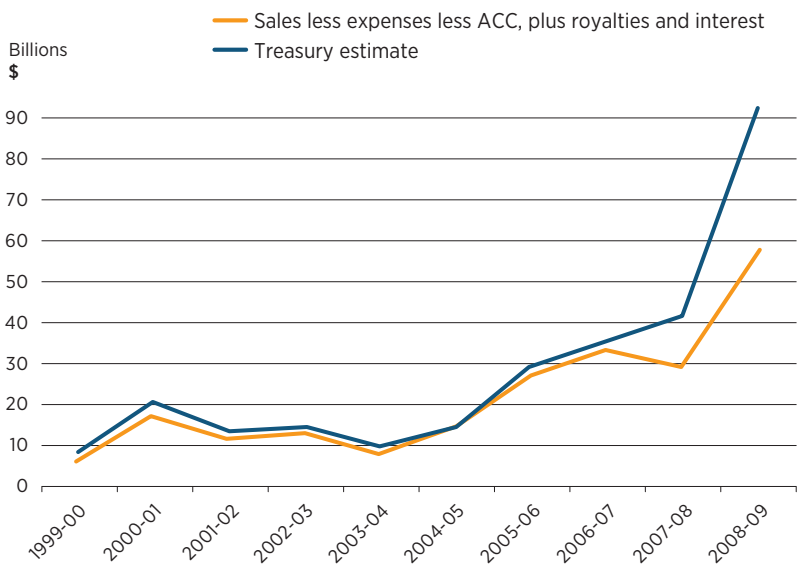
Chart 4 extends that analysis out to 2008-09 – the last year that Treasury put an estimate on during the great tax debate of 2010.

As Sesame Street puts it, 'one of these things is not like the other'. Chart 4 shows a considerable gap opens up in these two years. Whereas the largest gap between the official figures and those released by Treasury during the 2010 mining tax debate was a little over $3 billion in the years up to 2006-07, that ballooned out by a factor of ten times to more than $34 billion by 2008-09.

It isn't clear why that gap exists:

- By definition, it can't be a gap in the basic drivers of mining profits – revenues and expenses – because that's what the ABS measure is.
- And it isn't likely to be in the other adjustments. They just aren't big enough to move the dial.

Chart 4 **Treasury's 'resource rents' vs ABS sales less expenses and ACC, plus royalties and interest to 2008-09**



In other words, there's a notable mystery here.

What gives?

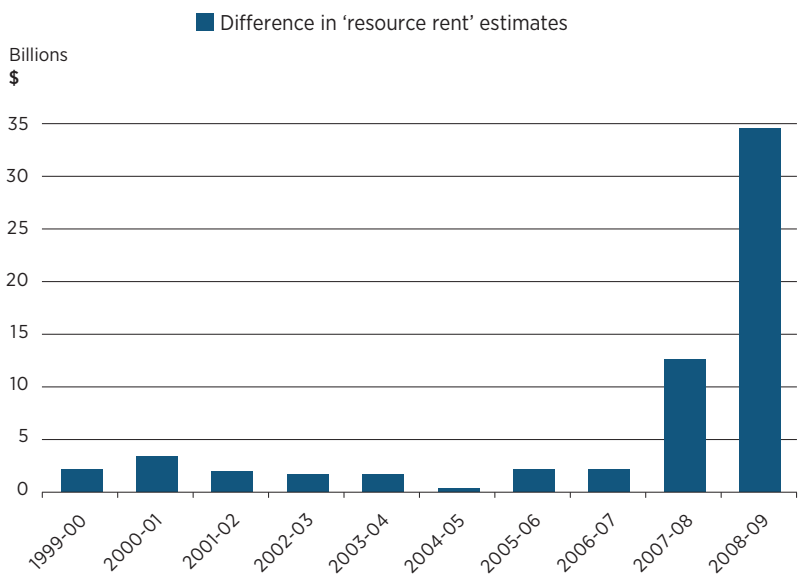
Because, as Chart 5 shows, those are massive differences. Even today, some years down the track, the combined annual profits of Australia's biggest four banks is still smaller than the $34 billion gap in question here.

And because those massive differences added to the estimate of mining profits that Treasury released in 2010, they presumably also boosted Treasury's estimate of what the new tax would collect from Australia's miners.

Chart 6 gives a 'before and after' snapshot of Treasury's tax ratio for royalties and other resource taxes, and then Chart 7 does the same but adds in company taxes.

That is, these two charts replicate Treasury's figuring, but substitute in what seems to have been the appropriate denominator for 2007-08 and 2008-09.

Chart 5 **Difference in estimates of 'resource rents'**



And they lead to rather different conclusions – the key royalties tax ratio was below its average for this century in 2007-08 and 2008-09, but it wasn't falling. And adding company taxes into the calculations (as seen in Chart 7) tells a similar story.

This Monograph began by noting that good data are crucial for good policy. So it is concerning, to say the least, that the figures underlying the mining tax debate in 2010 do not seem to be in line with basic drivers from the ABS.

And remember one other thing. The tax ratios in the first few years of the 21st century (prior to the take-off in commodity prices from 2003-04) were very high indeed. Their severity can be attributed to a long period of stagnation in prices from the early 1990s to the early 2000s when real prices were unusually low by historical standards.[15] Hence the early 2000s should not be seen as a particularly useful benchmark for mining tax ratios.

