

COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

SENATE

SENATE SELECT COMMITTEE ON THE SCRUTINY OF NEW TAXES

Reference: Mining taxes

WEDNESDAY, 30 MARCH 2011

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SENATE SELECT COMMITTEE ON

SCRUTINY OF NEW TAXES

Wednesday, 30 March 2011

Members: Senator Cormann (Chair), Senator Hutchins (Deputy Chair) and Senators Bushby, Cameron, Fifield and Williams

Senators in attendance: Senators Cormann, Cameron, Fifield, Hutchins and Williams

Participating members: Senators Abetz, Adams, Back, Barnett, Bernardi, Bilyk, Birmingham, Mark Bishop, Boswell, Boyce, Brandis, Carol Brown, Cash, Colbeck, Coonan, Crossin, Eggleston, Faulkner, Ferguson, Fielding, Fierravanti-Wells, Fisher, Forshaw, Furner, Heffernan, Humphries, Hurley, Johnston, Joyce, Ian Macdonald, McEwen, McGauran, Marshall, Mason, Minchin, Moore, Nash, O'Brien, Parry, Payne, Polley, Pratt, Ronaldson, Ryan, Scullion, Stephens, Sterle, Troeth, Wortley and Xenophon

Terms of reference for the inquiry:

To inquire into and report on:

- (a) new taxes proposed for Australia, including:
 - (i) the minerals resource rent tax and expanded petroleum resource rent tax,
 - (ii) a carbon tax, or any other mechanism to put a price on carbon, and
 - (iii) any other new taxes proposed by Government, including significant changes to existing tax arrangements;
- (b) the short and long term impact of those new taxes on the economy, industry, trade, jobs, investment, the cost of living, electricity prices and the Federation;
- (c) estimated revenue from those new taxes and any related spending commitments;
- (d) the likely effectiveness of these taxes and related policies in achieving their stated policy objectives;
- (e) any administrative implementation issues at a Commonwealth, state and territory level;
- (f) an international comparison of relevant taxation arrangements;
- (g) alternatives to any proposed new taxes, including direct action alternatives; and
- (h) any other related matter.

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Committee met at 9.29 am

ERGAS, Professor Henry, Professor of Infrastructure Economics, University of Wollongong

PINCUS, Professor Jonathan James, Visiting Professor, University of Adelaide

CHAIR (Senator Cormann)—I declare open this ninth hearing of the Senate Select Committee on the Scrutiny of New Taxes, the inquiry into a national mining tax. These are public proceedings although the committee may hear certain evidence in camera. The proceedings are governed by rules set by the Senate, copies of which have been given to the witnesses. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee. Such action may be treated by the Senate as a contempt. I welcome Professor Henry Ergas and Professor Jonathan Pincus to today's hearings. Would either of you like to make an opening statement?

Prof. Pincus—Yes, I would like to make an opening statement for both of us. We are just commenting on the paper we wrote with Mark Harrison, 'Some economics of mining taxation.' The paper tried to help achieve better understanding of five issues. I will deal with only four of them. First of all we discuss taxes on pure rents. The main point was that it is not feasible to tax mining in a neutral way such that the industry is unchanged except that the owners obtain less profit. If such a neutral tax did exist then it would be a tax on pure rents, and on pure rents only. Although the concept of a frictionless machine is very useful in theory, in practice no such machine exists; similarly, the concept of a tax on pure rent is useful in theory but in practice no such tax can exist. The definition of pure rent is, 'A payment made to the owners of a productive input which is in excess of that which is necessary to bring the productive input into being.' Nature put minerals in the ground and put them there with no payment. Thus, by definition, any payment for ownership rights over those minerals in the ground is pure rent. So, in theory, any tax on those pure rents, even a 100 per cent tax, will not alter the amount that is in the ground. In contrast, almost nothing else would come into existence in a market economy unless somebody is paid for the effort, the knowledge and the risk necessary to bring things into being. If a tax reduces those rewards then the tax will discourage production of all those other things.

So there is a gap between economic theory and practice, and that gap arises because mining companies have information about their activities that is not available to government. Thus, a taxing authority cannot, with perfect accuracy, divide mining profits into two piles: that which is due to the value of minerals in the ground; and that which is due to the efforts, talents and risk taking of the owners, the workers and the suppliers. A tax will inevitably fall on some revenues that are not pure rents. The abandoned super profits tax is not a knife you can take to a magic pudding, which is the mining industry, cut out a slice and leave the pudding no smaller. Neither is the new MRRT.

We briefly mention state royalties. We regard them as deferred payments for the right to mine. If they are negotiated in advance they are not taxes. Nonetheless, royalties do discourage some economically valuable activity. A mine nearing the end of its useful life may get sales proceeds that cover the cost of extraction and marketing, but if it does not cover the royalty payments, the ore remains unmined. So the task of designing mining taxes is to find the best compromise

between the desire of the tax collector to gather in pure rent and the desire not to discourage the effort, talent and risk taking involved.

The second point we made was the distinction between pure rents and quasi rents. This enables us to discuss the difference between a super profits tax of whatever kind on existing mines and one on prospective mines. For prospective mines, the theoretically ideal scheme is called the Brown tax after the American economist, not the Tasmanian Senator. Before any mining activity starts in this arrangement the government lays claim to, say, 40 per cent of all future revenues from the mine in return for agreeing to compensate the miner for 40 per cent of all future outlays, both capital and recurrent. So the miner ends up with 60 per cent of the profit in exchange for bearing 60 per cent of the costs.

This arrangement assumes that the government can indeed accurately determine the cost share which it is responsible for, and reimburse those costs. If some costs are not reimbursed, say, because they are allocated to aspects of the operation other than the resource, then the proportionate sharing, sixty-forty, will not hold. For instance, so as to maximise the return on a resource, a miner may need to invest in costly research and development. Unless it can claim those outlays as a cost that the government must contribute to, the miner will end up paying a higher share of the costs than it gets in reward. Under those circumstances, if 100 per cent of the profit—that is, without the tax—it is just worth the miner's effort and risk, then 60 per cent may not be worth it and so the effort and capital will be directed at other prospects or other countries.

Paradoxically, the unexpected imposition of a Brown tax, or a similar profit tax, on existing mines would yield possibly huge tax revenues—tens of billions of dollars—without causing any immediate change to the operation of the mine. So it seems like it is a tax on pure ends, but it is not. Once the mine has been brought into operation, a sudden tax will not make the mine disappear. It will continue operating at least for a time. Continued operation is better for the miner than shutting down if the operation is cash-flow positive, that is, if the revenues received exceed the tax plus the cost of operation. In economic jargon, this tax falls on quasi-rents. Quasi-rents are the payments in excess of what is necessary to make it worthwhile for the owners to keep an existing mine in operation. However, the tax will have its economic effects. It will reduce the incentives to develop mines further or it will reduce the incentives to cut costs in mining or the handling of ore and so on. Eventually, even the incentive to maintain the mine may vanish because of the tax.

Our third section related to whether a persuasive case had been made yet for retrospective taxation, taxation of existing mines, and I will omit discussing that section in the interests of time here and turn to the fourth section. This is a brief discussion of what new economic inefficiencies the MRRT will cause. The MRRT has many of the same inefficiencies as the RSPT but adds some further serious inefficiencies of its own. Like the resource super profits tax, it discourages cost reductions and revenue expansions by miners and, like royalties, it discourages production from mines near the end of their lives. In addition, it distorts the distribution of the rates of return from mining, thus differentially discouraging higher risk profits. The MRRT reduces the expected rate of return for risky projects by more than it reduces those for less risky projects. In other words, the realised tax rate on risky projects after the event turns out to be higher, maybe far higher than that on less risky projects. In addition, the MRRT encourages low-risk projects, that is, projects with low costs of capital, to increase their capital intensity and possibly to postpone production for tax minimising reasons.

Overall, the MRRT will make investing in Australian coal and iron ore projects less attractive than those overseas and less attractive than investing resources not subject to tax, and it will penalise high-risk projects, that is, compared to situations without such a tax. Moreover, the MRRT falls less heavily on mature projects that are included in a portfolio of Australian mining assets. It falls less heavily on those that have high market values and less heavily on miners who have ready access to overseas alternatives. And the three mining companies that negotiated the MRRT with the Gillard government have these exact characteristics.

The last point we made in the paper concerns the revenues—'rivers of gold'. The revenues from taxes such as the RSPT or the MRRT are usually overstated because these revenues are risky. The failure to take account of the risky character of those revenue streams could lead to fiscal illusion and make it more likely that unwise public spending commitments will be made. The background is that the government is planning to spend the forecast revenues—they are in the forward estimates. Without the mining tax revenues the government will have to cut its spending if it is to meet its announced fiscal targets. The Treasury has made various forecasts of the expected revenues from the proposed mining tax; some of them tens of billions of dollars larger than others. To note this is not to criticise Treasury forecasters; nobody can accurately and consistently predict the future. If Warren Buffett could make better guesses then he would make even more money and we would not have any Treasury officials left. Our point is that the market value of the wealth transferred to the Treasury, as agents of the Australian citizens, is far less than the Treasury's best estimates of the size of the revenues from mining taxes. The line of reasoning is simple: the flow of money tax revenues is uncertain; Treasury estimates the expected value of that flow and announces it; the market value of an uncertain flow of money is less than its expected value. The difference between the expected value and the market value is usually called 'risk premium' and it can be very large. We do not attempt to make an estimate of the value of the transfer of wealth to the Treasury, but we try to illustrate that it is likely to be far lower than the Treasury's estimates of the expected revenues. Thus it may be wise to bank some of the revenue for a rainy day, in case the pessimists like Professor Warwick McKibbin turn out to be correct and there is a sharp fall in mineral prices over the next few years. If that happens, then the planned course of public budgets may well prove to be unsustainable.

In conclusion, we said that we were not attempting to be definitive about the best forms of mineral taxation, but we offered a few suggestions and comments. First of all, a new Commonwealth mining tax, if there is one, should apply to new ventures only, and should be levied at a modest, that is, internationally competitive, rate. Our second comment relates to the relationship between the states and the Commonwealth. In order to reduce the problems of vertical fiscal competition over taxes and to encourage the states to use efficient imposts, we suggest that the Commonwealth Grants Commission should treat the state's mining revenues as capital receipts with zero net effect on the jurisdiction's balance sheet. Further, all payments mining companies make to state governments should be deductible against any Commonwealth tax—to give priority to state government imposts. That is the end of our opening statement. Thank you.

CHAIR—You mentioned that in practice no tax on pure rents can exist. Can you tell us in a couple of sentences why that is? Why is it good in theory in your view but not so good in practice?

Prof. Pincus—The only mechanism we know of to reveal the value that people put on unmined deposits is to auction them in advance. That is the market test. That tells us what the people in the world today think that deposit is worth. That is not tax; that is a system of marketing an asset. A tax does not do that. It does not reveal the value. The tax requires some estimate of the value. The miners have a stream of revenue, a stream of expenditure; the tax mechanism has to accurately divide those streams into that revenue which is caused by the pure value of the mine—the ore in the ground—and those revenues that are caused by other things. That division depends on intimate knowledge of the operations of each individual firm, which knowledge the firm itself may not even have. It may be implicit in the way in which the firm operates, for example. Maybe the firm makes expenditures which it thinks are attributable to getting the stuff out of the ground, but which the government thinks is not attributable to getting stuff out of the ground. The pure rent notion is the value of the minerals in the ground. The only known way to find out how much that value is, is to auction them. A tax does not auction them off; it makes a guest at how much is value in the ground.

CHAIR—Is it your argument that the tax, the way it is structured, is going to make it very complex and burdensome to assess the value of the resource for taxation purposes? Is that your criticism?

Prof. Pincus—That is not the basis of the argument. The basis of the argument is that the information that could lead an outsider to make an accurate estimate of the value of the minerals on the ground is not revealed by the tax. It has to be guessed.

CHAIR—Why is that a problem?

Prof. Pincus—The argument for a special tax on mining is that there are minerals in the ground, the value of which has not been created by anybody and is owned by the citizens of the states in which the resources are, and it is possible, so the theory goes, to tax that without damaging the economic prospects of mining. Our major point is that that is not possible. Auctioning them off in advance maybe would work; but taxing will not bring about that consequence. The tax system is going to be complicated in an effort to try to divide the revenues into two streams; those which are due to the mining of the value of the ore in the ground and everything else.

CHAIR—The reason the government is trying to impose a tax on pure economic rent—which you say in practice does not exist—is that it would help the government get revenue without changing taxpayers' economic behaviour. Do you think that the MRRT as it is proposed will change taxpayers' economic behaviour?

Prof. Pincus—Certainly.

CHAIR—In what way?

Prof. Pincus—In two separate ways. A whole series of efforts by mining companies may end up leading to tax liabilities on MRRT which, without the tax, they would have engaged in more fully—more exploration, more thoughts about research and development and reducing their costs. All of those things could add to the profits they make but they are not a consequence of the

value of the ore in the ground; they are a consequence of their efforts to make a profit. A tax on profits discourages all those things which make profits. That is the first line of argument.

The second line of argument is that the MRRT discriminates against more risky projects. We give an example in the paper showing that the expost tax rate on a risky project is much higher than on a low-risk project. It discriminates against risky projects and therefore the kinds of arguments that have been made by small miners have to be taken seriously; namely, if you have risky projects this tax will discourage them.

CHAIR—Why is it bad for a tax to discourage more risky projects? What are your reasons for saying that? What I am hearing in the way you are putting it is that that is one of the bad features of the tax. Intuitively, is that a bad thing?

