Mineral Resources Rent Tax - will it work?

Designing a mining tax that leaves enough incentive for future investment, treats both past and future investments fairly, deals with both Federal and State interests and collects some tax in the process is not easy. The recent Mineral Resources Rent Tax has proved just how difficult designing a tax to successfully meet these competing needs is. This seminar explored these issues and looked at how Australia's mining tax can be improved from here.

Speakers: **Professor John Daley, Chief Executive, Grattan Institute**
Professor Michael Crommelin, Zelman Cowen Professor of Law, University of Melbourne
Professor Ross Garnaut, Vice-Chancellor's Fellow and Professorial Fellow in Economics, University of Melbourne

JOHN DALEY: Good evening ladies and gentleman. My name is John Daley. It's my privilege to welcome you here this evening. I'm the Chief Executive of Grattan Institute and tonight's event is a coproduction of Grattan Institute and the Melbourne Energy Institute. Unfortunately the Head of the Energy Institute, Professor Mike Sandiford, can't be here this evening because he's busy, in his own words, being awarded a gong in Canberra. So congratulations to him for that, and it's lovely to have you all here.

Mining taxes are a difficult problem. When you think about what you're trying to do with minerals resource rent taxes, you're trying to make sure that there's still incentive for future investment; you're trying to treat both past and future investments in some rational and fair way; you're trying to deal with competing federal and state interests; and you're also trying to collect some tax in the process. And, needless to say, succeeding in doing all of those things at once is fairly difficult. Nevertheless of course, as a country we've tried and chances are we're going to keep on trying for quite some time and that's not surprising given the size of the mining boom that we've just been through. It's not well-known that something like $480billion has been invested in Australia over the last eight years in mining projects; 480billion. That's more than has been invested over those eight years than in any other country in the world, bar none. Canada comes in second about $420, and then there's a bunch of other countries that are somewhere between $200 and $300.

So it is easy for us to forget just the enormous scale of mining investment in Australia over that time. And presumably many of the people who have been doing that have been doing it partly because they wanted to develop the country and principally because they thought they were going to make some money in the process, and of course when that happens inevitably governments turn their minds to thinking about how they might tax it. And of course, we as a country have seen some quite vigorous debates about the appropriateness or otherwise of changes to our minerals tax regime and the fact that that debate coincided with the loss of office of one Prime Minister and the installation of another is certainly not going to go unnoticed by the history books. But as we are also now acutely aware, the Minerals Resource Rent Tax (MRRT) that we do have is not raising an awful lot of money. Indeed, on the latest forward estimates from the Commonwealth government it is only going to collect something like $2.3billion in 2016/17 and that's not much when you remember that the scale of Australian GDP is in the order of, today, about 1.45trillion and by then probably more like 1.8trillion. And so that's inevitably raised questions about whether we've got the design right and no doubt those questions are being asked more seriously as we look at the substantial budget deficits that Australian governments collectively have tonight, and many of you may have seen the work the Grattan Institute has done suggesting that that deficit may well be in the order of about 3% or 4% of GDP, $60billion in today's terms every year within a decade and, quite possibly, sooner than that.

So all these questions are on the table and we are very lucky tonight to have two people who probably between them know more about this topic than just about anyone in the country, namely Professor Michael Crommelin and Professor Ross Garnaut. As we were preparing for this they pointed out between them that they first talked together about this topic 40 years ago in preparation and then in the aftermath of a conference on Mineral Leasing as an Instrument of Public Policy, a conference that was held in British Columbia in Canada in 1974. So these topics don't go away and certainly one of the flavours that I hope will come through tonight is one can learn an awful lot from history in this area. Although we think that all the problems we have today are new; although we think that all of this needs to be thought about afresh and, of course, it does need fresh through; nevertheless, these are questions that governments around the world have been grappling with for a very long time. And, as I said, Michael and Ross between them have been grappling with them for a very long time.

They are both incredibly distinguished people and because of that I'm not going to provide them with long introductions. Michael has been Dean of Melbourne University Law School for a very long time and I think it was to Australia's, and for that matter the world's, mining law gain that he finally stepped down from that position a couple of years ago and has actually returned to the work of teaching and research, which he does very actively in that area. He was a tremendous Dean of the Law School and is also a tremendous and obviously globally-leading scholar in this area of mining law. And then Ross Garnaut, of course, now a Vice Chancellorial Fellow at this university but a distinguished Professor of Economics for a very long time, has worked inside government as an advisor to the Hawke government, has served as Australia's Ambassador to China, obviously wrote the Garnaut Review on climate change, but has been a distinguished leader in terms of thinking from an economic point of view about Australia's direction for a very long time, including, as that history about this suggests, involvement in mining resource rent taxes and similar minerals taxes going all the way back to the early thinking about the Petroleum Resource Rent Tax (PRRT) almost 40 years ago.

So we are very, very privileged to have them here. My job is essentially to introduce them, try and keep them talking, and otherwise conceal the fact that they knew far more about this topic than I do. And consequently it's my pleasure to invite Michael Crommelin to start with his remarks about where we go from here. Thank you.

MICHAEL CROMMELIN: Thank you John, and thank all of you for venturing out on an evening that must have caused you all to think at least twice about whether it was a good idea. *Minerals Resources Rent Tax - will it work?* Well, let me start by saying that, in my view, the MRRT is deeply flawed. I'm not able in the time available to deal with all its identified flaws, but four of them I will say something about specifically and I'm sure others will be raised in the discussion session. The four flaws that I want to speak about are firstly its rationale; secondly its constitutional basis; thirdly its treatment of existing projects, projects in existence when it was introduced last year; and fourth the mechanism that provides for combination of projects.