Chart 6 **Treasury's royalties and resource tax ratio**

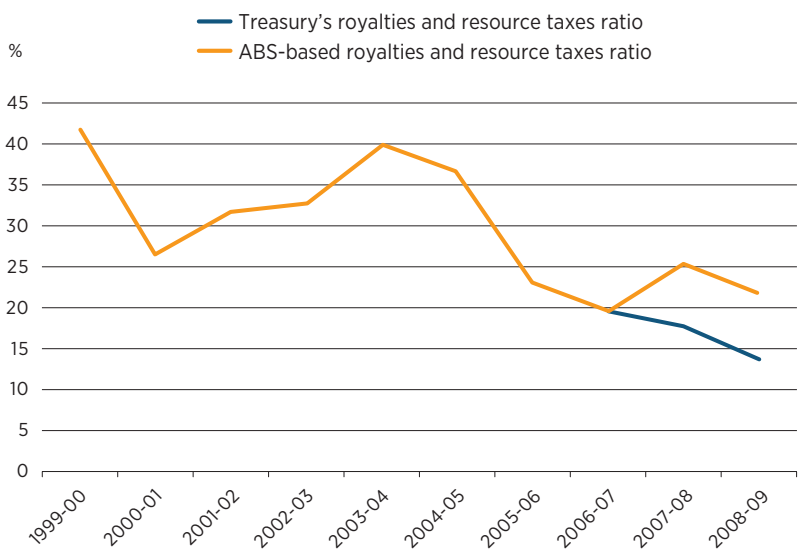
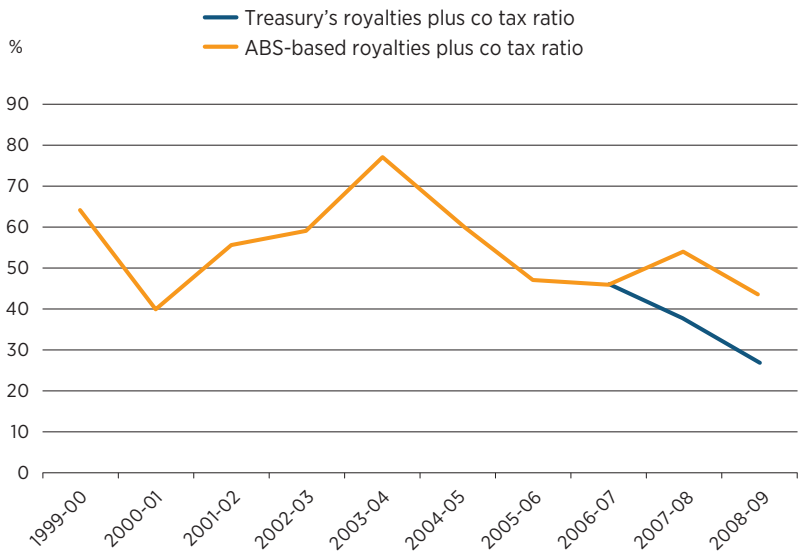


Chart 7 **Treasury's royalties, resource tax and company tax ratio**



Data availability at time of release

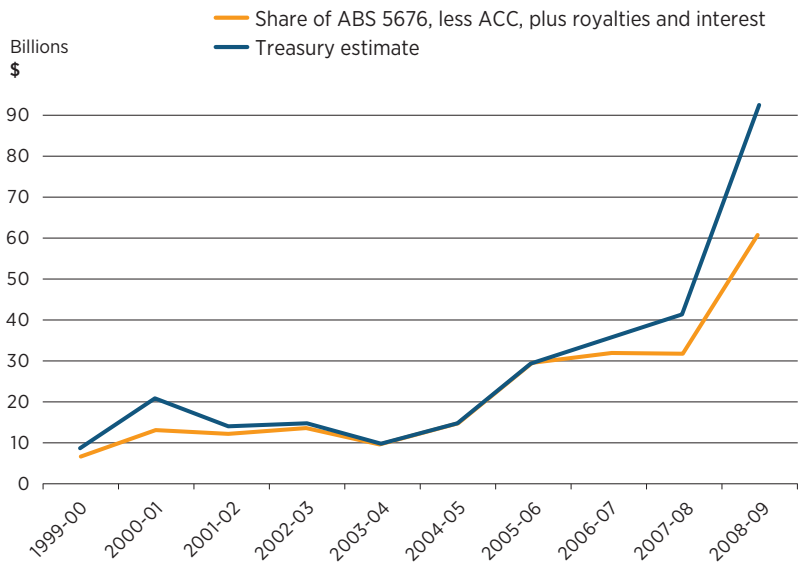
It is probably worth making the other obvious point here. When Treasury was releasing its estimates of 2007-08 and 2008-09 on 2 May 2010, ABS actual data were readily available for those years.

So in using estimates rather than actuals for 2007-08 and 2008-09, Treasury was attempting to forecast history.

The 2007-08 issue of ABS 8155.0, *Australian Industry,* was released on 28 May 2009, while the 2008-09 issue of the same publication was released on 28 May 2010:

- So 2007-08 data was released well before Treasury released the tax ratios in question here, while the 2008-09 actuals came out just three weeks after the Treasury numbers were released (in the middle of an intense national discussion focussed on these figures)
- Given the pace of ABS production timetables, had Treasury asked ABS for 2008-09 numbers, it is quite likely that the 2008-09 data would also have been readily available to Treasury comfortably ahead of the release of the Treasury figuring on 2 May 2010.

Chart 8 **Treasury's 'resource rents' vs ABS 5676.0 mining profits adjusted for coverage**



Moreover, there was other readily available ABS data to fill the gap ahead of 2 May 2010. The ABS publication 5676.0, *Business Indicators*, is released quarterly. It also contains profit data by industry, and the December quarter 2009 release was available as of 1 March 2010. Although its coverage is slightly wider, the data in that release showed nothing like the startling acceleration in profits that Treasury announced.

As a simple illustration of that, Chart 8 adjusts for the different coverage by multiplying the ABS 5676.0 measure by 78 per cent,[16] and then comparing it to the Treasury data. Once again, the disparity between these two measures leaps out.

In short, there may well be excellent reasons for Treasury's numbers, but they are hard to replicate.

Profits have fallen

The other element of this discussion requires looking at more recent data. 2008-09 may not have been the profit bonanza that seems to have shown up in the Treasury figuring, but it was undoubtedly still a good year for Australian miners, as the full impact of the global financial crisis (GFC) didn't really show up on profits until 2009-10.

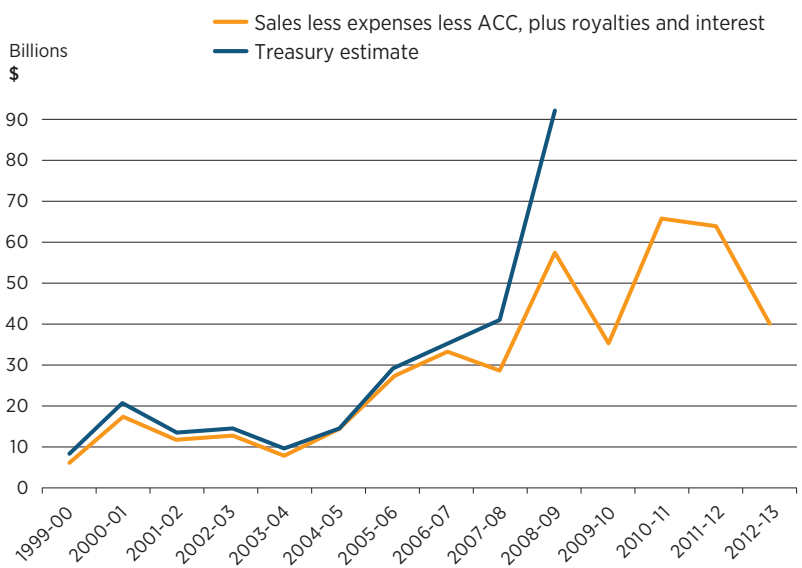
However, there are now official figures from ABS 8155.0 available through to 2012-13.