Prof. Pincus—Intuitively it is a bad thing because if risky projects are worthwhile economically, that is, if people are willing to pay the premium to get the money to engage a risky project, those people are ruled out. Essentially the tax slices off the top. A good project has a basement—'spend all your money and get nothing back'—and an unlimited top. You slice off the top.

CHAIR—So that discourages development that would otherwise take place.

Prof. Pincus—It is discrimination against risky projects as opposed to less risky projects.

CHAIR—But is it fair to say that all projects when they start have a higher degree of risk than ones that have been running for 20 or 30 years?

Prof. Pincus—Sure. I am really thinking about prospective projects.

CHAIR—So BHP and Rio's main projects these days are low risk?

Prof. Pincus—Sure.

CHAIR—But it would be fair to say that they would have been high risk when they started?

Prof. Pincus—They were very speculative projects, yes.

Prof. Ergas—Those projects were terribly speculative at the outset. When you bear in mind that the initial work on developing the iron ore projects was done at a time when Japan's principal exports were textiles and clothing and when China was in the midst of the Great Leap Forward, the idea that China would ultimately emerge as an industrial superpower and major consumer of Australian resources would have been regarded as quite fanciful. If you go back to that time then there is no doubt that those projects were initially extraordinarily risky.

But the fact of it is that the MRRT, because of the way it is structured, imposes a much lower tax rate on mature, existing projects than the effective tax rate it imposes on new, risky projects. The result of that is undesirable from society's point of view because from the point of view of Australia as a whole we want a lot of attempts at finding and developing new resources, even if some of those fail, because for every 5,000 attempts that are made maybe one will prove in the

long run as valuable to this country as iron ore in the Pilbara has proven to be. So if we discourage that that has a very high long-run economic cost, yet the way the tax is currently structured will inevitably do that.

CHAIR—So you are saying that we have an Australian success story like BHP, Rio and so on because of the risks taken in the past and the MRRT today will make it less likely for us to have similar success stories in the future because there is a disincentive to take on the sorts of risks which were taken on 30 or 40 years ago by BHP and Rio; is that right?

Prof. Ergas—Yes, that is correct. It will also have the effect of distorting decisions and the allocation of resources between large established miners, such as BHP Billiton, Rio and Xstrata, and newer mining entities that do not have as wide a portfolio as the established miners have and as much scope to offset gains and losses within that portfolio.

CHAIR—So what you are saying then—and I am not wanting to put words into your mouth, so correct me if I am wrong—is that those three big mining companies that had the privilege of sitting around the table with the Prime Minister, the Treasurer and the Minister for Resources and Energy are receiving more favourable treatment under the way the MRRT is designed than those competitors and potential future competitors who were excluded from the process when this tax was negotiated behind closed doors.

Prof. Ergas—Yes, I think that is a reasonable summary of the situation. Essentially we have a tax that is in many respects a highly distorting tax but it is especially highly distorting in respect of those who were not included in its negotiation.

CHAIR—Is it appropriate for an Australian government to design a tax with three taxpayers but excluding their competitors, making it harder for their competitors to compete with the people who get to negotiate the tax with the Australian government? Is that an appropriate way to design a tax?

Prof. Ergas—One would think not. Obviously the design of any tax, particularly a major new tax, will involve discussions and negotiations, if you want to call them that, with those who are likely to be affected. That indeed is a good thing. It is a good thing that the people who will be affected by a tax have an opportunity to input into the preparation and design of that tax—though ultimately the responsibility for coming to decisions rests with the government. But it would be far better if the scope for that consultation were sufficiently wide to encompass the full range of interests that were likely to be materially affected rather than solely the largest players amongst those whom the tax is likely to fall on.

CHAIR—This MRRT is not competitively neutral, is it?

Prof. Ergas—No, I do not believe it is competitively neutral. It is distorting the decisions that will be taken by the major established miners and will have significant distorting effects in that respect; but it is also distorting in terms of the allocation of resources between those established miners and potential, and at this point unknown, future challengers.

CHAIR—So it is giving the BHPs, the Rios and the Xstratas a competitive advantage visavis the small to mid-tier mining companies already in the market or explorers that are currently out there looking for resources and looking at being the BHPs and the Rios of tomorrow?

Prof. Ergas—Yes, it is inevitable that it will have that effect, in my view.

CHAIR—To use your language from before, that is entirely undesirable from the community's point of view.

Prof. Ergas—Yes, from the community's point of view it is undesirable to have taxes that make it more difficult for innovators, entrants and competitors to challenge existing major operators.

CHAIR—When the Henry tax review was commissioned it was supposed to be root and branch reform to deliver a fairer and a simpler tax system. Your early recommendation, which was of course acted upon, was to introduce a resource rent tax. Do you think that the tax that is on the table now, the MRRT, makes our tax system fairer and simpler?

Prof. Ergas—There was also a recommendation to reduce the company tax rate, and that recommendation has been adopted, albeit only in part. But in terms of whether this tax will make it simpler, I rather doubt that. The reason I would doubt that—and my colleague of course will want to comment on this too—is that in the tax review *Australia's future tax system* the recommendation was that there be a new resource rent tax that would replace the existing royalties. In fact the MRRT will be superimposed on existing royalties and will interact with those royalties. So there will be very complex issues to do with the interaction between the company income tax, the royalties system and the MRRT.

Additionally, as with the PRRT, the MRRT is in itself a very complex tax. It will raise myriad issues in its implementation, particularly but not solely issues about the allocation of costs and revenues—as between the overall operations of the tax-paying entities and the project component that attains the resource that is to be taxed—and also very complex issues around the determination of whether the net income from the taxable component has exceeded the thresholds over which the tax liability becomes payable. Overall, we will have a tax that in that respect creates complexities from its interaction with existing taxes, and the way it changes the incentives to behave in terms of those existing taxes, and additionally that is complex in its own right to administer.

CHAIR—In simple terms; a small- to mid-tier company's projects that will not be subject to the MRRT will continue to have to pay royalties and, to the extent that that distorts investment production decisions, that will continue. On top of that, they have got to go through complicated administrative and compliance mechanisms to prove that they are not subject to the MRRT. So we are not really any better off, are we, in that context?

Prof. Pincus—Additionally, we met the problem that by the nature of the MRRT creates the issues that you raise. It also creates issues in respect of the larger miners, who of themselves have very complex requirements in cost allocation and revenue allocation. These are problems that, even in the far simpler context of the PRRT, have led to quite significant disputes, many of which are still winding their way through the courts. So you will get all that. But on top of that

the MRRT creates incentives for revenue and tax-shifting games between the Commonwealth and the states, and how those tax-shifting games will play themselves out is at this stage, obviously, an extremely open question, but one where I think it is not unrealistic to expect those games to result in some additional inefficiencies.

CHAIR—What you are alluding to there is the fact that state governments could now increase royalties on those projects, subject to the MRRT, without actually increasing their overall tax burden. That creates, effectively, an incentive for the states to do exactly that and, in the process, undermine the revenue flows for the Commonwealth. Is that the argument?

Prof. Pincus—It opens up a struggle over who gets the tax; it does not necessarily mean that the total quantity of tax will change. The policy transition group did not resolve this problem, it just said, 'We're going to allow state royalties to be credited'. But some incentive mechanism will be brought in—presumably the big stick—to discourage the states from doing exactly what you have mentioned. It also—

CHAIR—Constitutionally, other than using backdoor big sticks, there is nothing that the Commonwealth can do to stop states from increasing royalties as they see fit. That is a fair assessment, isn't it?

Prof. Pincus—I am not a constitutional lawyer! But I have always assumed that the Commonwealth can do almost anything if it really sets its mind to it.

Senator CAMERON—You are not a constitutional lawyer are you?

Prof. Pincus—I said I am not a constitutional lawyer.

CHAIR—As a citizen of Australia, I hope that you are wrong; I hope that there are appropriate checks and balances against excessive government power at all levels. Hopefully, our Constitution can protect us from a government doing just about anything. That is just a comment, not a question.

Prof. Pincus—The policy transition group made the statement that the state royalty systems are not able to capture rents in a period of booming prices. I never knew what rents they had in mind; they must mean quasi rents—they certainly cannot mean pure rents.

Secondly, states have a variety of royalty arrangements, some of which do escalate with price. It is going to be very interesting to see—

CHAIR—I would put it to you that most royalty arrangements actually escalate with price, because they ad valorem.

Prof. Pincus—Sure.

CHAIR—So it is both on volume and on value.

- **Prof. Pincus**—And with some of them, the rates escalate with price. So it would be extraordinarily complicated, since sometimes states have the right to impose extra royalties and do not do so.
- **CHAIR**—Just going back to your comment before about the policy transition group decision essentially to go along with the passage in the mining tax deal between the government and the big three miners that all state royalties will be credited against the mining tax. The mere fact that they are going to be credited does not actually mean that they are going to be refunded, does it?
- **Prof. Pincus**—No. They are only credited and not refundable. If no MRRT tax is paid you do not get a refund from the Commonwealth.
- **CHAIR**—So if your project is in the decline phase, as has been said—and royalties supposedly accelerate the closure of a mine—presumably you are at a stage of your mine life where you are never again going to be sufficiently profitable to be subject to the mining tax. Whatever credits you accumulate will not serve any purpose whatsoever, will they?
- **Prof. Ergas**—That is correct. In the simple case of an entity which operates a single mine and where there is no scope to transfer the liabilities associated with royalties or the credits associated with royalties across projects, then the royalties will have whatever distorting effects they have at the moment. The situation may be more complex if you are an entity that is operating multiple projects and can transfer.
- **CHAIR**—Is it? In the heads of agreement it says very clearly that royalty credits are not transferable between projects. So even if you have got multiple projects, if you cannot transfer—which, as I understand it, you cannot—then the problem is still there. If you are a mine in the decline phase, you are not any better off; in fact you are probably worse off because you have got to go through the administrative processes of the mining tax.
- **Prof. Ergas**—That is indeed the case. The point we make in the article is that the risk is that you will accumulate the distortions associated with the royalties with the distortions associated with what is effectively a profits based tax.
- **CHAIR**—Can you just explain that point to us? You make the point that there is an incentive to accumulate credits and to smooth costs and revenues inefficiently. How would that happen and why?
- **Prof. Ergas**—This is an issue that has arisen with PRRT and PRRT type systems elsewhere in the world. It depends very much on the precise manner in which the taxable income of the entity is calculated, but the essence of systems of that kind is that you have a threshold return. The tax liability comes due once you exceed that threshold rate of return, and then the effective tax liability will escalate as your economic income rises relative to that threshold rate of return. As a result of that you create incentives, at least potentially, for entities to 'game' the system, for want of a better term, by smoothing costs and revenues over time so as to avoid situations where their period rate of return rises very steeply above the threshold. That in turn can lead to distortions in the allocation of resources and in the exploitation of the mineral resource, because it may be optimal from an overall point of view to, for instance, reduce extraction during periods when

demand is relatively low and ramp it up greatly when prices and demand rise rather than smooth the extraction of a resource.

- **CHAIR**—I have a few things I want to go through with you quickly before I pass on to my colleagues. Firstly, the market valuation method was one of the features that were introduced as a result of the mining tax deal between the government and the big three. How does that impact on the way the mining tax is to operate?
- **Prof. Ergas**—The effect of having an initial market valuation is in the first instance to reduce the taxable liability, but the extent to which that occurs and the pattern by which that occurs depends on the precise rules about the attribution of that initial value to each period's income. So it depends on the depreciation profile for the brought-in market value.
- **CHAIR**—What we know is that the depreciation profile is over a period of up to 25 years. 'Up to', in my mind, seems to suggest that if the life of the mine is demonstrably less then presumably you can do it over the remaining life of the mine. Now BHP and Rio, we only have approximate information about the market value of their iron ore assets, which was really in the context of the merger talks, and it is in the range of \$50 million to \$60 million each. That provides a pretty significant tax shelter, doesn't it, if depreciated over a period of up to 25 years, potentially less?
- **Prof. Ergas**—Yes, it is potentially a very substantial tax shelter. I have not done the accounting exercise that would be required to precisely value it.
- **CHAIR**—Would it be as advantageous for the smaller to mid-tier mining companies, having a market valuation method as part of the MRRT design?
- **Prof. Ergas**—Probably not because, their mining projects being typically more uncertain, it is likely that their current market valuations are relatively low and hence provide a much lower tax shield. Again, that is significantly affected by the precise way in which the depreciation provisions are ultimately crafted.
- **CHAIR**—Talking with you this morning, there is obviously a range of issues. You have gone through them in more detail in your submission, but there is a range of features of the tax design that clearly give the three big mining companies that were around the table a competitive advantage and make it harder for the riskier and newer projects to compete with them. That then would have an impact on the level of supply of iron ore and coal into the future, wont' it?
- **Prof. Ergas**—It will in a number of respects, it will in the sense that the way the MRRT is currently structured will discourage high-risk ventures that could, over the long term, expand the supply of the resources that are subject to the tax. And so in that sense, yes, that would be a potentially adverse effect.
- **CHAIR**—The context of my question—all other things being equal, if commodity prices are high there will be a supply response. As there is increased supply to meet the level of demand, prices will taper off, which is what usually happens. But if there is, through this tax, a disincentive for riskier, newer projects coming on-stream, presumably the supply response will

at least be slowed down and will keep commodity prices for iron ore or coal higher than they otherwise would be in the absence of this tax. Is that a fair—

Prof. Ergas—I am not sure that that is entirely the case. What is more likely to happen is that it will shift the focus of efforts of expanding the supply of coal and iron ore, a greater share of those efforts will ultimately go to other jurisdictions.