First of all the rationale: the rationale for the MRRT is itself deeply marred in confusion exacerbated by government rhetoric which at times has been misleading at best. The MRRT according to its title is a tax on rent, the value of the resource over and above all economic costs incurred in finding it and producing it. In other words, the MRRT purports to be a tax on the inherent value of the mineral resource. The claim that the mineral resources are owned by the Australian people, a claim made several times by different members of the Australian government, is unfortunately just wrong. They aren't. The mineral resources in question, we're talking about iron ore and coal, are owned by state governments and that's not quite the same thing. So the rationale that the MRRT would provide an appropriate return to the Australian people in their capacity as resource owners doesn't bear scrutiny. That confusion is reflected in the design of the MRRT itself. In some respects the MRRT is a tax on rent, the resource value, despite the fact that the proprietorship of the resource resides in state governments rather than the Australian people. In other respects however, the MRRT is a fiscal instrument of macroeconomic policy, one of a range of instruments available to the Australian government in dealing with the highs and lows of the national economy. The problem is, in trying to meet both of those not necessarily consistent justifications or purposes, the MRRT achieves neither of them.

What about the constitutional basis, my second flaw? The constitutional validity of the MRRT Act is currently subject to determination by the High Court as a result of a challenge brought by Fortescue Metals Group Ltd, notably, interestingly I think, not by any of the three companies involved in the negotiations with the Australian government for the design of the tax: BHP Billiton, Rio Tinto and Xstrata. It's Fortescue Metals Group Ltd that has brought this challenge and I think the explanation for that may, I hope, emerge in some later remarks I'll make. The challenge was heard by the High Court in March of this year. The governments of Western Australia and Queensland intervened in the proceedings in support of the two arguments put by Fortescue Metals Group to the court that the Act was invalid.

The first argument is that the MRRT Act, by one of its very controversial provisions, the provision that allows companies full credit for state mineral royalties paid against MRRT liability, the argument that Fortescue Metals Group brought is that that crediting provision causes the Act to have one of two effects, perhaps both. One effect is to discriminate between states because, of course, the state royalty regimes are different from state to state. The second effect is that it creates or provides a preference for one state over another state, again simply as a consequence of the difference in the state royalty regimes. The Commonwealth parliament is prohibited from either discriminating among states in their taxation measures or in providing preference of any one state over any other state in any other law relating to trade, commerce or revenue under the Constitution.

Now, predicting the outcome of constitutional challenges is notoriously hazardous, so I'm not going to try, but I do want to raise a question that I think flows from this argument that Fortescue Metals Group has put to the court: what if the court upheld the Fortescue Metals Group argument by deciding that the crediting provision does infringe either or both of those provisions of the Commonwealth Constitution? What would the consequence of that be? There are two possible answers to that question. The first answer is the one that the Fortescue Metals Group wants, and that is that the discriminational preference would bring down the entire legislation. The proposition here is that the crediting provision for state royalties is so central to the overall design of this fiscal instrument, the MRRT, that without it the entire edifice collapses. But the alternative possibility is that only those provisions of the Act which allow the crediting would be struck down leaving the rest intact, thereby curing one of the claimed design defects of the tax itself. What the mining industry would think about that and how grateful it would be to Mr Andrew Forrest for placing it in that position is something that I can only speculate about. But it is, I think, at least a possibility if indeed the discriminational preference argument were to get up in the first place.

The second argument brought and strongly supported by the two state governments, although it was an argument also advanced by Fortescue Metals Group, is slightly more esoteric based on what constitutional law students know as the Melbourne Corporation Doctrine. The Melbourne Corporation Doctrine says that the Commonwealth, and in particular the Commonwealth parliament, is not able to use its legislative power; its legislative power does not extend to measures which curtail or interfere with the exercise of state constitutional power. This is a consequence of the fact that our system of government is a federal system of government which provides and indeed requires two levels of government, each of which with the capacity to operate as governments of distinct polities within that federal system. The argument here strongly advanced by Western Australia and Queensland is that the management of these mineral resources is a critical function to their place in the federal system of government, largely for historical reasons and there is quite a history of that in the middle of the 19th century, but also for pragmatic reasons, that the importance of management of these resources is so substantial. Again, I'm not going to speculate on the outcome, but I do think that it's difficult always to succeed although on the basis of that argument, even though there are instances in rather different factorial contexts where the Doctrine has been upheld.

Let me now move then to the third of my flaws, the treatment by the MRRT of the existing large iron ore and coal projects. Those involved in public administration are very familiar with the challenge that arises in the design of any new policy instrument presented by what are sometimes called the transitional provisions. The transitional provisions of any new legislative measure don't sound very exciting, but they are always enormously important and that's particularly true of the MRRT. Transitional provisions are confirmed with existing rights, projects and activities already in place at the time when the new measure is introduced. And the ones we're talking about of course are the major iron ore mines in Western Australia and coal mines in Queensland and New South Wales. The three companies that were involved in the negotiations with the Australian government – BHP Billiton, Rio Tinto and Xstrata – all had and have very substantial investments in existing mineral projects. The question was: what deductions would they have in respect of the investments they had already made in those projects for the purposes of determining their liability for this new tax? To what extent would they be able to write off their previous investments against their liability under this new tax regime?