These dominate the measure shown in Chart 9. Interestingly, it looks as if mining profits never came close to hitting the $91 billion that Treasury estimated for 2008-09. They lifted to around $65 billion in both 2010-11 and 2011-12 because global commodity prices peaked in calendar 2011, but mining profits then dropped back to $39 billion in 2012-13.

And it hasn't gotten any better since then. The world since 2012-13 has continued to see a moderation in growth of the demand for minerals (in large part due to slowing growth in China), as well as a very substantial surge in the supply of minerals (including from Australia itself).

The upshot is that the latest official data from ABS 5676.0 – for the September quarter 2014 – shows that trend profits before income tax have fallen to be 10 per cent below their 2012-13 levels.

Chart 9 **Treasury's 'resource rents' vs ABS sales less expenses and ACC, plus royalties and interest to 2012-13**



And nor does the bad news stop there. As Chart 10 shows, the Reserve Bank's index of spot bulk commodity prices measured in Special Drawing Rights (SDRs, the closest thing the world has to a 'global currency') has dropped to be 26 per cent below its 2012-13 levels.

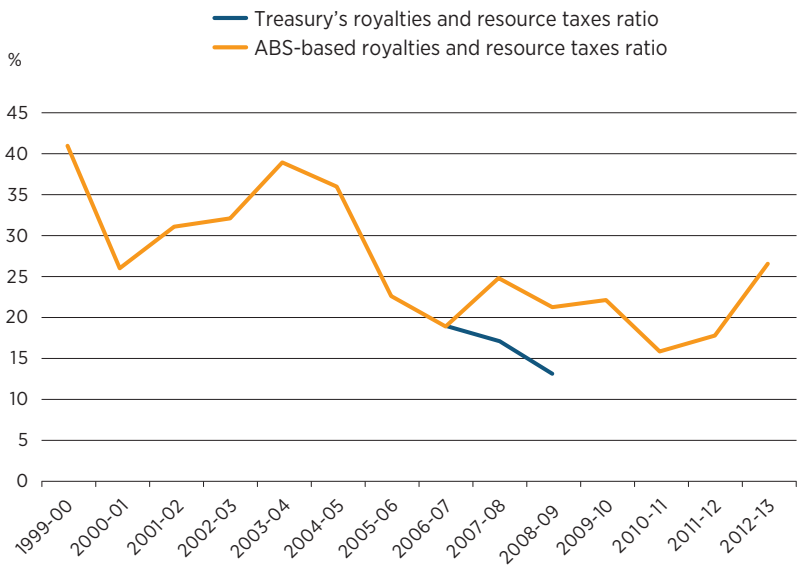
That suggests profits continue to go down.

> *"It looks as if mining profits never came close to hitting the $91 billion that Treasury estimated for 2008-09."*

Chart 10 **Spot bulk commodity prices in SDR terms**
Index: 2012-13 = 100

Chart 11

Treasury's royalties and resource tax ratio
Updated to 2012-13



And effective tax rates have risen

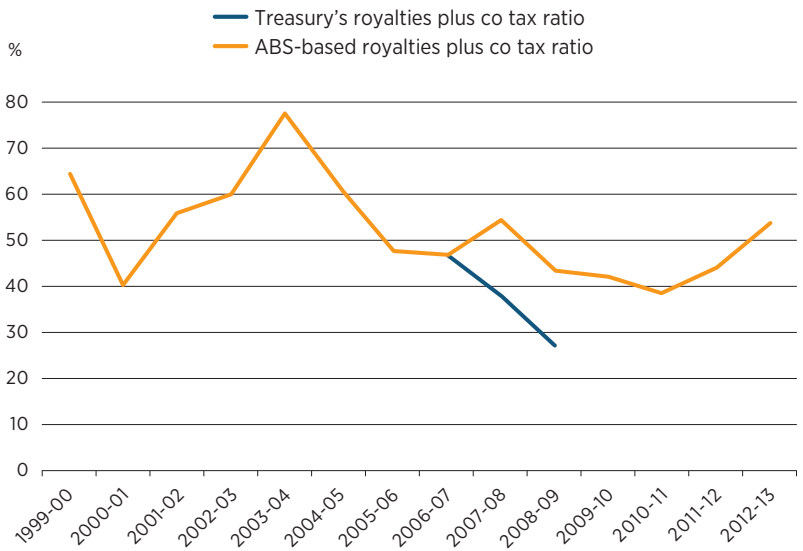
But what of taxes? Deloitte Access Economics has tried to put together the matching data for taxes that Treasury used in its calculations.

Chapter 4 talks through data sources and the like and notes that royalty rates were rising over these years. But the upshot is that, although tax collections fell in 2009-10 as the GFC hit home, they reached a new high in 2011-12 when commodity prices peaked. And, as at 2012-13, the tax take remained over $20 billion. Note 2012-13 is the latest year for which there is a combination of official data (such as state budget information on royalties) and reasonable estimates (such as company tax estimates based on a survey of MCA members, and adjusted for other known information).

So you may therefore be interested in the resultant update of the Treasury calculations that first showed up in Henry Review documentation, and played a starring role in Australia's gut-wrenching 2010 mining tax debate.

As you'll remember, that Treasury

Chart 12 **Treasury's royalties, resource tax and company tax ratio Updated to 2012-13**



figuring framed the subsequent debate, with those official figures showing that resource taxes (including royalties) had fallen from one in three dollars to one in seven dollars.

You may note that the story appears to be rather different.

In fact, recent years saw 'the amount the Australian community charges mining companies for our non-renewable resources' – a familiar phrase – rising rather than falling. As at 2012-13, that ratio was back to the average since the turn of the century (the period that Treasury considered).

Moreover, that was as of 2012-13. As Treasury and the Henry Review quite correctly noted, royalties aren't sensitive to the business cycle, meaning that the fall in profits since 2012-13 is likely to have driven this ratio even higher still.

Surprisingly, the public debate on these matters appears to be unaware of that.

What happens when you add company taxes in as well? The conclusion from the numbers that Treasury released in 2010 was that the latter ratio 'has also halved.'[17]

Except it hasn't, and it probably never did.