CHAIR—When you say 'other jurisdictions', do you mean overseas jurisdictions?

Prof. Ergas—Exactly.

CHAIR—Sure. But in Australia, the supply response out of Australia would be less than it otherwise would be because those three big players will become more dominant and whatever advantage that other suppliers will take from higher commodity prices will essentially be shifted overseas, in effect.

Prof. Ergas—If I did not think the reason for that is that the existing three will become more dominant, though this does favour them, I think the reason is that this is a tax that falls very heavily on high-risk projects.

CHAIR—Which are smaller and mid-tier.

Prof. Ergas—Be they undertaken by the existing three miners or by anyone else, they will still face a much higher tax rate and the effect of that will be to discourage high-risk investments in Australia and shift more of those investments overseas than would otherwise have occurred.

CHAIR—So it would make it less likely that the BHPs and the Rios will invest in higher risk ventures that could be the success stories of tomorrow in Australia and makes it more likely that they would invest in other commodities or in other jurisdictions?

Prof. Ergas—Yes, that is correct. To the extent to which there are some options or potential projects in Australia that are extremely attractive, even this tax will not prevent those going ahead, but at the margin it will shift riskier projects to overseas.

Prof. Pincus—The fact that it is, in a sense, discrimination in favour of the existing miners should not be taken to mean that it does not discourage them as well. As Professor Ergas points out, they can engage in risky activities. For example, the discovery of new ways to mine some deposit which they have already started to mine. It may be a very risky strategy to try to develop some new process and this tax discourages those sorts of activities. So it is not merely that the new players have some discouragement.

CHAIR—You talk about the volatility of revenue, and of course we have seen this. It is a tax that has not even been introduced yet, but the original estimate was \$12 billion. Commodity prices changed for the purpose of the MRRT deal and the original tax would have raised \$24 billion, then the estimate was \$10½ billion; exchange rates changed and in MYEFO it is \$7.4 billion; Treasury officials informally talk about less than \$5 billion to selected journalists, so the argument you make in your submission is already obvious in the way it has played out so far.

That is a pretty risky way of trying to raise revenue linked to Commonwealth spending into the future, isn't it?

Prof. Pincus—Our point was very slightly different—that is, the intention to spend the revenue and rely upon its coming is a bad idea. Let me make an analogy: state governments found themselves with huge inflows of stamp duties during the property boom. Once that boom stopped, they said, 'Oh, we're short of money!' That is an inappropriate allocation of expenditures over a period of years. Do not spend so much in the good years and do not collapse the expenditure so much in the bad years. So the proposition we are making is that it is inappropriate to plan to spend the best estimate that the Treasury has made. The best estimate that Treasury makes for a whole lot of other taxes, fine, but for the—

CHAIR—So the risk is that you essentially set yourself up for a structural deficit because your spending is in line with revenue expected at times when commodity prices and revenues are high, and then when the revenues drop you have a gap.

Prof. Pincus—And, in addition, if revenues are unexpectedly high and the strategy is always spend them, then it exacerbates it. So it is both high and low.

CHAIR—If the government were to go ahead with this tax, and from a coalition point of view we are opposed to it, but if this tax were to go ahead, the more sensible way to allocate the resources from it would be to put all of it into a sovereign wealth fund type setup where it is not linked to day-to-day spending.

Prof. Pincus—That is one possibility. The other possibility is to attempt an estimate of the market value of what has been provided and spend that over the period of time—smooth the spending.

CHAIR—But as you have said, it is very hard to estimate that over the long term.

Prof. Pincus—Of course.

CHAIR—And what has happened in this circumstance is that most of the revenue is committed to bringing the budget out of deficit while part of it is committed to various other government spending commitments. Even the infrastructure fund is a government spending program; it is not set up as a wealth fund as such, is it?

Prof. Pincus—No.

Senator HUTCHINS—Gentlemen, thank you for your observations about the proposed tax. I want to ask a quick question: will the burden of the tax fall on mining workers, be passed on to the customers or be born by the shareholders?

Prof. Pincus—All of the above.

Senator HUTCHINS—But in a direct sense, not an indirect sense. The actual people who are going to pay the tax are, I assume, going to be, in one form or another, customers or

shareholders, aren't they? Irrespective of whether that mine goes ahead or does not go ahead, that is who will pay it, isn't it?

Prof. Pincus—I am not sure if I understand the distinction you mean between direct and indirect burden. The direct burden is on the taxpayer, which is the companies. The question is: what are the economic consequences of the tax?

Senator HUTCHINS—I am just asking who will actually end up paying the tax under this proposal; that is all.

CHAIR—Taxpayers.

Senator HUTCHINS—That is what I want to find out: which group of taxpayers. That is all. Is it going to be the shareholders or is it going to be the customers?

Prof. Pincus—The customers will only suffer to the extent that the tax reduces supply, and the price is higher than it otherwise would have been. In the world market, given the size of the tax, I suspect that is not going to be huge. But it is going to be an effect. For any worker in the mining industry, despite what the Treasury seems to say, this tax makes mining less attractive and so the demand for their efforts and labour will be less. But my guess—and I have not done the work—is that the primary effect is on the existing shareholders, for the reasons that we put in the paper, namely that existing shareholders have a company which will have to grin and bear it. If the tax reduces profits but does not reduce them so low that mines close immediately then the first and, I think, most lasting burden is going to be on the—

Senator HUTCHINS—You and Professor Ergas were quite eloquent in outlining to us what you saw as the downside of the tax. I just want to get it clear in my mind that you see the actual primary group that will be paying the tax is ultimately the shareholders.

Prof. Pincus—I think some people who are quasi-shareholders—namely, the senior executives in those companies—are also going to bear some of it.

CHAIR—Before handing over to Senator Cameron, I will just interpose with a follow-up to Senator Hutchins's question. He asked whether this is going to be carried by shareholders, customers or whatever. Ultimately, if the tax has the effect that you talked about earlier, which is to reduce investment in riskier projects or reduce investment in iron ore and coal vis-a-vis other commodities, if 98 per cent of iron ore production takes place in Western Australia that really then has the capacity to reduce investment in Western Australia, because all of a sudden it becomes a less attractive investment destination, doesn't it? You were nodding. Hansard cannot pick up a nod.

Prof. Pincus—I suppose I need to know what time horizon we are talking about. Earlier we discussed the fact that a lot of that investment started in the 1960s. It is now 2011. So in answer to Senator Hutchins's question I suppose I was talking about the next three or four years, rather than the next 40 years.

CHAIR—Sure, but the MRRT modelling that was released by Treasury showed that 80 per cent over the next two years of MRRT revenue would come from iron ore. Nearly all of that is in

Western Australia, so that is \$8½ billion out of \$10½ billion in that model. If that were to come out of Western Australia, that would make Western Australia as an investment destination less attractive, compared to other investment destinations, than it was before the tax, wouldn't it?

Senator HUTCHINS—Mr Chairman, I think they could understand the question. I was just wondering who would pay the tax—that is all—not saying that the sky might fall in and all that.

CHAIR—I am asking a follow-up question.

Prof. Pincus—I think there is a real distinction between the short run and the long run here. Those Western Australian projects are going to go ahead with what they are doing, to a large extent, as they were before, for the reasons that we discuss in the section in our paper on quasirents.

CHAIR—The more mature ones.

Prof. Pincus—The mature ones. But, in terms of prospecting and future, yes, the tax has made risky projects, especially, much less attractive.

CHAIR—We understand about investments in the past and this will impact on investments into future growth and future projects, so to the extent that this is targeting an industry in Western Australia we make it less likely that investments in risky projects today will deliver the BHPs and the Rios of tomorrow.

Senator CAMERON—Professor Ergas, the last time you appeared before a committee I was involved in you were undertaking work on behalf on the Liberal Party on its taxation policy and you were undertaking work on behalf of the Minerals Council and also for Concept Economics. Is that not correct?

Prof. Ergas—I do not recall the particular Minerals Council work; it may have been undertaken by my colleagues. I was involved in a tax review exercise for the then Leader of the Opposition.

Senator CAMERON—You have now moved to academia, is that right? Has Concept Economics basically gone out of business?

Prof. Ergas—In summary, that is correct. It is not entirely correct, but it is correct.

Senator CAMERON—Do you have any funding from any mining companies, the Minerals Council or anyone associated with the mining industry in your academic pursuits? Do you carry out any consultancies for the mining companies?

Prof. Ergas—I do have a position as senior economic advisor to Deloitte. My understanding is that Deloitte works on behalf of a wide range of companies, including one of the major mining companies, I believe.

CHAIR—Including the Australian government, incidentally.

Prof. Ergas—I am not sure which one it is, but I believe they audit one of the big three.

Senator CAMERON—Chair, maybe we can get some ground rules set out here. I was very patient with your questioning. I did not interrupt and I would appreciate the same. I think that is fair and reasonable.

CHAIR—You go ahead, Senator Cameron.

Senator CAMERON—Thanks. Professor Pincus, can I put the same questions to you?

Prof. Pincus—I have no contract or arrangements with anybody, except the University of Adelaide currently. The last contractual arrangement I had was with Professor Ergas when he was running Concept Economics and that ceased in the middle of last year, I think. So the short answer is no.

Senator CAMERON—Okay. You talk about investment going overseas. Are any of you familiar with the situation in Zambia, where BHP, Rio Tinto and other Australian mining companies are investing?

Prof. Pincus—Only what I have read in the newspaper.

Senator CAMERON—So your analysis is done on the basis of not having an understanding of the taxation regimes in places like Zambia? **Prof. Pincus**—Our analysis is done on the basis of saying what Australia does will not affect the rest of the world's taxation arrangements. It is what in economics is called a comparative analysis. Compared to a situation without the Australian tax, what are the incentive systems that have been set up? We are not making a comparison with the rest of the world because the comparison is with a situation where the rest of the world is unaffected by Australia and Australia changes what it does.

Senator CAMERON—But the rest of the world is not unaffected by what happens in Australia, is it? That is why the mining companies were fighting so hard against increased taxes. They recognised that if there are increases in some areas of operation there is an incentive for other governments to increase their taxes, isn't that true?

Prof. Ergas—There may be or there may not be. There are incentives that cut each way, in reality. If we introduce a tax that in one way or the other makes investment in Australia less attractive, overseas jurisdictions will face two sets of incentives. They may face an incentive to increase their taxes because the comparison will now be with our higher tax rate or they may want to accentuate and further encourage the shift of resources to their jurisdiction by, for instance, either reducing, binding or in other ways constraining their future tax take.

Senator CAMERON—Would it surprise you that in Zambia, for instance, since privatisation of the mining companies over the period of this graph I have, between 2000 and 2004, mining companies paid no company tax?

Prof. Pincus—I just do not know enough about Zambia to know one way or the other. But, if you tell me that is the situation, I am happy to accept it.

Senator CAMERON—And you are not aware that in 2007-08 a windfall tax was implemented and there was a campaign by the mining companies to have that windfall tax removed. You do not factor any of what is happening in other jurisdictions into your thinking?

Prof. Ergas—I come back to the point that Professor Pincus made a moment ago. Our analysis is asking: whatever the situation may be in the rest of the world, does imposing the tax in this way make us better off or worse off relative to a situation where we do not impose that tax?

Senator CAMERON—It is a bit like saying that we have to compete with slavery. How do you justify just ignoring what happens elsewhere? For instance, 0.6 per cent is the basis of the royalty in Zambia. It really is a problem in terms of these countries being able to access decent returns from their mining resources. You don't have any comment on that? You don't care?

Prof. Pincus—The fact that I make no comment does not mean that I do not care.

Senator CAMERON—Do you care?

Prof. Pincus—Yes, of course. I am puzzled to know exactly what it is you are asking me about. If foreign countries behave badly, I am sorry for their citizens.

Senator CAMERON—So you are automatically saying that it is the governments that are behaving badly, not the mining companies?

Prof. Pincus—If the mining companies behave badly, I am sorry too. Mining companies are companies and sometimes they behave badly.

Senator CAMERON—I have to say that your critique is well qualified. On most things you have said this morning you have not been decisive. There has been a qualification in most of the comments you have made. That is because you are dealing with a theoretical situation, aren't you?

Prof. Pincus—No, it is a combination of theory and a smaller number of facts we need to drive the theory. For example, we provided purely theoretical, made-up tables to illustrate a point. As the title of the paper says, it is about the economics of mining taxation.

Senator CAMERON—Would the economics of mining taxation be affected by companies like BHP Billiton, which has set up what is described in the British press as tax avoidance operations in tax haven countries? The report in the British press is that BHP Billiton operates in 24 tax havens, Rio Tinto in 18 and Xstrata in seven. Does none of this stuff impact on any of your analysis?

Prof. Ergas—I would say it is clearly very important that we ensure and defend the integrity of our tax system, including through vigilant enforcement of the tax law. The solution to that is through vigilant enforcement; it is not by designing and implementing additional distorting taxes.

Senator CAMERON—Okay. Let's move on to some stuff on Australia. The Concept Economics report on behalf of the Minerals Council indicated that there would be strong employment growth in the foreseeable future in the minerals sector. Would you have any view that that would differ, that there would be a different proposition now?

Prof. Ergas—I should say, just to clarify the point, I do not believe I was involved in that report, and I do not have the report to hand. I also suspect the report itself was written some time ago. But, all of that said, it may well be, indeed I suspect is likely to be, the case that there will be strong employment growth in the mining industry in this country. The question, of course, from the point of view of assessing this tax is whether the tax will make outcomes in terms of the prosperity and wealth of Australia better or worse than they would otherwise be.