Now, the same issue had arisen previously when the Petroleum Resource Rent Tax (PRRT) came into force after quite a length battle between the Hawke government and the Senate in 1987. And when that legislation was passed that legislation initially applied only to what were conveniently described at the time as offshore green fields projects. That is to say, new projects, future projects in offshore areas, not onshore. So the existing Bass Strait oil and gas fields at that time and the existing discoveries of condensates and natural gas in the north-west shelf were initially excluded from the PRRT and so there weren't any transitional provisions provided to take account of the investments that had been already made in those projects. Bass Strait fields were brought under the PRRT in 1990 but that happened not by amendment of the legislation, it was by virtue of specific negotiations between the companies – Esso and BHP – and the government at the time, the Hawke-Keating government. But part of the new tax regime involving the MRRT that was enacted last year involved extending the PRRT to the north-west shelf and onshore. So the same question of how existing investments are to be treated by way of deduction arises under the PRRT Act as amended last year as it did under the MRRT Act.

Now, both enactments – the MRRT Act and the PRRT Act – in fact allowed the companies a choice as to how they could deduct the investments made in existing projects against future liability, whether it be under the MRRT or the PRRT. The issue is described as one of valuation of starting base assets. In other words, you've got an existing investment, what's it worth at the time the new regime comes into effect and how can you then write off that value against future tax liability? That's indeed the issue. The choice that the companies were given was between a familiar book value approach to valuation of these assets, relatively uncontroversial, and, the alternative, a market value approach as at the 2nd May 2010 when commodity prices were at astronomical levels. What do you think the companies might choose? Especially because if they adopted the market value choice they were allowed to include in that valuation the value of the production title, the statutory title that they had from the relevant state to produce the iron ore or the coal.

That approach is absolute anathema to the very concept of a resource-based tax. It just gave the companies what the tax base would otherwise have been. It's destroyed the tax base. The companies can, having obtained these valuations of these assets at that time, deduct a fixed percentage of those valuations until 2037. So they have very substantial deductions for the next 24 years which effectively erode dramatically the tax base as it would otherwise be for the MRRT. So far as the PRRT is concerned, the arrangement is the same but the practical consequence is probably must less significant because you don't have existing onshore petroleum investments at anything like the scale that you have for the iron ore mines and the coal mines. So in simple terms, the option given to the companies of the market value approach to valuation of starting based assets destroyed the tax base of the MRRT. It hardly comes as a surprise then that the returns from that tax have not only been small but are not projected to rise dramatically at least in the foreseeable future.

The last matter that I wanted to mention was a mechanism in the MRRT for what is called combination of projects. A true Resource Rent Tax, by its nature, is project-specific. It applies on a project-by-project basis just in the same way as the state royalty applies project-by-project, its purpose being to collect the inherent value of a project, a particular mineral deposit. Unlike the Income Tax, it doesn't allow losses incurred in one project to be offset against profits gained in another. The MRRT has departed from that cardinal design feature of a true rent tax by making generous provisions for offsetting losses against profits for combination of projects before final liability for tax is determined. The arrangements are rather complicated, but essentially what they allow is where a company can demonstrate that downstream infrastructure is shared among various projects – transportation infrastructure, processing infrastructure, even infrastructure for inventory control is shared - then the companies are allowed, they're given the election to deem multiple projects that share that common downstream infrastructure, they can deem that a single project for MRRT purposes. Again, the effect is simply to diminish what's left of the tax base. As well, of course, it exacerbates the confusion I mentioned earlier about whether this is really meant to be a rent tax or not.

So, the question: the *Minerals Resources Rent Tax – will it work?* Only if those design defects that I've mentioned, and indeed a number of others, are fixed. Not otherwise. It seems to me that those flaws are sufficiently serious to prevent the MRRT from ever performing anything like the function claimed of it by the government at the time of its promotion unless those flaws are fixed. There may be constitutional challenges to fixing the flaws, but frankly I think they pale into insignificance compared to the political challenges which certainly appear overwhelming. Thank you.

JOHN DALEY: Thank you very much Michael. Ross, as I said in my introduction, this is not a new problem; we've been looking at mineral taxes of various forms for a very long time. Given what Michael's told us about the current design of the MRRT, what do you think we can learn from history?

ROSS GARNAUT: Well, Michael's made a number of very important points and one thing I'll agree completely with right at the beginning and is relevant to everything else is the inappropriateness of using market value as a way of allowing for past investment. One can't expect really to get any revenue at all if that's one's approach. The budget papers have projected some revenue but one must consider that to be a little bit accidental given the treatment of market value, it's just conceptually absurd and obviously is a product of the way the arrangements were negotiated.

But on the history, I think it is really interesting to think of how we got to where we got to on the offshore PRRT and it tells us something about differences between the political culture in the '70s and '80s and today. And the PRRT is very relevant to the exercise because one of the effects of the discussion of the MRRT and the PRRT is that we have had the extension onshore of the offshore PRRT. Now, the offshore PRRT I think has been working very well since it was first introduced in the mid-80s and then extended to Bass Strait in 1990 and essentially those arrangements have been moved onshore and, as Michael said, extended to north-west shelf. By extending it onshore you catch what will be a very big industry in Australia and that's the coal seam gas industry, and you catch it at an early stage, before all of the issues of valuing the market value of historical investments becomes relevant. So the problems that Michael identified in relation to the MRRT are there in much smaller degree in the PRRT, and I think that the extension of the PRRT to the onshore fields, which most importantly are going to be onshore gas fields, is actually a good step in public policy. So there's something good come out of all of that. And the parameters of the PRRT onshore will be the same as the parameters offshore: the uplift factor on negative cash flows carried forward of 5% plus the bond rate, which is lower than for the MRRT, and other relevant design parameters.