Have a squiz at Chart 12. As noted, this report was able to replicate the Treasury figures through to 2006-07, but was unable to replicate them for 2007-08 or (especially) 2008-09. When the data is updated through to 2012-13, it again shows that this tax take ratio has been rising in recent years.

Note that update took not just official figures on mining profits, but also on mining royalties, while we updated the ATO's 2011-12 measure of company tax payments made by the mining sector by drawing from data obtained from the MCA tax survey.

As at 2012-13, the resultant mining tax ratio – at 53 per cent – was back above the average since the turn of the century (51 per cent). And it was still rising, given that commodity prices have fallen substantially further since then.

To put it mildly, these are very different pictures of the tax landscape.

Historians may wish to take this moment to reach for their notebooks …

This data, by the way, is pretty much all publicly available. This report talks through data sources in detail later. And it also covers a question not yet addressed – whether there are even better ways of looking at this data than Treasury did in the first place.

For the moment, however, the next issue considered is why these tax ratios have been rising.

Would it have been different under the RSPT?

All the figuring above has excluded the MRRT.

Then again, the MRRT never raised much, so it wouldn't make much of a difference.

Yet that raises a related point. If the RSPT had passed into law as originally envisaged, would it have raised more?

That might seem a reasonable expectation. After all, the RSPT had a higher effective tax rate (40 per cent) than the MRRT (22.5 per cent), and it covered more minerals and more miners than did the MRRT.

In addition, it only allowed for the written down book value of relevant assets to be depreciated against the income of those assets. As the latter were a fraction of market value, that means 'starting base deductions' would have been rather less under the RSPT than it was under the MRRT.

So it isn't surprising that there remains a view in the community – and among some commentators – that the RSPT would have raised a motza, making a big difference to

the Commonwealth Budget deficit woes of recent years.

However, two points are worth making:

- Had the RSPT raised heaps, then the basic point made in this report (that mining tax ratios were at or above their longer term average as of 2012-13, and will have risen further since) would be all the more true
- Yet the opposite is in fact true: the RSPT would have cost Commonwealth revenue billions of dollars. (Yes, you read that right.)

Although the above points (higher rate, wider coverage) are true, the RSPT also allowed a much higher rate of depreciation and, most importantly of all, the RSPT would have refunded royalties. The latter formed a hard floor to tax collections from the minerals sector under the MRRT, but would have been refunded under the RSPT.

That difference with respect to royalties means that the RSPT would have raised more than the MRRT in 'good times', but less (and potentially negative revenue) in 'bad times'.

And 'bad times' is exactly what the mining sector is seeing – in spades.

That was true in early 2013 when Deloitte Access Economics made the same point and, given trends in commodity prices, it would be even more true today.[18]

Although most people don't yet realise it, the original 'super profits tax' would have been super expensive if it had been implemented as proposed in May 2010.

"Although most people don't yet realise it, the original 'super profits tax' would have been super expensive if it had been implemented as proposed in May 2010."

SECTION

03

What drives tax ratios?

SECTION 3

What drives tax ratios?

This Monograph has already touched on some of the reasons why mining tax ratios have actually been headed up – rather than the public perception (and Treasury's figuring), which had them headed south. But it is worth teasing out the basic drivers here. In brief, profits went down, but taxes stayed higher.

Royalties are less sensitive than profits to the business cycle

Mining tax ratios tend – other things equal – to fall when profits are strong, and rise when profits are weak.

There's no particular magic to that. Rather, it is a feature of the current tax system.

As a generalisation, royalties are levied on the value of mining production rather than on mining profits. That's because royalties don't take account of a miner's cost of production – only of the value of minerals produced.

That leaves royalty payments more closely tied to mining revenues than they are to mining profits.

As a result, the share of profits captured by state royalties is subject to variations over time alongside shifts in the margin of sales revenue versus operating expenses.

In general, the lower are accounting profits, the larger that royalties loom as a share of those profits.

With that in mind, consider the three phases of the resources boom of the past decade in response to the world's increased demand for Australia's resource exports:

- The resources boom began with **a price boom**, as the supply of resources from existing mining operations struggled to keep pace with rising commodity demand.
- Pretty soon those higher prices led to **an investment boom**, as miners around the world looked to develop new capacity to match higher demand, building new mines and associated infrastructure. This phase also saw increasing costs and slowing gains in commodity prices.
- In turn, that investment is

kicking off **a production and export boom**, as new mines and infrastructure enter production. This phase – now strongly underway – sees commodity supply catching up to higher levels of commodity demand, leading to further falls in commodity prices.

Both mining profits and the broader Australian economy have been deeply affected by these shifts over the past decade.

Those same pressures can also have a marked impact on the royalties ratios presented in Chapter 2 above:

- **Royalty ratios fall when prices boom.** Royalty payments rise more or less alongside profits in the first phase, as the rising price of mining sector output lifts both. However, revenues are much larger and less cyclical than profits. That therefore sees the royalties ratio falling from its initial level as the margin between revenues and costs grows faster than do revenues alone.
- **Ratios then steady as investment picks up pace.** Greater investment see costs rising, as mining companies dig deeper and faster to expand the supply of minerals to growing export markets, and as stronger conditions add to the cost of wages and materials in the sector and its suppliers. That lift in

> *"The downward shift in tax ratios at the height of the minerals price boom was always going to be temporary, rather than permanent."*

costs slows the growth in profits relative to growth in prices, putting upward pressure on the royalties ratio.

- **Royalty ratios then rise once more.** With new supply coming online, the third phase increasingly sees the margin between prices and costs narrowing, resulting in increases in the royalties ratio as commodity prices fall.

That cycle of falling royalties ratios followed by rising royalties ratios – which is exactly what the analysis in the last chapter showed – is a reminder that the downward shift in tax ratios at the height of the minerals price boom was always going to be temporary, rather than permanent.

That isn't to say that higher royalty revenues are similarly short lived. After all, while higher quantities do little to alter tax ratios, they do provide a substantial and lasting lift in the level of both profits and royalties.

So royalty ratios move in the other direction than does the commodity price cycle.

However, corporate tax ratios march to a different beat. For company taxes it is not merely revenues (and hence commodity prices) that matter for tax collections, it is also the volume of production as well as the expenses that mining companies incur to extract minerals and prepare them for sale.

That latter factor is important, because shifts in expenses in recent years have been dramatic. Not only have wage and other cost pressures lifted expenses, but the industry has invested record amounts in new mines and infrastructure so as to power Australia's mining production and exports for decades to come.

And because expenses shifted dramatically, then so did revenues versus profits – which is why the royalties ratio is more sensitive to commodity price cycles than are company tax ratios.