Senator CAMERON—The Leader of the Opposition was talking about 10,000 jobs being lost in the mining sector. Do you have any analysis that would support that projection?

Prof. Pincus—It is not my field for making projections.

Prof. Ergas—Is not something that I have been involved in, but I have not seen that particular analysis that you refer to.

Senator CAMERON—Okay. The RBA have indicated in their statement on monetary policy in February 2011—are you familiar with that?

Prof. Ergas—Familiar in the sense that I read it, yes, but I do not have it in front of me.

Senator CAMERON—The RBA statement said that mining sector investment is it a historically high level. They have a graph, 3.9, projecting that mining investment will continue to boom over the medium term. Do you have any different view to the RBA's projections? Do you take issue with any of those projections?

Prof. Ergas—I think mining investment will remain strong. Again, I think the question is the differential or additional impact that this tax will have relative to a world where, clearly, there is growing demand for our resources and for resources of the kind in which we are abundantly endowed and that demand is increasing greatly. That is the question: at the margin, does this make us better or worse off?

Senator CAMERON—At the margin?

Prof. Ergas—Yes, that is what the analysis that we undertake involves. It says: you have a situation where you have some base case, that base case probably involves continued strong growth in world demand for our resources; that has a series of implications for Australia's economy. Relative to that base case, what is the impact, one way or the other, that this new tax has?

Senator CAMERON—And you are saying the impact is marginal?

Prof. Ergas—It is marginal in an economic sense, which does not mean small. It means it is the change; it is the delta. A margin can be large in absolute terms, but what you are trying to do is to assess the extent of the difference.

Senator CAMERON—In terms of the tax, do you see it having significant effects on jobs?

Prof. Ergas—I see it as having significant effects on the long run path of investment in output which, for the reasons my colleague pointed to a moment ago, will ultimately have effects on demand for labour.

Senator CAMERON—Peter Martin reported in the *Sydney Morning Herald* back on 4 February 2010 that the Ergas report:

Proposes an annual land tax that would extend to the family home and would be used to fund the abolition of real estate stamp duty.

And he reported that you said:

"It would be obvious nonsense to exclude the family home. It would create an unbearably low base."

Is that accurate?

CHAIR—Senator Cameron, we are talking here about the mining tax.

Senator CAMERON—Just let me finish the question.

CHAIR—This seems to be outside the scope of what we are talking about this morning.

Senator CAMERON—Let me finish. Is that an accurate report?

Prof. Ergas—I believe the summary you have read is a considerable simplification, but there is a case, which was also subsequently articulated in the *Australia's future tax system* report, for a broadly based land tax.

Senator CAMERON—So that is the recommendation you made to the Liberal Party: to tax the family home?

Prof. Ergas—No, I said that to the extent to which one implemented a land tax as an alternative to existing distorting taxes then the question would have to arise of the inclusion of the family home. My own view is that there are a number of distortions that are associated with excluding the family home.

CHAIR—Senator Cameron, you straying way outside the scope of the mining tax.

Senator CAMERON—I am not. Do not be so defensive; just let me ask the question. You have to contextualise your questions sometimes, Chair, as you would be well aware. Why did you support taxing the imputed rents of Australian homeowners but not companies that derive

and benefit from these rents via the extraction of Australia's nonrenewable resources at the expense of the Australian community?

Prof. Ergas—I do not think that is a sensible characterisation of the view that we have put. Our argument is not that you should not tax resource rents; our argument is that, to the extent that you do tax resource rents, you should tax them in a sensible way and in a way that minimises any incidental distortions that you may cause. To that effect, we, for instance, provide support for the notion of auctioning off mineral rents because auctioning off those resources will capture the benefit to the community and for the community of the inherent value of that resource.

Senator CAMERON—In your paper that has been provided to the committee, 'Some economics of mining taxation,' you state that the MRRT will reduce the incentive for firms to minimise costs. Your own tax review proposed that the personal income tax system should remove all manner of deductions and exemptions. And then the paper mentions that the MRRT would already remove all incentives to minimise costs. Couldn't one infer from these two comments that you would support the notion of removing deductions for company income tax purposes, that is, a company would be taxed on its revenue earned with no accounting for how it is earned? If so, under the MRRT would this not result in the uplift rate becoming a mute issue as there would be no losses to be uplifted?

Prof. Ergas—The answer to that question in simple terms is no. The proposition is that in respect of personal income tax, and to a lesser degree in respect of the company income tax, one should try to have a wide base with low rates and so not have unnecessary deductions and exemptions. I think that notion is well-established. But that obviously does not mean that you tax income regardless of the costs incurred in earning that income, and no sensible person would recommend anything along those lines.

Senator CAMERON—Peter Martin reports in *Business Day* on 4 February, and he is quoting you, that as an ideal you would like to see the model used for resource rent tax applied to all businesses. Is that correct?

Prof. Ergas—No, it is not quite correct. What I said to Peter Martin, and what I believe he is summarising there, is that there are many attractions in the notion of a cash flow tax. Cash flow tax is very similar conceptually to some forms of resource rent tax. But the cash flow bears absolutely no relationship to the MRRT. It is a completely different tax base relative to the MRRT.

Senator CAMERON—He goes on to quote you as saying that there are significant benefits to the resource rent tax. Is that correct?

Prof. Ergas—There are significant benefits to taxing rents to the extent to which one can do that, but the point I have always made in that respect is that there are many complexities involved and in the long run the best way to attempt to do that is through a company income tax system that is based on some notion of a cash flow tax. But I also have stressed repeatedly that there are many difficult issues—recognised fully, it must be said, in AFTS—in making the transition from the type of tax system we have today to a cash flow tax.

Senator CAMERON—If the company tax model in the PRRT is ideal, why is it not the case for the MRRT, as the two are notionally quite similar?

Prof. Ergas—I would never say that the PRRT is in any respect ideal. The PRRT is in some respects better designed than the MRRT but it is still very far from ideal.

Senator CAMERON—There are incentives as well as obligations on managers to maximise profits for the shareholders, isn't there?

Prof. Ergas—In principle, that is why managers are there. Yes.

Senator CAMERON—You are suggesting that a resource rent tax would encourage managers to maximise costs and minimise revenue raised. How do you reconcile these contradictory outcomes?

Prof. Ergas—In practice, in a tax system which taxes income above the rate of return it can become highly profitable for the firm to avoid the tax liability by either inflating its costs or by smoothing them over time. That will result in an outcome that increases the net cash flow to shareholders but which distorts the decisions the firm takes relative to decisions that, from a societal point of view, it would be efficient for it to take.

Senator CAMERON—Would you support the increase of royalties if it became apparent that current resource price looks set to remain high?

Prof. Ergas—Some such increase in royalties has already occurred. As a general principle, my own view is that the better approach for new projects is to auction off the right to the underlying resource so as to obtain for the community the underlying value of that resource. For existing projects, I think the risk with increasing royalties is that you send a signal that you will increase taxes should projects succeed, or should times be good, without necessarily smoothing or reducing taxes when times prove to be less good—and in that way increase risk and discourage long-run investment.

Senator CAMERON—Is it sufficient for shareholders of these companies to be rewarded while the Australian community misses out in terms of the increased profitability?

Prof. Ergas—I am not quite sure what that question means.

Senator CAMERON—I will clarify it. Is it fair that profits should go back to shareholders; and none of the profits come back to the community?

Prof. Ergas—I do not believe that is correct as a factual matter because of course these entities pay very substantial company income tax and they additionally pay very substantial royalties. There is no doubt, then, a very significant flow from those companies to the taxpayer.

Senator CAMERON—But income tax is paid by all companies, and all companies are not making 60 per cent increases in profits, either.

Prof. Ergas—But when they do make 60 per cent increases in their profits they pay a lot more income tax, and they also pay other taxes as well. The way the tax system is designed, and it may not be—certainly, is not—the best that we could ever dream of, is that those entities that are making high profits pay quite a bit of tax, and those entities that are making losses or no profits pay either no or less tax.

Senator CAMERON—I am confused because on one hand you challenge the issue of changing the resource tax arrangements during a once-in-a-lifetime boom, but you argue for a super royalty. How do you reconcile these two different approaches?

Prof. Ergas—I am not sure I argue for a super royalty.

Senator CAMERON—Did you not indicate that a super royalty is one way of dealing with this, as distinct from an MRRT?

Prof. Ergas—No, I believe we simply said that some states do impose super royalties, and the fact of those super royalties is to increase the tax rate on existing lines and output. I do not believe that we suggest that that is a desirable, much less efficient, way of doing it.

Senator CAMERON—Why is a model similar to the PRRT not suitable for taxation of the profits of iron ore and coal producers, but suitable for petroleum producers?

Prof. Ergas—I do not believe that we have ever said that the PRRT is the ideal way of taxing the resources that are subject to the PRRT. The reality is that there are a number of differences between the PRRT and the MRRT, and those differences tend to make the MRRT a less efficient tax than the PRRT is. But bear in mind that the PRRT is not without its problems.

Senator CAMERON—When BHP announces a profit of \$10.5 billion for the half year ended 31 December 2010, what would you consider a modest rate for taxation on that?

Prof. Ergas—At the moment we tax it through royalties and through the company income tax. So we tax that income already. Our company income tax rates are reasonably high by international standards, at least in the amount of tax that they collect.

Senator CAMERON—You have changed your position, because in your article you state:

Any new Commonwealth mining tax should	
(b) be levied at a modest (internationally competitive) rate	

We are talking about a new tax, not the existing business tax.

Prof. Ergas—I misunderstood your original question.

Senator CAMERON—I am sorry.

Prof. Ergas—I think our position in that respect is that if the Commonwealth believes—or, indeed, if any of the jurisdictions believe—that it or they want to change the basis for the taxation of mining it is important that the rate they set be a rate that is not going to be either out of line in international terms in a way that would disadvantage us, nor be such that in its level and its structure it would be significantly distorting domestically. That said, we have not undertaken the analysis that would lead you to say that the right amount is 10 per cent or 20 per cent.

Senator CAMERON—But it is reasonable to increase the tax—are you prepared to concede that point?

Prof. Ergas—Our point is that you need to distinguish between existing projects and new projects. In respect of new projects, our preferred approach is to auction off the underlying mineral resource or the right to extract that resource. That auction would capture for the taxpayer a present value of the expected rents associated with that resource. In that sense it would capture the entirety of that expected rent for the community. That is obviously a higher tax rate than the tax rates that we have at the moment. For existing projects though, we believe that it is poor policy to impose substantial retrospective taxes, which reduce Australia's tax credibility and increase our sovereign risk.

Senator CAMERON—I will have a question to you on retrospective taxes. I do not have time to ask it today but I will certainly be looking at how you could ever define this as a retrospective tax. I do not want you to go there at the moment but I will put that one on notice to you.

You claimed that the Brown tax, the RSPT, the MRRT and the PRRT are inefficient in practice. How can states and territories introduce an efficient taxation on minerals if you dismiss all these options? What type of role would you recommend to achieve the efficient taxation of minerals? Are you simply saying that it should all be in the auction?

Prof. Pincus—That is certainly the position that I take, which is that all taxes, and it does not matter how well they are designed, have an efficiency cost, and that is the cost to the community as a whole—and I am leaving aside taxes like taxes on smoking and taxes which are designed to get rid of distortions within the economy.

Senator CAMERON—But you said taxes on life—

Prof. Pincus—No, taxes on smoking would be an exception. Some taxes improve the efficiency of allocation of resources because they tax things which are damaging. Leaving them to one side, other taxes have costs and, if you can avoid those costs, then that is a good thing, but you cannot avoid them in almost every tax that we have other than those corrective taxes.

There is an alternative to taxing the profits of mining companies, and that is the upfront auction. It is not a tax but a contractual arrangement made which captures 100 per cent of the market valuation. There is a very slight wrinkle on that. Auction theory tells us that it actually captures the second-highest valuation, and there is no way of avoiding that. It captures 100 per cent of what the market valuation is with that minor proviso and it does not have the distorting effects of a tax. So if the objective is to get for the community the value of the unmined resource

and if a system is available which can do that without distorting the allocation of resources, then it seems like a very attractive thing to do.

Senator CAMERON—So all your faith goes into the auction system even though in practice auctions can deliver a boom and you can actually get a good price in some auctions and a bad price in some auctions. So if there is price signalling and you do not get a good price, then the community has to live with that. Is that correct?

Prof. Pincus—The way of designing auctions is something that huge amounts of effort have been put into throughout the world and, if we are going to run auctions, we would be wise to do them properly.

CHAIR—I have just two closing questions. The first concerns the prospect of reward for shareholders. That is what attracts investment from those shareholders, doesn't it?

Prof. Ergas—Yes, absolutely.

CHAIR—So to the extent that the reward for shareholders is impacted by this tax, it will reduce their attractiveness for shareholders to put additional investment in these sorts of ventures that are impacted by these tactics, won't it?

Prof. Ergas—Yes, it will. Of course the caveat to that is the point we note in the paper and that my colleague referred to earlier. If the tax were designed so that it fell solely on the return above that required to elicit the investment, then such a tax would not undermine the incentive to invest.

CHAIR—But that is where we get into the argument about higher risk and lower risk projects, because the higher the risk, presumably, the higher the return that a shareholder would be looking for before they are prepared to put their resources into that particular investment. Senator Cameron asked about investment in the mining industry continuing to be strong. There are many sections in the mining industry that will not be subject to this tax, such as uranium, gold and nickel. None of these resources will be subject to the mining tax. It is only iron ore and coal that will be subject to the MRRT. Overall, do you think that the level of investment in the iron ore and coal industries, including lower risk and higher risk projects, will be lower as a result of the MRRT?