On the history of how we got to the PRRT, it's worth thinking a bit about the history of the treatment of Bass Strait. Bass Strait was a very valuable resource – still is actually what's still there, but historically it's been a very valuable resource. In scale one can think of Australia having four great resources of great national value: one is the Pilbara iron ore; one is Bass

Strait; one is the high value coal, not all of the coal but the main basins in Queensland and the Hunter Valley at least; and now the rapidly expanding gas industry. The quantitative importance of these is roughly ranked: the Pilbara is worth the most; and then if you add together all of the coal that might be the second, but gas will challenge it and may exceed it; but Bass Strait behind those, but not a long way behind it. So Bass Strait has been a very substantial resource. Bass Strait was a very good but not astronomically profitable investment for BHP and Esso when it was first made in the '60s and the early '70s, but the oil price increased several fold in the early '70s, fell back a bit and then increased several fold again. So you had for oil prices through the '70s an increase in price proportionately similar to the increase in iron ore and coal prices in the boom that began in 2003 and reached a peak in 2011.

Now, that boom increased the value of annual production from Bass Strait by what was at the time a couple of percent of GDP at the peak, which was 1980/81 after the second oil price increase, about 2% of GDP. What the Commonwealth government of the day did was effectively said "You made that investment in Bass Strait on the basis of old expectations of low prices, we'll take virtually all of the increase" and so it was mainly done by the Fraser government. There was a toe in the water by the Whitlam government, but the Fraser government in '76 allowed an increase in the oil price to the new high world price and then put an excise on crude oil and condensate of virtually all of the increase in 1980/81 at the peak of the price, and then they adjusted that levy every now and again as the oil price increased. It was a rather clumsy process, but it raised a lot of revenue so that the crude oil levy on Bass Strait in addition to the old royalties, which were still paid, in 1980/81 collected 2% of GDP for the budget. And the Fraser government almost had a balanced budget in '80/81 but it would have had a deficit of 2% of GDP if it had not treated Bass Strait in that way.

Now the current budget deficit is about 1.2% of GDP. If exactly the same approach had been taken to the windfall from the higher iron ore and coal prices, just the established mines that were already operating in 2003, that would have collected revenue on the old Fraser government method of about 5% of GDP, which would be roughly $75million today. So we would have had a budget surplus this year of about $50billion. My memory of the Fraser government's introduction of the crude oil levy was that there was not a single public complaint about sovereign risk. I checked my memory today just by going back over the web and I couldn't see any reference to sovereign risk. What was proposed in 2010 was a very small levy proportionately compared with the old crude oil levy and, of course, we know the response to that. That's indicative of very large change in political culture and I think it's worth reflecting on.

I was actually a critic of the introduction of the crude oil levy. I was saying then we should raise the price to the world price and we should have an efficient rent tax which would not have been as high, but would have collected a lot of revenue, and that was part of the debate of the '70s; Sir Anthony Clunies-Ross and I did the definitive book on mineral taxation at the time. And eventually that flowed into policy and so the PRRT replaced the crude oil levy in two stages in the mid-80s and then 1990. And the companies – BHP and Esso – were actually relieved because this very heavy imposition which, because it was a lump sum, a certain dollar per barrel levy, meant that as Bass Strait became older and the costs of producing became greater, it was locking in a lot of oil. So by changing from a dollar per barrel charge in the crude oil levy to the PRRT, more of the value from the Bass Strait field could be extracted. At the time of transition the Hawke government gave back a bit of the revenue but more than recouped that, much more, in the subsequent more efficient operation of the field later on. It is sometimes said that the Hawke government handled much more smoothly and effectively the introduction of the PRRT through consultation with industry and so on. That's definitely true, it was handled very smoothly and efficiently, but it was made much easier by the fact that it was replacing the other charges.

The final point I want to make is about issues that are very important, both historically and looking forward and Michael has already made the point, and that is the role of Commonwealth state relations in public policy in this area. What we have here is two legitimate heads of sovereign power: the Commonwealth has a legitimate right to tax corporate income; the states have a legitimate right to charge for use of their resources; and so it's a conflict of laws. How that was handled in the introduction of the PRRT, initially the Commonwealth had in mind that it would have a single tax onshore and offshore, but it became clear that the states weren't going to cooperate in that. So what the Commonwealth did was it introduced some fiscal incentives for the states to introduce their own resource rent royalty with similar design to the Commonwealth's offshore tax. Western Australia actually did that for the Barrow Island oil field, but it did not depend on Commonwealth legislation. The advantages of a rent tax are of two kinds: they can collect for the revenue a substantial proportion of highly profitable fields without deterring investment; at the same time as the resource tax has a less distorting effect, less discouraging effect on the operation of high-cost fields, which include petroleum fields later in their life because costs rise over time.

So as Anthony Clunies-Ross and I described it in the introduction of our book 30 years ago, through efficient design of rent taxes you can have your cake and eat it too; you can have more resource investment and collect more revenue from it, and that's the idea of a resource tax. But to get the efficiency advantages you can't have conflicting imposition of state and Commonwealth arrangements. Either the Commonwealth has to withdraw, or withdraw and provide incentives for the states to cooperate, or there needs to be agreement between the Commonwealth and the states. And I'm afraid that where we've got to is a very difficult position where with the crediting of royalties the states actually have an incentive to put up royalties of the kind imposed by the states, percentages of value generally, and this can be very distorting for development of high-cost fields. And that's going to be very important in the period ahead with resource prices coming down after the China resources boom has dimmed its lights and the structure of the state royalties is going to lead to premature closure of some projects.