In turn, that's why movements in the royalty ratio dominated the original figures on miners' tax contribution released by Treasury in 2010, and it's why movements in the same ratio lie behind the notable upswing in the total tax ratio for the mining sector in recent years.

It is therefore worth tracking through each of the major factors behind this rise of royalties as a share of accounting profits over the past decade.

Mining expenses rose

With revenues the key driver of royalty payments, movements in mining expenses can have important implications for royalty ratios.

A boom sector is a sector in which costs proliferate.

Again, the data from the ABS helps to underline that point. ABS 8155.0 shows that, in the six years to 2012-13, although mining sales and service income rose by 77 per cent (that is, by $87.5 billion), mining expenses rose by 104 per cent ($84.5 billion) over that same period.

That has also been widely discussed elsewhere:

- For example, a Reserve Bank Bulletin article from January 2009 discussed the surge in costs in the mining sector that was then underway[19]
- As noted, the strength of the sector saw suppliers get paid more – workers could earn higher wages, and materials commanded higher prices
- Similarly, the need to chase poorer grades of ore among strong global demand for minerals was pushing up costs relatively rapidly too
- Finally, and even allowing for a notable degree of currency hedging, the sharp fall in the A$ amid the global financial crisis added to the cost of imported equipment in 2008-09 in particular.

Commodity prices fell

From a longer term viewpoint there is a commodity super-cycle underway. Yet that is likely to be in commodity demand rather than in commodity prices.

Global commodity demand is higher because the demand most relevant to commodity prices is that in the emerging industrial giants of the world, as they are the ones who drive most of the growth in additional industrial production. Accordingly, the accelerated growth in this group of nations over the past decade has made a massive difference to global commodity demand.

But even if greater demand for industrial commodities is here to stay, that does not mean prices were going to remain near their 2011 highs.

That is because demand is only ever half of the story. The supply (production) of industrial commodities will eventually catch up to fast charging demand.

Economics points to an iron triangle connecting demand, supply and price. At any given time two of those three can boom – but not all of the three.

For much of the past decade the boom in demand has been matched by a boom in price.

But prices have already passed

their 2011 peak. Industrial commodity supply is now rising faster than the matching demand, and the underlying price trends are downward. That still leaves industrial commodity prices above where they were as recently as a decade ago, but it won't see them return to anything like their 2011 peaks.

Rather, it is likely that the longer term impact of the Asian century will be a boom in both commodity demand and supply, with prices reverting to those levels generating more 'normal' or 'sustainable' levels of profit.

And in the short term that means commodity prices are now eating sharply into mining profits at a time when miners have invested record amounts in new capacity.

> *"Economics points to an iron triangle connecting demand, supply and price. At any given time two of those three can boom – but not all of the three."*

Royalty rates rose

So 2010-11 marked a high water mark for mining profits in Australia, alongside a matching peak in Australia's terms of trade.

That was also the time the debate around mining taxes reached a crescendo, with both the RSPT and MRRT proposals announced in 2010.

Yet one of the elements of the debate at the time – the argument that royalties weren't keeping pace with profits – didn't hold, as state governments on both sides of the political divide moved to announce

changes to royalty arrangements in recent years.

The overwhelming majority of royalties are based on the value of mineral production, with royalties levied at high and low rates. While varying from state to state for most minerals, relatively high effective royalty rates apply to export coal, lump iron ore and bauxite. Three states (Western Australia, Queensland and New South Wales) account for around 95 per cent of all mineral royalties collected in Australia.

Two sets of factors are at work here.

- First, the proportion of total mineral sales accounted for by high royalty rate commodities (notably iron ore and coal) has increased since 2000
- Second, state governments have taken the opportunity presented by rising minerals sector profits to raise effective royalty rates.

In 2008-09 that was due mainly to both Queensland and New South Wales lifting their statutory royalty rates. New South Wales increased its coal royalty rates by 1 percentage point with effect from 1 January 2009 and Queensland introduced a surcharge when the value of coal exceeded $100 a tonne from 1 July 2008. The resultant two tier royalty rate structure was '... designed to increase the return to the Queensland community when the value of this non-renewable resource increases'.[20] Queensland also increased the royalty rate on bauxite used domestically by 50 per cent from 1 July 2008.

Similarly, Western Australia increased effective royalty rates on iron ore in a number of ways.

First, a concessional rate of 3.75 per cent that was offered to some iron ore projects was withdrawn in 2010-11, raising effective royalty rates. Then in May 2011 Western Australia raised the royalty rate on iron ore fines from 5.625 per cent to 6.5 per cent from 1 July 2012.

That rose further to 7.5 per cent from 1 July 2013, thereby bringing royalty rates on iron fines up to the same royalty as charged on lump iron ore. Then a new 5 per cent royalty was imposed on magnetite concentrates (a specific form of iron ore) from 1 July 2012.

More recently, miners have been given the opportunity to apply for a 50 per cent rebate on royalties for up to 12 months, if the price of the commodity remains below A$90 over that period.[21]

After commodity prices had peaked, Queensland increased the rate for coal royalties from 1 October 2012 to 12.5 per cent

on the value per tonne between $100 and $150 and to 15 per cent thereafter. The royalty rate for coal below $100 a tonne did not change.

In 2011 the NSW Government announced a supplementary coal royalty (though the link proposed with MRRT liabilities meant the industry escaped a further impost as coal industry profits fell).

Other states increased royalties across all commodities, including South Australia (from 1 July 2011) and Tasmania (from 1 July 2012).

Taken together, these increases accounted for a substantial lift in royalty payments as a share of mining revenues.

Those moves were primarily a result of the desire of state governments to cash in on the then resources boom, but they were made easier by the decision of the Australian Government to provide full deductibility of royalties against MRRT liabilities. In effect, the latter treatment of royalties gave state governments the option of increasing royalties at the Commonwealth's expense, with the potential for little to no impact on mining companies' bottom lines.

That was a temptation that resource rich states couldn't and didn't resist.

Not surprisingly, those increases combined with surging mining production to hold royalty payments to the states close to the levels seen alongside the commodity price peak of mid-2011.

That is, while royalty payments to the states were relatively steady, that occurred at a time when mining revenues were falling.

That lifted the royalty take as a share of profits, and it did so even before the last of the royalty increases came into force.