Prof. Ergas—I think that the long-run consequence of the MRRT will be to reduce the level of investment in Australian mining.

CHAIR—In Australian mining overall, and in particular—

Prof. Ergas—Obviously, in iron ore and coal in particular.

CHAIR—Thank you very much for your contribution to the committee this morning.

Proceedings suspended from 11.01 am to 11.15 am

FANE, Adjunct Professor George, Australian National University

CHAIR—I welcome Professor George Fane to today's hearing. Professor Fane, would you like to make an opening statement?

Prof. Fane—I am very honoured to be invited. Yes, I would like to make a statement. I wrote out a two-page submission, which I imagine everyone has a copy of. Do senators have copies?

CHAIR—Yes, we do.

Prof. Fane—Listening to the first session this morning I felt strongly that in understanding the various taxes it helps to start with and understand the tax invented by the American academic, Professor Brown, just over 60 years ago. The tax recommended by the Henry committee, which is very close to the one originally introduced by the Rudd government, is fairly similar to Professor Brown's tax. The final version, the MRRT, I think can be best understood by seeing how it differs from the other two.

The tax suggested by Professor Brown is a tax on company cash flows. To keep the arithmetic simple, think of the tax at 50 per cent. Every time the company spends a dollar the government gives them 50c and every time the project earns a dollar the government collects 50c. That effectively makes the government into a silent partner, a 50 per cent equity partner. Compared to the original situation, it is exactly as if the government had acquired half the shares in the company. Then the question arises: did they pay for them or not? To the extent that they pay for them, it is in the form of what is called the starting base in the Australian proposal. In other words, if the company was worth \$1 million, to pick a manageable small number, if the government gave it a starting base of \$1 million and immediately cashed it out the way it would under Professor Brown's tax, the government would have to hand over half a million dollars and it would then collect half of all the net cash flows, collect half of the receipts and pay half of the expenses.

Basically, in that case it is exactly as if the government has bought the shares. That is obviously non-distorting, unless the company tries to cheat its sleeping partner, which it presumably would to some extent; sleeping partners tend to do less well than active ones. But, ignoring complications like that, it would be exactly as if the government had bought 50 per cent of the shares. The thing would be neutral; it would not change any decisions. The trouble is that it would not raise a lot of revenue, because the revenue it raised would be exactly matched by the shares that it had bought. That is the neutral Brown tax.

If, to take the other extreme, the government gave the shareholders a zero starting base then it has effectively expropriated half the shares. That will raise some revenue but it appears to me to be undesirable because expropriation looks pretty much like theft and the risk that it is going to be repeated is going to be a substantial discouragement to doing business in the country.

The tax that was proposed by the Henry committee which is more or less identical to the RSPT is really no different to Brown's tax except that when the company's cash flow is negative, for example if it undertakes a large investment and spends far more on investment than it is

collecting in receipts in the current period, instead of the government paying the company half of its expenditure on investment it gives them a government bond. If we wanted to exactly replicate the Brown tax, which I think was the intention of the Henry committee—they were explicit about it—then the interest rate that would be appropriate on which you could exactly hand the company a government bond or you could give them a tax credit which is supposed to be exactly like a government bond is the long-term government bond rate.

The point that the Henry committee did not make, but it should have made, is that it is the long-term government bond rate after tax. Because if you give a company a government bond it is paying interest, if you want to have a neutral tax system, the company should be paying tax on that interest. So the appropriate interest, unless the implicit interest on the tax credits is included in company tax, which I am confident it will not be in Australia, then the appropriate interest rate is not, let us say, five percent of the government bond rate it is that minus the company tax rate, so it is a number like three per cent which is the appropriate carry forward interest rate.

Before I get to the MRRT, for the actual rent taxes that are proposed in Australia and in other countries where there are rent taxes—for example Norway has a tax very similar to the one proposed by the Henry committee—there are various exclusions. So there are things which the companies are not allowed to deduct but which are clearly relevant to earning profits from their projects—investment in R&D, overheads and the construction and use of infrastructure that they have invested in in the past.

So, to the extent that those items of inputs get excluded from the rent tax, you can think of the actual tax, the Norwegian tax or the one proposed by the Henry committee, as a pure rent tax—in other words, something that is exactly the same as the acquisition of shares by the government generally—and, in the case of the one proposed by the Henry committee, at a lot less than their market value. So that is where the revenue comes from—the fact that the shares are acquired for a lot less than their market value. The starting base proposed by the RSPT was not the market value of the projects but the historic cost—the book value. In the case of BHP, in my attempt to compare the two, if I have understood their accounts properly—which is maybe, maybe not—the book value is about half the market capitalisation. If we take BHP as representative and if I have got that number roughly right, the Henry committee was going to set the starting value at half the market value. Then, since the tax rate was 40 per cent, if you combine 40 per cent with paying half the value, it comes to the same thing at the end of the day as expropriating 20 per cent of the shares, and that is where I think most of the revenue comes from. That is basically the reason for my opposition to all these versions of the tax.

I feel that a sensible way of treating mining companies is, first of all, auctioning leases and, secondly, then taxing the income from mining companies just like the income from any other company. The large way in which the Australian tax system fails to do that now is through the too lenient treatment of capital gains. The system of capital gains tax introduced by the Hawke and Keating governments was much better, in my view, than the reform made by the Howard and Costello team, that before we tax capital gains, basically allowing for an inflation adjustment of the acquisition of the assets, and then if you have a mining boom and the shares turn out to be worth far more than anyone could reasonably have anticipated before, that gain is treated as income and it is taxed. I think that is the appropriate way to treat a mining boom and to tax it, and that to tax only half of the nominal gain—to add half the nominal gain to people's income for income tax purposes—is not appropriate. It is much too generous. I think the sensible way to

tax mining and any other resource owned by the community is that, when it is allocated it is allocated by auction and then the earnings from it are taxed exactly the same, regardless of whether you are looking at a mining company or a bank or anything else. That is my view on that.

Then the Gillard proposal, the MRRT, differs from the system we have just looked at by, first of all, having the carry-forward rate on the starting base and on expenditures, periods when the government would have been paying out money if it were following the Brown proposal, but instead is giving credits rather than paying out money. Those credits have been carried forward at much too high a rate. Whereas I am arguing that the appropriate interest rate be about three per cent, they are actually going to be carried forward at about 12 per cent, I think—say, seven per cent in excess of a bond rate of five per cent. That is a very substantial incentive to delay projects, to hold these credits for as long as possible. That is a kind of subsidy to the mining companies.

On the other hand, the reason the MRRT is going to tax risky investments is that if your project is a failure, the government does not want to know about it, is not going to pay you anything and gives you a credit that you can never use. But if your project is a success, the government is going to take their share. That is where the disincentive to risk-taking arises. On that basis if you look at existing projects, in my view there is a strong element of expropriation; the government is effectively acquiring shares. It does not actually acquire the shares, so it avoids the legalistic definition of expropriation, but it acquires the stream of cash flows that give the shares their value. So, from an economic point of view, it comes to exactly the same thing—even if it does not from a legal point of view—at less than their market value.

Applied to new projects, the Henry proposal, the RSPT, would have been not far off being neutral, in my view, except that it was going to exclude various inputs like research and development, everything at the head office level and use of infrastructure so it was going to be a tax on those inputs combined with the acquisition of shares—or something exactly equivalent to the acquisition of shares.

The thing which has not generated much discussion in the press or in the session this morning is that if the projects are not allocated by auction—the Henry committee recommended that they should be—economists almost invariably recommend auctions for better or worse, I guess it is a professional hang up and I am on that team too—

Senator CAMERON—Are you hanging up there too!

Prof. Fane—I am hanging up there too. That is exactly right, Senator. The trouble with an auction is: can you define the thing you are auctioning clearly enough? Where leases are being allocated for exploration and then for development and production, as they are under the current system, the thing being allocated does seem to be defined clearly enough to be allocated, so why not auction it? The answer to why state governments do not auction all their mining rights is, firstly, they are worried that, if you introduce a change, you are putting your head above the parapet wall and you might get knocked off and, secondly, the current rather cosy arrangement where the departments of minerals and energy allocate their licences and know who they are dealing with so they retain a large element of control. I am not suggesting that there is anything

corrupt about it; it is just a cosy, convenient arrangement where the state governments retain a fair bit of control. I think that is probably the attraction.

I see that system as having a large danger, which is that it encourages companies to over-invest in mining projects. At the moment we are having an enormous boom and so the more investment undertaken in the past the better, but you cannot expect to have a boom forever. Where you cannot anticipate the future, you look ahead. If these rent taxes were going to raise revenue from new projects it must be the case that the companies are getting not just a normal rate of return on their capital but a super normal rate of return, excess profits. That is what rent means, an excess profit, a bonus.

But in that case why hasn't some other company competed for the lease rather than allowing it to go to the company that has got it? That is not something that is addressed by the Henry committee or in any of the discussions. I think there is going to be an incentive under the current work program bidding system—the system of negotiations between mining companies and the state government departments in charge of allocating the leases—which leads to overinvestment and the dissipation of the potential rents.

In that case, I think that there is something to be said for royalties. They at least make sure that the community gets something. If you just have a rent tax and you do not have any auction and you just have the allocation through tendering by offering to spend more than the other company on developing the site, there is a tendency to waste the potential rents from the site. So I think that what look like inefficiencies—and what would be inefficiencies if you had an auction—actually help to save some of the value of the site when you have it allocated by a competitive non-auction system, a competitive tendering with expenditure.

I think that covers the points I tried make in the submission.

CHAIR—Thank you very much. You gave us a very succinct outline of a Brown tax. The original RSPT was based on a Brown tax. It might be in theory neutral and not affecting investment decisions but, in practice, when the government becomes the silent partner, as you describe it, and underwrites—as was the case with the RSPT—40 per cent of losses, it does have the potential to create quite a bit of moral hazard, doesn't it?

Prof. Fane—I guess the way that the government tries to protect itself from that is by excluding some of the expenditures which would be included under the Brown tax—the ones I listed, like research and development—

CHAIR—But fundamentally the proposition under the Brown tax/RSPT is that, when the government are a silent partner, they are not part of the decision making around how much risk is taken on and they are not part of the operational decision making, and yet they cover a proportion of the cost in exchange for a proportion of the revenues, which you describe as taking a share in the company.

Prof. Fane—The companies have the opportunity to exploit the government under a Brown tax, because they can engage in transfer pricing, and there is going to be a large legitimate area of doubt as to what are reasonable expenditures. There is no way of unambiguously defining expenditures.

CHAIR—Once you get into that space where the government underwrites—as was the case with the RSPT—40 per cent of costs or losses, that then becomes subject to political debate as to what extent it is appropriate for the government to do it. Of course, there would be pressure on any government that underwrites 40 per cent of losses and costs to take an interest as to the activities of the company that has incurred such losses, wouldn't it? That would then have an impact, wouldn't it?

Prof. Fane—Yes. I think that is right. If the government wants to share in the risks, upside and downside, of the projects, I think the way to do it is to explicitly purchase the equity through the Future Fund or some sovereign wealth fund.

CHAIR—Your point on the RSPT was that it involves a level of expropriation—

Prof. Fane—It can, if the starting base is not the market value of the project.

CHAIR—Which, of course, it was not.

Prof. Fane—Correct.

CHAIR—So the way the RSPT was structured involved, effectively, the government acquiring a share in the company without paying market price for the value of those shares. Is that right?

Prof. Fane—That is correct.

CHAIR—The way you describe it, the MRRT might not be legal expropriation but economically the effect is the same.

Prof. Fane—That is for both of them.

CHAIR—Can you explain why that is?

Prof. Fane—If somebody went to a court and said, 'The Commonwealth is expropriating my shares.' The court would say, 'No, they are not; you are still the owner.' But if the Commonwealth takes half the income stream that gives the shares their value it comes to much the same thing.

CHAIR—And the value of shares is driven by the expected return in the future, isn't it?

Prof. Fane—Yes.

CHAIR—That is, people's expectation of an after-tax return is what drives perceived value and ultimately market value. You talked about how, because of the crediting arrangements, there is an incentive to delay projects and hold credits because there is a 12 per cent risk-free return, effectively, by just holding the credits. Can you talk us through that in a bit more detail?

Prof. Fane—Under the Brown tax, suppose that in a particular period a company has no receipts and it spends \$2 and there is a 50 per cent tax. Under the Brown tax, the government

would give it \$1—or \$1 billion if we wanted to make it large numbers. Under the Henry proposal, the government is going to give it one dollar's worth of government bond. If it really gave it one dollar's worth of government bond the company would have to pay tax on the interest on that bond.

CHAIR—So it is a tax-free return?

Prof. Fane—But in the case of the Henry proposal, the idea was to give them a tax-free government bond.

CHAIR—I am interested in the MRRT.

Prof. Fane—It has a still larger effect because instead of giving them a tax-free government bond that pays five per cent, they will give them a tax-free government bond that pays 12 per cent. A company that have been given a government bond that pays 12 per cent and is tax-free have an incentive to hold onto that bond. They cannot sell it to somebody else; they want to keep it as long as possible. To keep it as long as possible, they want to delay earning the revenue against which they will eventually use it. This is because the way in which they are going to get their return is by taking their credit and offsetting some receipts in the future.

CHAIR—Of course, the MRRT would not apply. They will not be paying additional tax on the 12 to 13 per cent that they have received from the uplift factor the credits. That is right?

Prof. Fane—It is free of company tax.