My own view is that we won't have an effective mineral tax regime onshore, except in the context of a comprehensive agreement between the Commonwealth and the states. That sounds impossible when you say it, but my own view is that federal fiscal relations generally have become dysfunctional, so badly dysfunctional that it's actually an urgent matter to rework the federal fiscal compact. It is creating huge problems for provision of transport infrastructure, for provision of health services, education services. It introduces huge inefficiency in delivery of all of these services. You've got it nicely exemplified now in the conflict between the Victorian government and the Commonwealth over support for transport infrastructure, with the Commonwealth saying "We'll support a proportion of an underground railway investment under Melbourne if the state puts in the other bit" and the state government saying "No, we're not interested in rail, we'll put in a proportion of a new road under the city if the Commonwealth puts in its proportion". It's a complete stand-off, it's a farce. We have large problems of a similar kind right across transport infrastructure, right across education, right across health. I think that we need to sort out the mineral tax regime in the context of a new look at federal fiscal relations more generally.

JOHN DALEY: Thank you Ross, very much. Michael, given your remarks I think it would be fair to say that you're no fan of the MRRT in its current design. Whether we get there by amendment or whether we get there by repealing the MRRT and, as it were, starting again, what would be your ideal mineral regime in Australia?

MICHAEL CROMMELIN: I agree with Ross that this can't be looked at in isolation, that it really must be part of a much more broadly-based fiscal arrangement involving both the Commonwealth and the states. Because the sort of competition with the particular feature that's already been mentioned in relation to the MRRT of state royalties being credited against MRRT's liability just shows how absurd things have become. So I do think it's the big picture we've got to tackle. Where resource-specific taxation, mineral taxation fits into the big picture could well depend on how you resolve some of the other aspects of it. I certainly accept the advantages of resource rent taxation as the instrument of rent taxation. State royalties are very crude instruments. They have a couple of advantages, but they're still very crude instruments particularly when levels of profitability fall, as Ross was referring to. The advantages they have are that the states typically get their money earlier than they would under a rent tax and, secondly, the cost of administration of them is typically very much lower because they're very crude instruments. I mean, if it's $5 a ton in every truck that goes out the mine gate all you've got to do is count the number of trucks and that's it. So compared to the complexity of a rent instrument, that is an advantage but despite those two advantages – which have to be acknowledged, particularly for some minerals which aren't of their nature very high value minerals – I think some more comprehensive look at a nationally-based rent model, whether the proceeds go to the relevant states, that's part of the bigger picture.

JOHN DALEY: Thank you. Ross, one of the key issues here is around the extent to which a regime does or doesn't deter investment. And, as you've already pointed out, one of the features of a Resource Rent Tax is that inherently as the price of minerals goes down effectively the rate of taxation goes down. Nevertheless, one of the things that people talk about on the other side is that one of the reasons that companies do invest in these projects is because there's at least the chance that the price will go up and that chance is effectively built into the economics of the project. Is it true to say that a Resource Rent Tax has no deterrent effect on investment or is it just that it's less than other kinds of tax?

ROSS GARNAUT: There's a sense in which you can say it has no deterrent effect, but I'll have to explain that. If companies were certain that a tax regime was going to stay in place forever exactly as it was at the beginning then you would get more investment with no tax whatsoever than with a Resource Rent Tax. But the experience of governments everywhere, communities everywhere, especially in relation to mineral resources which under our Constitution and the Constitution of most countries belong to the Crown; in this case, as Michael said, the state Crown and not the Commonwealth Crown. But it has never proved to be viable over long periods of time not to charge for the value of a mineral resource at all. State government when it hands over the rights to mine a property is handing over a valuable bit of public property and it becomes a contentious matter whether and the amount to which it is able to recoup value through a Resource Rent Tax.

So no taxation at all would at the margin generate higher levels of investment than an efficient Resource Rent Tax, but a company wisely led will take into account that the chances of such a zero tax regime surviving with stability are zero and so will presume some change in the tax arrangement, and that will deter investment. So that's the sense in which an efficient resource tax system will not deter investments. And where efficient resource tax regimes have been introduced, and that includes offshore Australia and about a dozen other countries now have taxes of this design based on the work that Anthony Clunies-Ross and I did back in the '70s, the general practice is that once in place there has not been pressure to change them. They are self-adjusting. When profits are very high they generate a lot of revenue, when profits are low they don't, and so they end up having political support and so are a basis for stable arrangements. And stable arrangements reduce the supply price of investment and encourage investment.

JOHN DALEY: Thank you. At this point we might throw it open to the floor and we have a number of experts in the audience as well as obviously a huge number of interested people. So if I can invite you to ask questions of either or both of our speakers and the only things I would raise in advance are if you would like to say who you are and where you're from that would be helpful, but don't feel absolutely obliged to do that. And, secondly, if I can just point out that having hosted a large number of events like this I can assure you there will be far more questions at the end than there will be at the beginning, and therefore if you're really keen to have your question answered I strongly urge you to put your hand up early.

AUDIENCE: The government, are they likely to change this any time soon? Are they in the process of amending some of these flaws or will they act on this do you think? What's your prediction of how the government will respond to the failure of the tax to raise the revenues original thought?