SECTION

04

Not just better numbers – better concepts too

SECTION 4

Not just better numbers – better concepts too

The discussion to this point shows that:

- With minor adjustments, ABS data can pretty much match Treasury's estimate of resource rents through to 2006-07
- Yet the same data doesn't come close to Treasury's resource rents figuring for 2007-08 or 2008-09
- ABS data also show mining profits, and indeed resource rents, dropping back more recently
- Add in the available tax data, and the figures show that the royalties ratio has been rising, and is close to its average this century
- Once company tax is added in, taxes have moved above longer term averages as a share of resource rents
- Moreover, trends in commodity prices suggest those tax ratios have risen even further since then
- That's not rocket science. Royalties bulk larger as a share of profits when times are tough, and smaller when times are good. That drives the cycles in both the royalties ratio and the wider ratio that includes company taxes.
- The sharp slump in tax ratios Treasury calculated for 2008-09 seem to have never actually happened. They did dip in 2008-09, but that was nothing more than the usual response to a jump in profits.
- Overall tax ratios have since moved to be at or above their longer term averages amid a slump in commodity prices and as states increased their royalty rates.

Yet there are a few more issues to cover on this front before moving on.

One is that, to date, this discussion has accepted the Treasury approach to the figuring as perfect, and simply looked at the actual numbers. However, there are methodological questions here too.

Key measures

When considering the tax burden faced by Australia's miners, it's best to focus on measures of tax rates rather than absolute tax dollars:

- Although there have been ups and downs, over time absolute dollars have grown due to the enormous growth in the demand for and price of industrial commodities. Similarly, tax payments and income figures in absolute terms have declined recently as commodity prices have cooled.
- Ratios provide a more accurate and more stable measure of the tax burden because they abstract from the size of the sector and allow debate to focus on tax rates and the associated tax burden. They also enhance comparability between the mining sector and other industries.

As a result this report focuses almost exclusively on ratios. But what is the right ratio to measure the contribution of miners to Australia's tax take?

The royalties ratio

As the discussion in Chapter 2 notes, royalties are a unique contribution of the mining sector to government revenue – mainly that of the states.

Although some other industries also pay royalties, mineral royalties, by definition, affect only the mining sector.

Measuring royalties as a share of mining profits means defining both total royalties paid and the appropriate measure of profits for use as a comparator.

(1) **Treasury method:**

$$Royalty\ ratio = \frac{Royalties + PRRT + JPDA}{Resource\ rent\ (before\ royalties)}$$

(2) **Alternative method**:

$$Royalty\ ratio = \frac{Royalties + PRRT + JPDA}{Accounting\ profit\ (before\ royalties)}$$

(3) **MCA tax survey:**

$$Royalty\ ratio = \frac{Royalties}{Taxable\ income\ (before\ royalties)}$$

Royalties paid (the numerator)

Treasury's original ratio estimates – Ratio (1) above – used a broad definition of the term 'royalties', covering:

- State mining royalties (sourced by Treasury from state and federal budgets)
- Crude oil excise levied by the Commonwealth
- PRRT receipts
- Receipts from the Joint Petroleum Development Area (JPDA) in the Timor Sea
- Petroleum royalties received by the Commonwealth Government.

That is a sensible approach to measuring royalty payments more broadly. It is similar to the approach taken in the figures in Chapter 2, and is also used as an input to the

alternative method proposed here – Ratio (2).

In contrast, the ratio used in the MCA tax survey conducted by Deloitte Access Economics – Ratio (3) – includes only royalties paid in respect of Australian minerals mining. It does not include PRRT, JPDA, crude oil excise or petroleum royalties.

Pre-tax profits (the denominator)

While measuring royalties paid is largely a matter of coverage, differences in measures of profit are more substantial.

As the earlier discussion notes, Treasury's ratios are based on estimates of 'resource rent' – with the latter measured as sales less expenses and an allowance for corporate capital plus royalties and interest.

Given the criticism by George Fane of resource rent taxes (that the accounting rules are too hard for economists and the economics is too hard for accountants), most Australians could be forgiven for not understanding resource rents.[22]

In any case, estimating 'resource rents' is an unusual approach to measuring tax ratios. Treasury itself when comparing tax ratios for mining with other industries in 2010 applied a different methodology – one much closer to measures of accounting profit.

That is why Ratio (2) above measures tax ratios using accounting profit before royalties. This is a more transparent series which is easily identifiable and replicable. It ensures that all items included within it are accounting concepts; by contrast, the estimate of resource rent relied on a theoretical ACC adjustment which would not ordinarily be considered as an expense.

Ratio (3), from the MCA tax survey, uses taxable income instead of accounting profit:

- Given that the ratios are ultimately 'tax' ratios, the use of the corporate tax base is considered preferable to accounting profits
- It moves the inputs to the calculation closer to a comparable basis
- Given that the tax figures used in the numerator are ultimately dependent on taxable income rather than accounting profit, this ratio is considered to be the more 'internally consistent' ratio.

Note that in all cases royalties are considered to be the functional equivalent of a tax, as they are elsewhere in this Monograph. Royalties, which ordinarily are expensed in a company's accounts, are therefore added back to the denominator in order to calculate the tax ratios used in this survey.

Failure to do so would mean that royalties are compared to a base from which they have already been deducted, leading to an overestimate of tax ratios.

“Given the criticism by George Fane of resource rent taxes (that the accounting rules are too hard for economists and the economics is too hard for accountants), most Australians could be forgiven for not understanding resource rents.”

The total tax ratio

Similar measures are used to estimate total tax ratios.

(4) **Treasury method:**

$$\text{Total tax ratio} = \frac{\text{Royalties+PRRT+JPDA+company tax}}{\text{Resource rent (before royalties)}}$$

(5) **Alternative method**:

$$\text{Total tax ratio} = \frac{\text{Royalties+PRRT+JPDA+company tax}}{\text{Accounting profit (before royalties)}}$$

(6) **MCA tax survey:**

$$\text{Total tax ratio} = \frac{\text{Royalties + company tax}}{\text{Taxable income (before royalties)}}$$

Ratio (4) is the original Treasury estimate of the total tax ratio.

Ratio (5) is Deloitte’s amended total tax ratio. The denominator differs from Treasury’s per the description above. The company tax figure used is the ATO’s measure of gross tax for total mining less mining exploration and services (an approach which is consistent with Treasury’s definition).

Ratio (6) is the total tax ratio from the MCA tax survey. Company tax is gross tax as per companies’ tax returns. Again, the denominator is taxable income before royalties rather than accounting profit.

Key data sources

ABS data

The amended Deloitte series use data from two ABS sources – 8415.0 *Mining Operations Australia* and 8155.0 *Australian Industry* – to obtain basic financial data.