CHAIR—It is free of company tax, but would they pay any tax on it?

Prof. Fane—No, they would not. It is going to be used as a credit against future payments of resource rent tax.

CHAIR—Which would be less because the credits have been escalated. What you are really saying is that by holding those credits and not incurring the tax you can have a risk-free and tax-free return of 12 to 13 per cent, which you would not be able to get anywhere in the market?

Prof. Fane—That is right. But if you earn the revenue next year that you have to pay this against, then the party is over next year. But if you wait for two years the party goes on for two years.

CHAIR—Is it compounded?

Prof. Fane—Yes.

CHAIR—So a compound return of 12 to 13 per cent, tax-free, does provide quite a perverse incentive to not go ahead with making profits.

Prof. Fane—It is an incentive to develop more slowly or extract the resources more slowly.

CHAIR—And to delay making profits that would put you into the category of having to pay the MRRT?

Prof. Fane—Yes.

CHAIR—Do you think that this tax will see taxpayers gain the tax?

Prof. Fane—I am not sure I understand what sort of gain you have in mind?

CHAIR—I have never come across this issue before, so I am interested to explore it. My understanding is that the original Henry proposal was that we should replace royalties with a profit-based tax because production-based royalties saw the argument that those distort investment production decisions, whereas a profit-based tax does not. Where that is most relevant is the start-up phase; supposedly, some projects may not get off the ground if they have to pay royalties. And in the decline phase, some projects will close down faster under as royalty regime which is charged on production rather than a profit-based tax.

Under the MRRT, if all these companies in both these phases have to continue to pay royalties, those in the decline phase will never be able to use their credits because, presumably, they will never be subject to a mining tax into the future because they will not make sufficient profits. They would have the burden of complying with the tax without any benefit for it, and would still continue to pay royalties. To the extent that it exists this distorting effect continues to be there.

But in the start-up phase, which is relevant for discussion here, I understand you to say that there is an incentive for them to stay in that start-up phase—in the non-MRRT profit phase—for longer, in order to maximise the return from any credits into the future. Is that the argument?

Prof. Fane—Yes, I think that is the argument.

CHAIR—And is your argument that that is an undesirable thing?

Prof. Fane—It is a source of inefficiency, but you are not going to raise tax revenue without generating some inefficiencies.

CHAIR—Yes.

Prof. Fane—Every government is going to need tax revenue, and there are going to be inevitable inefficiencies. The trick is to raise the revenue with the least inefficiency.

CHAIR—Do you think it is appropriate for an Australian government to negotiate a tax with three taxpayers who have a particular interest, excluding all of their competitors, who may have different tax design interests? Is that an appropriate way for an Australian government to negotiate a tax?

Prof. Fane—It is probably one of the facts of life—whoever you have got. It may not be ideal—

CHAIR—You say 'facts of life', but is that fair—if you were one of the companies that were now going to find it harder to compete as a result of the way the tax was designed?

Prof. Fane—If I were one of the little companies, I suppose I would complain about it. If I were one of the big companies I would be happy.

CHAIR—Yes, sure.

Prof. Fane—It is not ideal, but it does not strike me as something particularly iniquitous.

CHAIR—I can understand why the big companies did what they did. They acted in the best interests of their shareholders in the way that they saw it—and as they must, I guess, from their point of view. But is it not incumbent on the Australian government to act in the public interest and to pursue tax design and public policy in a way that is competitively neutral?

Prof. Fane—I guess they were under pressure; they were criticised for lack of consultation, so they did some consultation, and it is hard to consult with millions of small people.

CHAIR—It is not millions; it would be about 300, I guess, that will be captured by the tax.

Prof. Fane—You are asking me a kind of ethical governance question. I kind of sympathise a bit with your point of view, but—

CHAIR—Yes. You and the people who appeared before you talked about auctioning as, essentially, a more efficient way of releasing the value of the resource for the community. On the face of it, it sounds very efficient: there is a tendering process, presumably, and everybody who wants to—

Prof. Fane—I think if you combined that with a rent tax announced in advance of the auction that there would be something to be said for the rent tax in that situation.

CHAIR—Because people can factor that into the value.

Prof. Fane—But the trouble with that is that to a large extent the revenue you would expect to get from the rent tax you would lose at the auction. The value of what you are auctioning would be reduced by the rent tax that you expect to collect from the winning bidder. But not entirely; the rent tax will capture a little bit in addition—that is a kind of a technical thing that I could explain with algebra, but is probably impossible in words now.

Senator CAMERON—I should ask you the same question I asked the other professors.

Prof. Fane—I am expecting it.

Senator CAMERON—You were here when I asked a question about any link to—

Prof. Fane—I have never been paid a ha'penny by any mining company.

Senator CAMERON—Good. Thank you for that. This is a very complex issue. I note on your website that you have an interest in developmental economics, poverty and growth and have looked at things like the gains from the exchange rate unification in Bangladesh. You are focused on the Asia-Pacific, aren't you?

Prof. Fane—In the 15 years before I retired, yes, I was.

Senator CAMERON—I am interested in the issue I raised with Professor Ergas previously, and that is the argument that jobs will be lost with this tax. If you read the press, people are saying the jobs will go to west Africa to places like Zambia, where there is a lot of mining investment. Would that be a fair analysis of what has been projected in the press?

Prof. Fane—Yes.

Senator CAMERON—Given that you have this interest in developmental economics and fairness, does an unfair position in west Africa in terms of governments being able to stand up to the might of these international miners have an effect on what we can do in Australia in terms of getting a fair return?

Prof. Fane—I do not think it has. I take that position that the two academics in the previous session were taking. What Australia does—whether it implements one version of this mining tax proposal or another, or none at all—is not going to affect the system that operates in Zambia. I imagine it would not. I cannot see how it would, but I might be wrong.

Senator CAMERON—During the debate on the mining tax—and analysis was done in many of the newspapers—the miners were determined not to let this tax come in Australia because of implications in other countries for other countries to say, 'We want a bigger share.' Do you not agree with that analysis?

Prof. Fane—I agree with what you have said.

Senator CAMERON—You agree with that analysis?

Prof. Fane—No. Sorry, there were so many negatives in your question that I got lost. I do not think that what Australia implements in terms of a mining tax is going to affect policy in Zambia. If that puts me in disagreement with the mining companies then yes, I am in disagreement with the mining companies.

Senator CAMERON—Now you have got me confused.

Prof. Fane—I am sorry.

Senator CAMERON—Are you aware of the taxation situation in Zambia?

Prof. Fane—Only to the extent that you summarised it for us this morning.

Senator CAMERON—Basically no company tax was paid until the last few years by any of the mining companies.

Prof. Fane—I imagine they would have payroll taxes and stuff like that. I think that would be how Zambia would—

Senator CAMERON—As I understand it, the only tax that came through to government in Zambia was payroll tax, as a PAYE tax. So I cannot understand how you can say that a mining company that is maximising the returns in that sort of atmosphere and that set of circumstances would not have an eye on that country increasing their taxes if we could increase ours. I cannot understand how you could come to the conclusion that it is completely separate. We are in a globalised world, these companies are operating globally, and you say it has got no effect. I just cannot understand that.

Prof. Fane—I am certainly not wanting to be confident about how the political system on what taxes they use in Zambia operates. I did once do a project on taxation in Ghana. From my experience in Ghana I would have thought the constraints on operating the tax system come from the difficulties of administering it, and payroll taxes are a relatively simple thing to operate. I am surprised that Zambia does not collect some royalties, but you are saying that they are negligible.

Senator CAMERON—0.6 per cent.

Prof. Fane—That certainly seems pretty negligible. I do not know the answer. I am speculating, but it does seem extraordinary that the government of Zambia does not set a higher royalty. A royalty seems like quite a simple tax to administer. I guess that is why we have got royalties all round the world. The government of Zambia have control of the country; they are in a position to collect tax. Why they have not set a higher royalty or managed to collect a higher royalty than that does seem like a big puzzle. I do not have the answer to it. So I cannot understand how they have got such a low royalty, but you are suggesting that if Australia introduces its mining tax the Zambians might introduce a rent tax or a royalty. I think a rent tax is a harder thing to administer than a royalty. I would have expected the Zambians, if they were going to tax mining, to have a royalty.

Senator CAMERON—I do not want to go on too much more on Zambia, but the Zambians introduced a profit tax in, I think, at 2007-08 and the miners said if the profit tax was kept they would leave the country and go elsewhere, probably to Australia. So the same arguments are being used by the mining companies. I am sure you are not naive, far from it, but have a look at what Zambia have in terms of their capacity to deal with some of these big mining companies. It is a pretty uneven battle, isn't it?

Prof. Fane—I do not know. If I was the Zambian government I would be tempted to call their bluff. What one is always told in developing countries about taxation and investment is that the thing that puts off foreign investors is all the uncertainty and the graft and the hassles and the risk of expropriation and so on, and that companies do not worry too much about fairly simple low-rate taxes. That was what I thought the conventional wisdom was, but you are certainly getting me off my area of expertise on this.

Senator CAMERON—The point I am trying to make is that it is okay having expertise in a narrow field of economics, but there is a wider political analysis that has to be done that the economics has to be contextualised in. Don't you agree?

Prof. Fane—I do, but I think the point would be more forceful if you or somebody else could explain why introducing the MRRT in Australia was likely to improve the tax regime in Zambia, how it would do it and what sort of tax it would induce the Zambians to introduce.

Senator CAMERON—I am just saying the analysis that was in the newspapers was that the reason the miners were fighting this so hard was that they were global companies and if they conceded in Australia there would be pressure for them to concede elsewhere, and I thought that was a fair analysis. I saw reports coming out of Chile and Zambia saying, 'Yeah, we want to look at this.'

Prof. Fane—But there are lots of countries which have got various kinds of profit tax already, so the introduction of one in Australia is, I would think, unlikely to have a big impact around the world. Denmark and Norway have introduced taxes like this without—

Senator CAMERON—I am not sure how much iron ore they are digging up in Denmark and Norway!

Prof. Fane—No, maybe not; but does it have to be the same mineral in the different places? If the idea is that they will see the tax regime in Australia and think, 'That tax regime would be a good idea for us,' or they see Australians taxing their minerals sector and think, 'Why don't we tax ours?' then Denmark and Norway are relevant.

Senator CAMERON—That is the view you have. I have not seen your analysis of the MRRT, but are you arguing that jobs will be lost under that tax?

Prof. Fane—I do not address that in the submission I have given you. Maybe I could anticipate your question by saying that, obviously, I do not have a numerical computer model with all the relevant parameters in it, and so I do not have any idea how many jobs would be lost.

CHAIR—Neither does the government.

Prof. Fane—Well, they have a very large Department of the Treasury to estimate these things, and I am a retiree. Given that the tax is clearly a tax on risky investments, for the reason I set out before—it is an increased tax on taking risks—it would be reasonable to assume that it is not going to raise employment; it is going to reduce it a bit. Whether it is a trivial reduction or a large reduction, I would not know. As you were discussing with the previous witnesses, I imagine that the mining boom and so on will continue, investment will stay high and jobs will continue to grow. The MRRT is going to have a bit of a negative effect—it might be small compared to all that. I do not have any idea of the numbers.

Senator CAMERON—But, in terms of the current number of employees in the mining industry, would your analysis be that there would be a loss of jobs there? The figures I have heard are that 10,000 jobs will be lost. Have you seen anything like that?

Prof. Fane—No. I feel I have answered your question by saying that I do have the ability to give you any numerical answer.

CHAIR—Senator Cameron, I think the witness has answered the question.

Senator CAMERON—Can I take you to the *Statement on monetary policy* by the Reserve Bank. You may not have it in front of you.

Prof. Fane—No.

Senator CAMERON—Graph 3.9 shows that mining investment will grow strongly over the near term. If there is a strong growth in mining investment, would your analysis be that jobs would increase?

Prof. Fane—Yes. But it is what we are comparing. I am making the very modest point that, compared to what would otherwise happen, having the MRRT will have some negative effect on jobs and on investment. I do not know how big that is. If it is all imposed on a background of a mining boom, which it is, then jobs and investment will grow.

CHAIR—But it is in relation to the iron ore and coal industries, of course, because the mining industry as a whole—

Prof. Fane—Sorry, yes.

Senator CAMERON—Senator Cormann, I thought we had an agreement here, and I must say it gets a bit rich when you can go for over an hour without interruption and I get limited time and you will not let me ask my questions. This is totally unfair.

CHAIR—Senator Cameron, I asked 10 to 15 minutes of questions of this witness. I am asking a supplementary question to this question because I think you are being quite misleading. There is nothing inappropriate about that whatsoever. I would just make the obvious point that the mining industry as a whole is much broader than the mining industry in relation to iron ore and coal, so the comments that you quote, again, and that you have quoted before—

Senator CAMERON—I do not need a lecture from you, Chair.

CHAIR—Senator Cameron, you are out of order.

Senator CAMERON—You are out of order. Have I got the call?

CHAIR—I am just asking the question as a follow-up to Senator Cameron's question. The MRRT, of course, applies to iron ore and coal. So, to the extent that it is going to have an impact on investment in the mining industry, that will be on the mining industry in relation to iron ore and coal; it will not have an impact on the broader mining industry. The comments that Senator Cameron just read out, from the Reserve Bank, relate to the broader mining industry. So the impact on jobs and on investment of the MRRT will be targeted at the iron ore and coal industries—that is right, isn't it?

Prof. Fane—You have given an answer which I should have given.

CHAIR—Thank you.

Senator CAMERON—Oh! There's a surprise! So you are adopting the chair's answer now, are you?