MICHAEL CROMMELIN: Well, I think there's no change that the government can act in the time between now and the 14th of September. I think it's out of the question within that period. What happens after the election of course, as I understand it I think the opposition has stated that it would repeal the MRRT Act. I haven't heard anything said about the extension of the PRRT onshore and whether that's part of the policy on repeal or not, but perhaps Ross is better informed than I. If there were to be a repeal of the MRRT Act one of two things or, indeed, three things could follow: nothing could follow and the industry would just get on without this impost; a second possibility of course is you'd have a new better designed rent-based tax replacing the old one with all its defects; but the third possibility of course is that, and this may be more politically palatable, the parliament under the encouragement of the new government could amend the Income Tax Assessment Act. The Income Tax Assessment Act provides some very generous concessions to the mining industry as things stand which could be removed or modified.

AUDIENCE: Do you think there's method to the madness that's happened thus far since 2010? There's a whole heap of laws that affect corporate taxation, everything from transfer pricing to weighted average cost of capital; there's all sorts of things that affect it. Is this just smoke and mirrors going on? Isn't it true though in Australia's history that whenever we've come to an impasse everyone does knock their heads together and figure it out because they just have to? These days everyone's up for credit ratings and paying their mortgages, just like the government has to. Isn't it common sense will prevail here regardless of how stupid they want to behave now?

JOHN DALEY: Ross, you've been in politics for a long time.

ROSS GARNAUT: Well, I think Australia has got some very serious problems ahead of it in which we'll have to look again at everything. So right now you wouldn't be optimistic that in the next few years these issues would be looked at in a rational way. But in the context that the problems that Australians will realise they have to deal with over the next few years, that may change political culture in ways that allows us to look rationally at everything again. There's a chance.

AUDIENCE: Ross, what roughly is the effective tax rate that the oil and gas industry pays in Australia and how does that compare with countries like, say, Norway?

ROSS GARNAUT: Well the new PRRT has a marginal tax rate of 40% which is the same as the offshore PRRT, which is different from the MRRT which is 22.5%. So a company embarking on a new oil or gas development, say it's one of those new gas fields in Queensland, will be able to recoup all of its investment plus the long-term bond rate plus 5%, plus recoup with an additional uplift historical exploration expenditure. After it's recouped that, which is meant to correspond to the cost of capital to take into account the riskiness of the investment, it will pay 40% of cash flows as PRRT. That will be deductable against Corporate Income Tax, they will pay 30% of the 60% that's left after the PRRT. So the Corporate Tax rate will be effectively 18%. So add those together and at the margin the tax rate on profits and cash flows is approximately 58%. This is in the later years of the project after the initial investment has been recouped with interest.

If you're comparing it with Norway, the average tax rate is higher than that in Norway and starts much earlier; you don't get the upfront treatment of recoupment of capital. Compared with the world's well-established big oil industries in Norway, the Middle East who are relatively lightly taxed, especially on less profitable projects, which is a good feature. If a project is only generating the long-term bond rate, the Commonwealth bond rate plus 5 percentage points return, then the company will get its investment back interest at that rate will never pay PRRT, and that's how it should be. You asked for the comparison with Norway, that's how it is compared with Norway. The arrangements vary greatly in different countries, tax rates tend to be higher in major oil producing and gas producing countries, tend to be lower in countries in which this industry is less important. There's a range of different arrangements in Canada and the United States.

I'll just mention one feature of the United States and Canadian arrangements which is pretty desirable. That is in many jurisdictions, certainly offshore and in federal territories in the United States and extensively in Canada, they run auctions for access to exploration properties and generate a lot of revenue from that as well, so you get an upfront payment as well as tax later on. That's always been very fiercely resisted by the industry in Australia, but it's a very efficient way of raising revenue. It can be on top of other taxation arrangements and companies bid what they think is the after-tax rent value of the property. So really what I'm saying is comparison is very complicated because the details of arrangements vary greatly country-to-country, but you asked for the comparison with Norway, we don't collect anywhere near as much revenue per unit of production as Norway.

AUDIENCE: What about in terms of iron ore and coal, Ross, have you seen those?

ROSS GARNAUT: The main competitor for iron ore is Brazil and Brazilian production is by a very efficient company that's mainly owned by the state and so the profits go back to the state. Well, the largest shareholder is the state; they've been selling off shares over time, so I actually don't know what the state proportion of the profits is now. The state royalties in West Australia vary between 5% and 7% of the value of production depending on the type of ore. That's a fairly typical royalty. I think that the royalty regimes in Brazil are similar to that, but the whole arrangement in Brazil is complicated by the state ownership of Vale.

JOHN DALEY: Yes, I have certainly seen some international studies suggesting that the total corporate tax plus royalty taxes for many of those minerals is, for Australia, highish relative to many other countries, albeit certainly not at the top but certainly also not at the bottom. But as you say, invariably there's all these wrinkles like who really owns them and who owns the companies that are doing the work, that means that probably looking at those nominal tax rates is something you've got to be fairly careful about.

AUDIENCE: Professor Garnaut, you mentioned that in the 1970s there was no talk about sovereign risk being imposed. Would you agree that the reason for that was that in the 1970s the sovereign risk was actually non-existent in terms of it being imposed by the tax and that actually what we had coming from the opponents of the tax was perhaps an inability to pay or to factor in or budget for the political risk of the tax being imposed which itself then fed into, given the fiscal consequences that you identified, an actual sovereign risk that we've got going forward?