ABS 5204.0 *National Accounts* data were used to obtain the capital base for the mining sector, which was then multiplied by the long term bond rate to derive the estimated allowance for corporate capital.

Royalties

The Deloitte series uses:

- Royalties data from the relevant state budget papers
- Crude oil excise payments from the Department of Finance
- PRRT data from the Commonwealth Budget
- JPDA payments from East Timor's National Petroleum Authority.

Crude oil excise data are not available beyond 2009-10, and so have been estimated on an 'average share of GDP' basis thereafter.

Note that there is a conservative approach here. The total royalties estimates compiled from the above data are lower than the matching figures reported by Treasury, suggesting the estimated royalty and total tax ratios reported for 2009-10 through 2012-13 may well be lower than they would be based on Treasury's data sources.

To illustrate the scale of this difference, it is worth noting that if the same approach was applied to re-estimate prior years as is used in 2009-10 and beyond, then the royalty ratio estimate for 2008-09 would fall from the 21.7 per cent shown in Chapter 2 to more like 19.2 per cent. That suggests that there may have been an even stronger bounce back in royalties ratios than that shown in our earlier results.

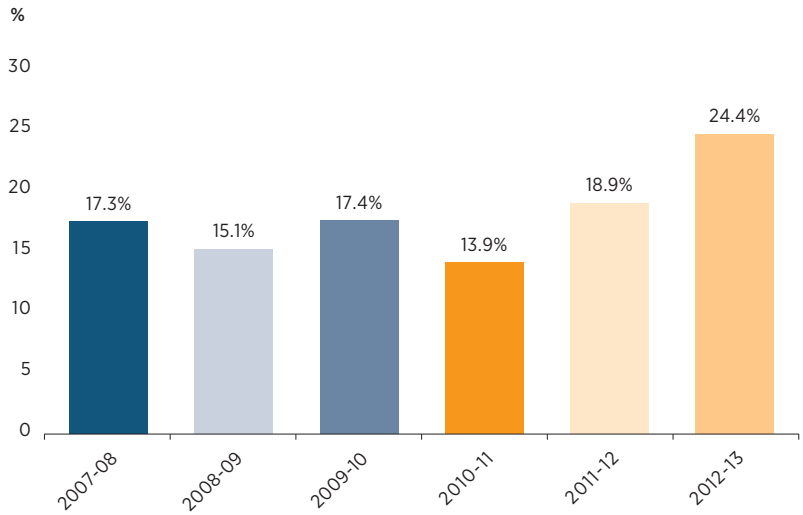
Company tax

Treasury notes that it used unpublished ATO data to provide the requisite company tax data in its estimated tax ratios. It is therefore unclear which measure of company tax underpins the Treasury figures.

While there is no reason to doubt the accuracy of the figures, there may well be differences in the detailed industry classification between the ABS and ATO. Commonwealth Treasury implied this when responding to a question on notice posed at a Senate estimates committee in June 2010.

Specifically, Treasury noted its company tax numbers at the industry level were different to those published by the ATO. This was attributed to, among other things, '... estimates [being] updated from

Chart 13 **Royalty ratio (2014 MCA tax survey)**



those published in the ATO Taxation Statistics to more accurately allocate tax paid to industry groups ...'.[23]

That increases the risk that the industry classification being applied to the ratio's numerator differs from that applied in the denominator.

In contrast, this report uses gross company tax payable (at 30% of taxable income) from the ATO's *TaxStats* publication. Gross company tax payable is included in the numerator, since that is the amount of tax that is accrued with respect to mining operations in *a specific year*, irrespective of payment lags, rebates and other tax credits. The trouble with using 'cash' tax or 'net' tax is that the ultimate ratio is likely to be swayed by market conditions that prevailed in years other than the year for which the ratio is calculated.

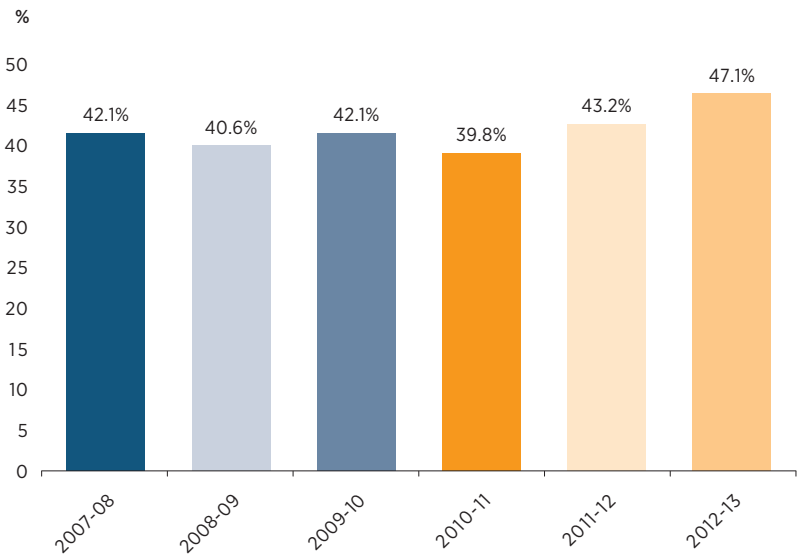
That said, a downside of this approach is on account of various rebates, tax offsets and credits, as well as potential timing effects. The amount of tax actually paid in any one year may differ substantially from gross company tax payable.

The MCA tax survey – company tax

In order to improve the quality and timeliness of data on which public policy debates are based, in late 2010 the MCA commissioned Deloitte Access Economics to assist it in collecting its own data on taxes paid by mining companies. The survey has collected data annually since then.

For company tax data for 2012-13, we updated the ATO's 2011-12 measure of company tax payments made by the mining sector by drawing from data obtained from the MCA tax survey.

Chart 14 **Total tax ratio (2014 MCA tax survey)**



The MCA tax survey – royalties

As the discussion above makes clear, the results of the MCA tax survey are not directly comparable with the tax ratios at issue here.

That said, the evidence from the most recent survey released in late 2014 is of note.

Those results showed the take from royalties on minerals mining as a share of pre-tax profits reaching its highest recorded level of 24.4 per cent in 2012-13, as shown in Chart 13. The survey results indicate that the effective royalty rate nearly doubled between 2010-11 and 2012-13, which is a reminder that falling commodity prices have seen royalties ratios rising relatively rapidly of late.

That picture reinforces the broader point that royalties ratios are highly cyclical, and that the ratios have been rising strongly.

This trend is likely to continue with Western Australia's iron ore royalty rate having increased further on 1 July 2013, and with additional falls in key commodity prices.