Prof. Fane—I am agreeing that he has made a good point which, if I had been a bit quicker, I might have made.

Senator CAMERON—Okay. In relation to the auctions: how long does a typical mineral deposit and a mining project last for?

Prof. Fane—My understanding is that it varies from state to state. There are 10-year decreases. There are options for renewal, and the proportion that is renewed declines over time. Say you get an exploration licence for two or three years, and then there is an option for renewal but maybe for 50 per cent or 70 per cent or something like that; it all has to be renegotiated again. As to having a precise numerical answer, I am not aware that anyone has that.

Senator CAMERON—Some leases could take 40 years to extract the resources.

Prof. Fane—On the production side?

Senator CAMERON—Yes.

Prof. Fane—Yes.

Senator CAMERON—So are you confident that, over a 40-year period, you can factor in all of the vagaries of prices and profits in an auction for a lease for 40 years? What I am saying is: can you be sure governments get value for their resources?

Prof. Fane—Obviously you cannot anticipate what is going to happen over the next 40 years. But it is a bit like selling your house: the person who buys it might own it for the next 40 years; they do not know what is going to happen to the housing market over the next 40 years. But auctioning it is the best way people have come up with.

Senator CAMERON—But governments do not have to behave like homeowners and get caught in that circumstance, do they?

Prof. Fane—I am not sure that I see why you think they are going to get caught. The person who is selling may end up with the better side of the deal or they may end up with the worse side of the deal

Senator CAMERON—Well, let us assume, for the purposes of this, that they get the worse side of the deal. If you get the worse side of the deal, which you have conceded can happen, then it is not the government that gets the worse side of the deal. Governments come and governments go. It is the Australian community who gets the worse side of that deal, isn't it?

Prof. Fane—If the mineral prices turn out to be much higher than people were able to anticipate when the auction occurred—

Senator CAMERON—I would have thought that there would be some actual evidence here.

Prof. Fane—but if they turned out to be lower, then the situation would be exactly reversed.

Senator WILLIAMS—I think that noise is coming from your friends out there, Senator Cameron.

Senator CAMERON—I am sorry; I am having difficulty hearing. Could you just explain?

Prof. Fane—You are wanting to focus just on the case in which ore prices turn out to be higher than people expected when the auction occurred, and then the Australian community loses out. But if we also look at the case in which ore prices turn out to be lower than people expected when the auction occurred then the Australia community has got the better side of the deal.

Senator CAMERON—So auctions are unpredictable in terms of the outcome for the community.

Prof. Fane—That is correct.

Senator CAMERON—You might do better; you might do worse.

Prof. Fane—Upfront you know exactly what you have got. Later on, if you look at it 10 years down the track, you might wish that you had not auctioned it or you might be very glad that you did. I think the sensible thing is to have a bob each way. You can auction the asset and then if you want the community to get some of the return you can either combine it with the purchase of shares, you can use some of the proceeds of the auction to buy shares through a sovereign wealth fund, or you can have a rent tax. The two things are going to be very similar. The rent tax involves quite a lot of administrative complexity but in theory should raise a little bit more revenue. The buying of shares through a sovereign wealth fund does not in theory raise quite as much revenue, but it is a lot simpler.

Senator CAMERON—You have considered that we could end up not getting value for the resources in the ground through the auction process. That is quite a reasonable proposition that you have put. If you go to an auction, the money that comes from the auction under the current circumstances would go to the state government?

Prof. Fane—Yes.

Senator CAMERON—The royalties would go to the state government?

Prof. Fane—Yes.

Senator CAMERON—How do you then deal with spreading the benefits from a state that is lucky enough to have large mineral resources? How do you spread the benefits across the rest of the country and deal with issues that you have been interested in over the years—that is, over a growth across the rest of the economy? How do you deal with that?

Prof. Fane—I suppose you have got the Commonwealth grants arrangements.

Senator CAMERON—Horizontal fiscal equalisation.

Prof. Fane—Yes. I guess I am also saying there is no simple answer. I am trying to avoid saying, in case you do not like the answer, that you are making a good point and I accept it. But when I made that response to the chair you seemed to object strongly. I feel you are making a good point. But if Western Australia owns all the resources, and they operate the auctions and the royalties, they will get all the revenue. There is not going to be a simple answer to sharing between one state and the others.

Senator CAMERON—But if there was a mining resource rent tax you have a bit more flexibility over a 40-year period to actually make sure you have got a proper return.

Prof. Fane—Obviously with the rent taxes the Commonwealth is getting some of the return that would otherwise have gone to the state governments directly; they are not getting it through the Commonwealth grants process.

Senator CAMERON—Why is it appropriate to have a petroleum resource rent tax—even given that the previous two professors have said there might still be issues with it—that has operated for decades in the petroleum and gas industry and not to have a mining resource rent tax in the minerals industry?

Prof. Fane—When the PRRT was first introduced, it was combined with cash auctions. I supported that and I have said in the context of onshore minerals that combining auctions with rent taxes has got quite a lot to be said for it. But exactly the same arguments apply to the PRRT and to the MRRT. They are both tax-risky investments. It is a downside of the PRRT that it is a disincentive to undertaking risk.

Senator CAMERON—Professor Ergas has also proposed the super royalty approach. What are your comments on that?

Prof. Fane—I do not know what Professor Ergas's super royalty is. How does a super royalty differ from a royalty?

Senator CAMERON—As I understand it, it is when you have periods of high profitability—

Prof. Fane—You have a higher royalty rate—

Senator CAMERON—During a period of high profitability or super profits.

Prof. Fane—That tends to be what happens in practice, but that would not be a proposal that I would support. I realise that governments tend to do that.

Senator CAMERON—So if I can summarise your position: you go auctions plus royalties, and that is how you get the stream, and to get a national outcome you use horizontal fiscal equalisation. Does that summarise your evidence here today?

Prof. Fane—If you have got the auctions, I would be hesitant to have a royalty. In terms of the theory, it would say: do not have any royalty; just have the auctions and perhaps have a rent tax like the PRRT which does not discriminate against risky investments and does not involve this incentive to delay. If I were going to have a royalty, it would be because the administration

of the system might not work in practice the way it does in theory. A royalty is nice and simple and perhaps the theory, which ignores the complexities of administering the tax system in the real world, does not give royalties their full due—their simplicity.

Senator CAMERON—Why do you think countries that have got significant resources—not Third World countries but advanced economies—are moving towards a profit based tax in relation to minerals as distinct from royalties? They are moving away from royalties to profit based.

Prof. Fane—I guess I was not aware that that is globally true.

CHAIR—Do not assume that it is true just because it has been put to you.

Senator CAMERON—There is quite a lot of evidence that that is where countries are moving to. Royalties are still a feature in countries where they do not have a lot of resources, but even in parts of Africa countries are now considering profit based tax. You can check that if you like, but assume I am right: why do you think they would go down that track?

Prof. Fane—If we are just comparing royalties against a profits based tax, providing you are confident that the lack of a cash auction is not leading to the dissipation of the potential profits through over lavish proposals by the companies, then there is a lot to be said for the profits based tax. My arguments against the profits based tax are in the context of the Australian work program bidding—if we use that for the system of negotiations between the companies and the departments that allocate the leases. If we can be confident that that system does not lead to dissipation of the value of the resource through over lavish bidding then there is a lot to be said for the profits based tax relative to the royalty.

I think the auction and the pure form of rent tax, the first one we had, applied to new projects is pretty close to my first best proposal. My first best proposal is probably instead of the profits based tax to have the purchase of equity by the sovereign wealth fund. The profits based tax is not going to raise much revenue. The profits based tax raises its revenue by expropriating the existing shareholders, if it is announced in advance of the auction it is mostly going to subtract from the price paid at the auction but it does give the community a share in both the upside and the downside. You have emphasised that if we do not have it the community will not share in the upside, but if we do have it they will share in the downside.

Senator CAMERON—Thank you.

CHAIR—Senator Cameron mentioned that auctions are a bit unpredictable in terms of their revenue. I guess everything is unpredictable. The revenue estimates from the MRRT are quite unpredictable, aren't they?

Prof. Fane—I guess the auction is unpredictable before you hold it. Once you have held it then your uncertainty is removed—the uncertainty as to what you have got—but there is always still the uncertainty as to what you might have got if you have held on to the resource yourself instead of auctioning it off, if the community had held on to it through a rent tax. Obviously, the returns from the MRRT are very hard to predict also.

CHAIR—Whereas with revenue from royalties, royalties are easy to administer and the revenue is pretty stable isn't it?

Prof. Fane—I guess that is right. They are relatively stable. They are set as a percentage, it goes up and down with the mineral price. It does not fluctuate as much as the profits would.

CHAIR—Ad valorem royalties which royalties on iron ore mostly are, obviously go up as the value of the resource goes up and as volume of production goes up but that is reasonably predictable. It is quite stable—you do not get the significant ups and downs that we have already seen in the estimates of the MRRT revenue just over the last five months.

Prof. Fane—Profits obviously fluctuate more than revenue when the source of the fluctuation is a change in price.

CHAIR—At present we have a circumstance where companies mining projects pay a royalty on production which is on the value and the volume of the resource as it is extracted irrespective of profits. Then of course we have the profit based tax which is company tax. If all we had across the board was a profits based tax what would that do—

Prof. Fane—A rent tax.

CHAIR—Rent tax is supposed to be a—

Prof. Fane—The difference between the two is how the tax system treats investment. Under the pure profit tax you can deduct the whole amount of investment on the day you spend it—and you either get cash back or, if the government does not want to pay out cash, it gives you a bond or a credit against your future tax payments. Under an income tax you can only depreciate your investment over its economic life. So when you say profit tax—

CHAIR—The government calls it a profit tax.

Prof. Fane—There is a sense in which it applies to profits but it is a different concept of profits from what the rent tax is going to look like.

CHAIR—Sure. The government talks about it as a profit based taxed. Income tax is the ultimate profit base tax and it takes nearly all cost bases into account. The MRRT is a profit based tax that only takes cost base into account up to a certain point because the tax is to be applied at the main gate. There is an artificial calculation as to what the profit is at a particular point in time at the main gate. Rather than having a combination of production based royalties and company profits, if all of it is fundamentally profit based to different degrees doesn't that provide a perverse incentive to minimise profits in Australia and maximise profits by value adding offshore?

Prof. Fane—I guess it gives you an incentive to engage in a bit of transfer pricing.

CHAIR—And the government say they will try to minimise the risk of transfer pricing, which will give us a whole additional layer of administrative and compliance complexity. But taxation does drive behaviour, doesn't it?

Prof. Fane—When you refer to a profit based tax, I think that is the same as what I am calling a cash-flow tax—it is the Brown tax, in other words.

CHAIR—The MRRT is a not a Brown tax as such; it only kicks in at a certain level of profit. Doesn't that provide an incentive to stay below that level of profit for as long as you can, and is it in our national interest to have it like a tax system because it is totally profit focused whereas with royalties there is a return to the community irrespective of profits? As soon as the resources is taken out of the ground the company has to pay a return to the community irrespective of profit. If you have got the MRRT and the company tax as the alternative arrangement, you really have an incentive even more so than now to minimise your profits, don't you? Is that a good thing?

Prof. Fane—I do not think you do have an incentive to minimise your profits. If we started with the purer form of the profits tax, the RSPT, which is much closer to a pure profits tax than the MRRT, then it is neutral in the sense that the decisions that led you to maximise the whole of your profits in the absence of any tax will lead you to maximise—you will have the same incentive and make the same decisions if all you are getting is half the profits. You do not want to minimise your profits because the government is taking half of them. If they apply the tax at, say, 50 per cent—that is just to keep the arithmetic simple in discussion; the actual number is 22 per cent—

CHAIR—You said earlier that it would reduce the incentive to invest in a higher level projects.

Prof. Fane—But now we are going into the MRRT—

CHAIR—That is what I am talking about.

Prof. Fane—On the one hand, the treatment of tax credits by the government is mean in the sense that, if the project fails, you cannot use them. So there is the disincentive to taking risk. On the other hand, the treatment of the tax credits by the government is too generous. They are being accumulated at 12 per cent tax-free, whereas they should be accumulated at five per cent and pay tax—in other words, at 3½ per cent tax-free. I do not think that produces an incentive to minimise profits. You still want however much of the profits the government takes and still want more rather than less as long as the tax rate is less than 100 per cent. But it gives you an incentive to develop a mine more slowly than you would if the tax credits were being carried forward at 3½ per cent.

CHAIR—Or to realise the value of the resource offshore.

Senator CAMERON—Chair, can I draw your attention to the time.

CHAIR—Yes, it is 12.29 pm. This is my final question; we are going to close. As I said: or to realise the value of the resource offshore.

Prof. Fane—But the resource is tied in Australia, isn't it? If we are talking about a resource in Australia—

CHAIR—You add value to it, of course. We have been trying for a long time in Australia to build up value-adding rather than just digging it up and shipping it out.

Prof. Fane—But the value-adding is not going to be subject to the MRRT.

CHAIR—I would like to explore this further but, as Senator Cameron has pointed out, we have reached the time of 12.30 pm. Thank you for your contribution to the committee.

Proceedings suspended from 12.31 pm to 1.30 pm

ROLFE, Professor John, Professor in Regional Development Economics, Central Queensland University

FREEBAIRN, Professor John William, Ritchie Professor, University of Melbourne

CHAIR—The committee will come to order. I welcome Professor Rolfe, and I note that Professor Freebairn will join us at 2 pm. Professor Rolfe, would you like to make a brief opening statement?