ROSS GARNAUT: I hadn't actually done the sums that I revealed until I got onto the web this morning, and it's back-of-the-envelope stuff. But I must say I was a little bit surprised by the comparison of the current situation and the '70s. I think there is a very different political culture now. I think at the time the joint venture of BHP and Esso, all of the political dimensions of it were run by BHP and I think that if the government of the day had said to them "This is what you're going to wear in the national interest" there would have been a fairly strong tendency to accept it, whereas there isn't these days. The comparison of the two situations is worthy of closer study. I don't think it's a sovereign risk anyway for a government to re-assess fiscal arrangements, although I must say the degree of reassessment that was associated with the introduction of the crude oil levy in the '70s was extreme.

JOHN DALEY: I think it would also be fair to say, just given the scale of investment in Australia over the last eight years, however much there's been a sovereign risk deterrent element it's been a lot less than anywhere else in the world. Michael, sovereign risk is a kind of concept that people will often talk about in a Constitutional Law context. How do you think is the right way to think about this issue?

MICHAEL CROMMELIN: Well, it is a complex issue because it's a term that's sometimes used to describe quite different situations. I agree with Ross that if the context of the particular discussion is the reassessment of fiscal arrangements, then there's very little to be gained by calling it sovereign risk because that's what governments do all the time. It is a different question if you get expropriation of property and then questions arise as to whether compensation needs to be paid and, if so, in what amounts. Not surprisingly, the mineral and petroleum industries worldwide are pretty edgy about expropriation of property and that I think is a very different discussion to alteration of fiscal arrangements.

AUDIENCE: Michael, I was interested in your comments that the resources are owned by the states and not the people, but I've never heard any of the media question Swan or any of the proponents that "Hey, when you say that it's not true". Does that mean the media are not aware of what you say? Presumably what you say is backed up by case law? Could I just have your comments on that?

MICHAEL CROMMELIN: Well, it's not so much based on case law, it's actually based on our constitutional history. During the early colonial years, the first half of the 19th century, in Australia Crown lands and all the resources they contained were controlled, managed by the United Kingdom government. But when New South Wales and Victoria got the opportunity to draw up their own constitutions providing for self-government, limited but a measure of self-government, in the 1850s they did so in a way that was really rather startling. And I'm surprised it hasn't received more attention really because part of the deal under which they were given this opportunity expressly prohibited them from doing anything to change the arrangement on Crown lands and resources, but they did it anyway. They put in their constitutions provisions saying that the entire management of what were then known as wastelands, ungranted lands of the Crown, and all the resources including mines and minerals therein, was effectively transferred from the United Kingdom government to the new colonial legislatures. And for reasons I've never tracked down, the United Kingdom government rather grudgingly accepted that. And it's certainly been recognised by the High Court and even by the Judicial Committee of the Privy Council that the consequence of that development, which effectively was followed in the other colonies as they developed their constitutions, was to vest proprietorship of very important resources, notably minerals and petroleum but not only minerals and petroleum, in what Ross has accurately described the Crown in the right of the state, which is a polite way of saying state governments.

So why the assertions by the Australian governments that these resources belong to the Australian people didn't attract greater attention at the time, I certainly took advantage of an open invitation from the then Prime Minister to communicate with him on any matter – this was Prime Minister Rudd – via his website. And I wrote to him about this feeling that it was a matter deserving correction, but I didn't ever receive an acknowledgement. Perhaps I pressed the wrong button.

AUDIENCE: A question to Ross Garnaut: given your pessimism about commodity prices, I would have thought particularly in the case of coal and iron ore the problem isn't that we're going to be foregoing a lot of MRRT or even a revised version of it; the problem's more likely to be with the state royalties which have been jacked up and are likely to lead to the premature closure of marginal mines?

ROSS GARNAUT: Yes, I think that's right. Even an efficient Resource Rent Tax would be collecting much less in three years' time than it would have been two years ago. Prices are on the way down and have got quite a way to go, and high cost mines will be affected by 7% ad valorem royalty. State governments are actually in quite a difficult position in managing that because under the Commonwealth Grants Commission formulae for distributing the GST, if a state is not charging a royalty at a similar rate to other states its GST revenues are debited as if they were collecting it.

So take South Australia which has got extensive resources, relatively high cost iron ore, magnetite. Now, it may be that with the fall in prices that wouldn't be attractive anyway, but if it was attractive to develop those they'd be marginal deposits. An efficient tax regime wouldn't be putting any royalties on them and if you had an efficient Resource Rent Tax they wouldn't be collecting any. These are the projects that might cover their cost of capital, but won't generate a surplus. Applying to them the same royalty rates that the rich West Australian mines are paying will kill those mines, but the South Australian government if it allows those mines to be developed with a tax on true rent, i.e. near zero royalties, it will lose a substantial percentage of the value of the exports. It will never have collected the revenue, but it will lose from GST a big hunk of revenue. So the states can't afford to have efficient rent tax regimes under the distribution arrangements for the GST that's administered by the Commonwealth Grants

Commission. That's one of the very big problems that has to be cleaned up with a new federal fiscal compact.

AUDIENCE: It's for Michael. I was wondering, on private lands aren't the resources still owned by the state governments but only the topsoil owned by the private land owner? So is there going to be any conflict or any resolution of those issues under the MRRT?