Similarly, the total tax take ratio increased between 2011-12 and 2012-13 to its highest recorded level, marking the third consecutive year of increases. The 2014 survey results indicate that the ratio rose from 43.2 per cent of pre-tax taxable income in 2011-12 to 47.1 per cent of pre-tax taxable income in 2012-13.

SECTION

05

Making a GOS of yourself

SECTION 5

Making a GOS of yourself

So mining tax ratios have been climbing, and are back at or above their longer term averages. Yet that isn't at all the public perception.

For the most part, this hasn't climbed much above the 'we wuz robbed' view of the world, even among some generally well-informed commentators.

Indeed, some commentators claim that miners pay less than their share of national profits. How can they make that claim? Because they aren't comparing apples-with-apples.

The public's understanding hasn't been helped by the fact that many comments could easily be misinterpreted:

- For example, Treasury's Budget Paper No. 1 in 2011-12 noted that: 'Over the decade to 2008-09, the mining sector accounted for over 20 per cent of total corporate GOS, but only around 10 per cent of company tax receipts.'[24]
- Similarly, Treasury's Budget Paper 1 of 2012-13 notes that: 'In recent years, the mining sector has accounted for around 30 per cent of private corporate gross operating surplus, but only 15 per cent of company tax.'[25]

Sounds dodgy, right? Can't be pulling their weight, right?

Wrong. Those statistics don't reflect anything evil.

They don't compare apples-with-apples.

Far from implying that the mining industry managed to avoid reasonable taxation for their operations, these statements merely mean that a capital-intensive industry geared up to respond to an historic opportunity. As a result, investment expenses leapt, and depreciation charges are slowly following.

In fact any such comparison will tend to show a capital-intensive sector as accounting for a bigger share of Gross Operating Surplus (GOS) than it does of the company tax take.

As Treasury itself notes in Budget Paper 1 of 2012-13 (also on page 5-8): 'Tax receipts from the mining sector are being affected by high levels of tax deductions related to capital expenditure, reflecting the unprecedented scale of mining investment over the forward estimates.'[26]

What's GOS?

Let's get to the bottom of this. In the statements above, Treasury has implicitly been using an effective tax ratio (ETR) based on the ratio of tax receipts to corporate gross operating surplus.

GOS is the measure of company profits in the Australian System of National Accounts.

GOS is indeed an important measure of the contribution from corporate incomes to Australia's Gross Domestic Product (GDP). However, there are major differences between GOS and company profits that make GOS a completely misleading measure of income for constructing an ETR.

That is because GOS:

- Includes some items that are irrelevant for tax purposes
- Does not include several large income and expense items that affect corporate profits and are relevant for tax purposes.

For the capital-intensive minerals sector, the most notable omission from GOS is the annual depreciation of assets. GOS is measured gross of depreciation expenses, whereas company profits are net of these.

It is therefore unassailably clear that depreciation should be subtracted from GOS before constructing an ETR.

Look at it this way. If there were a measure of profits that didn't deduct wages (as opposed to GOS, which doesn't deduct the cost of capital), then it would show labour-intensive sectors as failing to pull their weight in company tax payments.

And any such calculation would be silly.

Using GOS as a benchmark with which to examine the tax take is not only inappropriate in general, but the huge surge of capital spending by the miners means that GOS is also more inappropriate than it has ever been as a way in which to examine the current tax take of the minerals sector.

In fact, Treasury's 2007-08 discussion is the one that rings true, and needs to be understood

in the national tax debate. Treasury noted that GOS is 'an inappropriate measure of income for constructing an ETR'[27] and that you need to make at least four adjustments to make it a more suitable measure:

- Subtracting depreciation
- Removing the income earned by government trading enterprises
- Adding back 'pure' interest income earned by the financial sector
- Taking out the impact of changes in inventory holdings.

The first of these necessary changes is why more recent figuring from Treasury has not helped to inform good debate on 'tax effort'.

Treasury authors have made many of the same points. For example:

> GOS is not the most appropriate measure of a corporate income tax base as it excludes income unrelated to production — such as property income, land and natural resource rents, net interest receipts, and capital gains or losses — which rightly forms part of company income and profits. In addition, GOS excludes depreciation whereas the corporate income tax base allows a deduction for depreciation.[28]

So GOS is rising relative to taxable income because miners have been investing, and because investment is – completely correctly – tax deductible to all companies, not just to miners.

In fact, miners have just invested a trillion dollars in new mines and associated infrastructure. The benefits of that to Australians will last for generations. But that also means measures of profits before allowing for depreciation costs are more skewed than they have ever been.

Accordingly, comparing tax paid against measures other than taxable income (and especially against measures that don't allow for depreciation costs in Australia's most capital-intensive sector) will mislead – badly.

Abbreviations

ABS	Australian Bureau of Statistics
ACC	Allowance for corporate capital
AFTS	Australia's Future Tax System (the Henry Review)
ATO	Australian Taxation Office
ATR	Average tax rate
ETR	Effective tax rate
GDP	Gross Domestic Product
GFC	Global financial crisis
GOS	Gross operating surplus
JPDA	Joint Petroleum Development Area
GST	Goods and services tax
LTBR	Long term bond rate
MRRT	Minerals Resource Rent Tax
MCA	Minerals Council of Australia
PRRT	Petroleum Resource Rent Tax
RSPT	Resource Super Profit Tax

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[8] Henry Ergas, *About the rent we're charging*, The Australian, 28 May 2010.

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[10] If so, then some broader observations flow. First, when commodity prices and bond rates move in opposite directions, the ACC will enhance the effect on profits of commodity prices, making the underlying profit ratio more volatile. Second, when commodity prices and bond rates move in the same direction, the ACC will counteract the effect on profit of commodity prices, making the underlying profit ratio more stable. Finally, over the period covered by Treasury's estimates, the bond rate and commodity prices were moving in opposite directions, meaning the ACC adjustment made the tax ratio more volatile than it would otherwise have been, which no doubt re-enforced Treasury's view that mining tax ratios had fallen between 1999-2000 and 2008-09.

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Mining tax ratios revisited

CHRIS RICHARDSON

In this MCA Monograph, Chris Richardson (one of Australia's best known economists) delves into the official figures that drove the 2010 mining tax debate. He finds some of them hard to replicate, especially the profit figures for 2008-09.

His update of mining tax ratios is just as revealing. Not only did mining tax ratios never fall far, they've actually headed up over recent years rather than down, as profits have fallen and states have increased royalty rates. Public perception may not yet have caught up, but mining tax ratios are at or above their longer term average.

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