MICHAEL CROMMELIN: The situation on private land is that, subject to a few exceptions, and there are some exceptions, the proprietorship of the mineral resource, and that includes petroleum, is vested in the relevant state government even though the land is privately owned. Now, there are a few exceptions which really are explained purely in historical terms in New South Wales, in Queensland, in Western Australia interestingly enough, and in Tasmania. Victoria and South Australia both decided in the 20th century to expropriate all of the exceptions so that they've got a universal situation of government ownership of the minerals. So there used to be some privately owned minerals in South Australia and in Victoria until South Australia expropriated theirs in 1972 and Victoria did the same for its privately owned minerals in 1983. These issues of residual exceptional private mineral ownership tend to be more difficult to resolve in New South Wales where every now and again there's a problem, including some recent High Court litigation on them. But they are very much exceptions to the general rule. So who owns the so-called surface, which technically isn't just the surface anyway but nevertheless that's the way it tends to be described, who owns the surface doesn't determine who owns the mineral resource beneath that surface.

AUDIENCE: A question for Michael, and perhaps for all three to comment if you wish: if the High Court accepts Fortescue's argument that the credit effectively invalidates the MRRT, are you aware of any other taxes that would be similarly invalidated because of the same flaw in their legislation?

MICHAEL CROMMELIN: I'm not, but it's not a study that I've undertaken and I seem to recall that there was some reference that I didn't follow-up in the argument of the case before the court to the possibility that there could be some flow-on effects. The arrangement under the MRRT for full crediting as distinct from mere deductibility of state royalties is highly unusual, if not unique. But whether you would extend the principle beyond the situation of full creditability to mere deductibility, that is an interesting but of course unresolved question.

AUDIENCE: My question is for Professor Garnaut: you talked a lot about the fiscal position of the government and talked a little bit about what happened during the '70s and so on. But I've been an investment analyst for a long time and the one thing I have learnt over about 30 years of following the resource industry, it's a very cyclical industry. My observation is over the last 10 years governments have given tax cuts, increased spending on the assumption, maybe not explicitly but some assumption that the strength of the resource industry, the rise in commodity prices, demand from China, would continue forever. And so when the situation now where a revenue base has been eroded because we've given tax cuts we can't really afford at a normal level of resource profitability, we've increased spending on the basis that these huge investment, the great taxes and royalties the mining industry is paying, will continue forever. So whether we have a MRRT or anything, the problem to my mind stems from the fact that people have assumed the last 10 years of the resource boom is the normal which history would say it's far from normal, so the adjustments that we're going to have to make have to be much broader than simply tweaking resource tax. And given the current level of profitability in the coal industry, whatever percentage you have is going to be a small number because most of the industry is not very profitable at current prices.

ROSS GARNAUT: Yes, that's dead right. It has been a very big mistake to spend the increased revenues as they were received. I gave a number of papers saying exactly this back in 2004 and 2005. One of them was published in the Oxford Review of Economic Policy in 2005 and it began by saying there are salad days in economic policy when bad policy looks ordinary and ordinary policy looks good, and we are living in the salad days. But don't worry, it won't be long before this boom is over and we'll be in the dog days in which stellar economic policy looks ordinary and ordinary policy looks diabolical. So it's there on the record, I said we should be saving a few percent of GDP right through that time, but we didn't and we've got a very big adjustment ahead of us.

JOHN DALEY: Although I think it's interesting Ross if you look at the government's own projections at the moment, by 2015/16 they're expecting that Income Tax as a percentage of GDP will be higher than it has been at any time since GST was introduced. Now, we forget that those Income Tax cuts effectively created a temporary, albeit very large, hole in revenue which bracket creep is essentially bringing back because we've had almost no change to many of those brackets now for several years. So we're starting to see Income Tax revenue, as I said, get back to levels that it hasn't been at since 2001.

ROSS GARNAUT: The Income Tax cuts were part of the corrosion of the tax base and if you give it enough time the fiscal drag will get it back, but it takes a long time, it will get most of it back. But that wasn't the only corrosion of the tax base. The completely unsustainable arrangements for superannuation tax on old people like Michael and me, not yet you, the gutting of the Capital Gains Tax which means that we're back into the old game of people on above-average incomes getting as much of their income as they possibly can in capital gains not in income tax. There's been a general corrosion of the tax base, but also quite a substantial increase in expenditure, including quite a lot of expenditure that won't meet the tests of priority once the blow torch goes on in the next few years.

JOHN DALEY: I think at this point, particularly given the hour, we should probably bring things to a close. So if I can make a couple of thank yous, firstly to Melbourne Energy Institute for their cooperation in organising this series of seminars, particularly to Susannah and also to Angela from Grattan who put in a huge number of hours to make all of this look utterly seamless; needless to say, there is plenty of paddling underneath the water. Obviously thanks to Melbourne University for the use of this theatre. Enormous thanks to you the audience for coming on a very wet and cold Melbourne evening to hear a talk about tax, which I think it would be fair to say is, as Michael described, transitional arrangements, it doesn't sound very exciting but it is incredibly important. If there's one thing I have learnt over my 4.5 years at Grattan Institute, tax is indeed very dull in certainly how it sounds, but it is also probably the most important policy issue we face and we probably don't spend nearly enough time worrying about it. And then of course, finally, to thank Ross and Michael who have absolutely delivered on their extensive reputations in terms of taking something that is technical, not well understood, but incredibly important and explaining very clearly exactly why it matters, exactly what the issues are, and exactly what some of our options might be as a country, and we're very grateful to them. So thank you all very much.

End of recording