Prof. Rolfe—I have prepared something which highlights points in four key areas. First of all, I have a few points to make about underlying justifications, and a little bit about the specific details of the MRRT. I really want to focus on the impacts on the regional areas. I also have some comments about how any income from resource rents should be allocated.

I think there are clearly well established economic principles for resource rents and there is a very strong case for a resource rent tax as opposed to royalties. But there are three particular points I want to raise about the underlying justifications. The first is that in the Henry review and in the subsequent design of the super profits tax and the MRRT, there is really a confounding effect, and that is between the issue of design—that is, whether it should be a tax as opposed to a royalty or some other system—and scale—that is, the rate at which it occurs—and the purpose—that is, the reasons it is being used. Essentially, I am very supportive of the resource tax on economic grounds. I have a lot more criticisms about the scale at which it is applied, and about the purpose. I will explain those.

The second key point is that a major problem with the Henry review in this area, and the subsequent justification of the resource tax, is that it does not put enough focus on capital. Clearly, an argument is that the resource tax is appropriate to minerals because it is relying on extractive industries. But the real economic argument, the sustainability argument, is that as we deplete natural capital it should be replaced with other forms of capital. The idea is that your total capital stock does not fall. So, clearly, you do not want proceeds out of extractive resources to go into consumption because that is running down your capital base. That is the Nauru example. So there should be a stronger sustainability framework and there should be much more clearly a very transparent system for saying that reductions in natural capital will be replaced by other forms of capital.

The third key point that I would like to make about the underpinning reasons is that I think the Henry review downplays the important role that property rights and private investment have, as well as public investment, in creating resource rents. This is where there is a difference between text book economics and the real world. In textbook economics it assumes that we have a resource out there, and because of its physical location and the fact that you cannot shift it, it can earn these super profits. It takes that as a given and then looks to the ways of allocating those super profits, or rents as we call them. The problem is that both public investment and private investment over time create those rents. Let me give you a couple of examples to show you what I mean. Imagine there is a mineral resource in central Australia that is so far away from anywhere that nobody can mine it. It is not economically viable to extract the resource. Because it is not economically viable there is no rent available. Imagine then that public funds—state or

Commonwealth—are used to build a railway beside that resource for another purpose. Suddenly that mineral deposit has got access to transport; suddenly it is economically viable and there is then economic rent available. But that economic rent has been generated in this case by public investment. There is a strong argument that a lot of the ownership of the economic rent is due to public investment.

For the next example, let us say we have got a mineral resource in Central Australia which is unfeasible to mine and then, by accident, a private investor builds infrastructure beside it so it suddenly becomes valuable. There are superprofits available, so rents are available, but in this case the rents have been generated by private investment, accidentally. Is it then fair to say that all of those resource rents are really public property?

The issue that I think has been missed is that resource rents are generated by both private and public investment. The argument that I am making here in this statement is that there are at least three major components of resource rents, so when you are thinking about how it is generated and how it should be distributed there are three key arguments. The first is that resource rents are generated by a lot of private investment: as firms put money into exploration, development and other activities they increase the rents available. The second is they are also generated by a lot of public investment: investment in railways, ports, roads, mineral exploration—those things all contribute. The third is that resource rents are very important to make sure that we have a balance of capital so that we are replacing natural capital with other forms of capital. So I think that the Henry review is a little bit simplistic, and that is one of the reasons why there is so much argument.

Essentially, the Henry review is saying: 'Virtually all of this resource rent is available for capture if government wants to, it could all be taken by government, and we'll set a rate that's a bit lower.' But in fact there are these opposing drivers for resource rents: there is clearly a strong government role for both the investment reason and the capital reason, which suggests that the resource rents or the amount of capture by government should be well above zero; and there is also a very strong private interest in there, which means that any tax on resource rents or any royalties should be well below 100 per cent. The resource super profits tax and the minerals resource rent tax are both in the middle somewhere—it is just that the Henry review did not explain why it is in the middle. The Henry review just came up with a number, but there was really no justification there for it. That is the first key problem—that we need a lot more rigorous analysis.

I have a couple of small comments on the design of the MRRT. The changes that have been made to the previous resource super profits tax clearly favour the mining industry. The transition arrangements look quite generous. I think it is very difficult to assess if the arrangements are optimal; we simply do not have the information. One straw in the wind is that the level of investment coming into the mining sector is increasing very rapidly. It is at probably a record high: more than four per cent of GDP now. So we have got hundreds of billions of dollars in the investment pipeline, which suggests that the proposed arrangements under the MRRT are not frightening off investment.

The third key area I want to talk about is the impacts on regional areas and the adjustments for the two-speed economy. Clearly some of the work I have done in Queensland with my colleagues shows that the mining industry generates very substantial employment and economic impacts that are actually really widely spread. Roughly half of it goes straight to Brisbane—to the capital cities—but the other half in Queensland get spread around the regional economies, so anything that impacts on the mining sector will slow down regional economies. This is the area where I want to make the other set of comments. The debates about the resources sector and the rents are assuming that everything else is working well. But, in fact, the mining industry generates quite a lot of spillover effects—what we call externalities—and at the moment state governments are using royalties to address those spillover effects. So as well as the other purposes that I suggested rents should be used for, they are also used to deal with some of these issues. There are some at the regional level and some at the national level.

At the regional level, mining activities generate a lot of things like extra demand for infrastructure, a lot of population pressures, a lot of pressures on services, houses and all of those sorts of things, and they create their own sets of issues. For example, because houses and wages go up it is very difficult for regional economies in mining areas to diversify; they get locked in to mining activities because it is too expensive to do anything else.

That is what we call a type of Dutch disease. Dutch disease is named for an effect in Holland in the 1960s when the North Sea oil was discovered. What happened was that because the small economy changed very quickly to focus on oil production it sucked all available labour and resources into that sector of the economy and manufacturing collapsed. So Dutch disease is where you have really rapid growth in one sector that causes some adverse economic impacts on other sectors, and we are seeing some evidence of that in regional areas. So at the moment the responsibility for some of those spillover effects is on state governments. They use money from royalties to invest in roads, provide some of those services and deal with some of those impacts on regional economies. I think that is an important use of that type of funding.

We also have what we call Dutch disease issues at the national level and resource curse issues. At the national level, Dutch disease impacts are mostly about the exchange rate. Because we have really rapid growth in the resources sector it pushes up the Australian dollar and that makes some of our other export industries struggle. The keys ones that are affected are, of course, agriculture, tourism—probably very badly for tourism—education also suffers and, in a roundabout way, manufacturing suffers badly too because the high Australian dollar makes our manufacturing sector very sensitive to lower cost imports.

It is very difficult to do anything about the exchange rate. Really, the only thing that we can do is increase productivity. This is where improving productivity across sectors is the only real defence. It is very important then that what is captured for the public in resource rents is then used to invest back into the economy to increase productivity. That is the quid pro quo for dealing with an economy that is going through these structural issues.

The final comments I have are about the allocation of resource rents. What I am suggesting is that there are really four key reasons for having resource rents. One of them is to reward the private sector for investment and development. It is very important that there are resource rents so that they make that level of investment—because of the spin-off effects of growth in the economy. The other three are all reasons that some level of resource rent should go to government. The first is that it is a return on public investment, particularly by state governments. The second is that it is important to address the key spillover effects at regional, state and national levels—and that includes providing some of the infrastructure and services

and dealing with the adverse terms of trade. The third key area is to maintain the stock of capital. This is to make sure that our rundown in natural capital is replaced by other forms of capital.

When we look at the proposed allocation of funds, I think at the moment there is not a strong justification for allocating funds to superannuation. I see that as being just a form of deferred consumption. It is not clear to me that funds from a resource tax will deliver net capital increases, so we need to make sure that that is more transparent. And given that some of the key reasons for having resource rents going to public sources are tied up in state government roles, it is not clear what principles and mechanisms are in place to allocate funds between state and federal governments.

CHAIR—Thank you very much for your opening statement. Professor Freebairn, do you want to make your opening statement now or would you prefer that we ask questions of Professor Rolfe first and then come to you in the second half?

Prof. Freebairn—I am happy to go along with what suits you.

CHAIR—Maybe we will kick off on the basis of Professor Rolfe's statement. I invite Senator Cameron to ask some questions.

Senator CAMERON—Good afternoon, Professor Rolfe. There are lots of professors today! This morning we had Professor Ergas, Professor Pincus and Professor Fane arguing what I think would be a completely different position to yours. The argument that they put up—and I do not want to misrepresent their position; you would probably have read some of the positions that they have put forward—seems to me to be that the MRRT is going to affect jobs and investment and that you are better not having an MRRT and you should have an auction process to try and get the rent upfront at an auction and then have some type of royalty to deal with that. I think Professor Ergas has actually proposed some type of super royalty, which seems to be a bit at odds with some of his other arguments. How do you deal with this argument about auction and royalty being the way to get the proper return to the community?

Prof. Rolfe—There is a very good argument for auctions. The difficulty that I see is that it is very hard to find the point at which to apply the auction except if it is at the exploration point. Essentially what happens is that you have got these stages, from exploration through to development, and some mineral resources change hands several times before they are actually fully developed and operational. At each point along that continuum, as better information comes in and as firms sink capital in, the potential profits increase, so your rent increases over time. But it is very difficult, in the process as I see it, to have an auction once we are starting down the development phase. Firms would be very reluctant to commit capital into development if they then lose the rights to have the resource. So auctions, I think, are extremely useful in auctioning off exploration rights They may be very useful as a test case to work out what the right balance is between zero and 100 per cent of allocation between public and private interests. I think there is a role there. But in terms of auctions being useful in replacing royalties, I am not sure that it is technically very easy to do it, so I think some force of resource rent, which is effectively another way of achieving the same broad outcome—except it is really hard to identify the rate—is preferable.

Senator CAMERON—I think the argument that was put forward is that the auction will be a market based approach, and the market value of the commodity will be reflected in the auction price. If you have the auction price reflected in the market value for the period of the operation of the mine, there was some argument that you do not even need royalties.

Prof. Rolfe—I cannot see how it would work in practice. A company is not going to invest \$15 billion or \$30 billion in developing a major asset if they then have to turn around at year one and face an auction for the rents. The problem is that you can only effectively auction it right at the very beginning, at the exploration stage, when there is almost no information—and of course rents are very low then, so I am not sure that it is in government's interest to do it.

Senator CAMERON—There would be some information asymmetry in an auction. But that information asymmetry would be less for an Xstrata, a BHP and a Rio Tinto compared to a small player wanting to try and come in. Would it be correct to say that the auction would favour the big players with the information they have available?

Prof. Rolfe—There is some argument that it might. You have got a timing and a risk problem as well. If you take the exploration stage, it might be 10 or 15 years from exploration point to operation point. In 10 or 15 years there are a lot of unanswered questions about what public infrastructure is going to be, what port access is going to be and whether there will be private transport options. Because of all those uncertainties, it is a very large risk for a company to take. That is why bigger companies would be favoured in an auction process at the early stage if you are trying to capture the resource rents right through to development.

Alternative ways of trying to do that would be to make some public commitments about what the level of infrastructure and access will be over time. You would have to try and tighten it up to give the market more certainty if that was to occur.

Senator CAMERON—I come to this argument that the MRRT or the resource super profits tax would result in a loss of employment. I have asked a number of the professors whether they have had a look at the statement on monetary policy from the Reserve Bank in February. I am not sure if you have but I will take you to graph 3.9, which shows a massive increase in mining investment. I have asked the Reserve Bank whether this massive increase in mining investment is companies saying that they 'might' invest. The Reserve Bank said that has been sifted out of the equation and this is investment that is ongoing. Given there is this massive mining investment, can you understand why anyone would be saying 10,000 jobs will be lost in the mining industry as a result of the MRRT?

Prof. Rolfe—That is not my view.

Senator CAMERON—Or the carbon tax? I do not want to go down the line of the carbon tax but there is an argument that these will bring 10,000 job losses to the industry.

Prof. Rolfe—There is no doubt the amount of investment coming into the country with mining is huge. It is several hundred billion dollars. It is more than four per cent of GDP, which is the highest rate we have had in 150 years in terms of the proportion to GDP being invested, so it is massive. But, at the same time, any impacts of the MRRT at the moment are disguised to a large of extent because prices are also extremely high. We are at the top of the resource cycle;

profits are very high. There is a lot of scope for mining companies to absorb some loss of profits. So I do not believe there would be much change in jobs. The only change that I would see from a resource tax, at whatever rate, would be that it would influence the rate of new development.

There is no doubt the industry is growing. It is going to increase employment. It is a question of: how fast does it grow? If a resource tax was at a very high rate, it would slow down that rate of future growth. If a resource tax was at a lower rate, it would not slow it down as much. I do not see it would be a loss of employment.

Senator CAMERON—One of the issues that you have raised is what you described as a two-speed economy. I have heard it described in other ways—that it is not two-speed, it is even worse than that across the economy. If you have state based royalties with these massive profits—a 60 per cent increase last year in profitability for the minerals sector—how do you distribute these profits across the country if you are simply based on a state based royalty? Even if you have an auction upfront, which becomes the property of the state, how do you deal with horizontal fiscal equalisation?

Prof. Rolfe—That is a big topic. There are quite a lot of points to be made on that. We have a two-speed economy. One of the mistakes that you often see in the public press is that is talked about in terms of being the resource rich states against the other states. That is not true. A lot of the wealth out of mining flows through very quickly into New South Wales and Victoria, partly because of taxes and a lot because of the business supply chain. The economic impact of mining does not stay in the resource states. The second big point to make on this is that the two-speed economy or 10-speed economy or whatever—

Senator CAMERON—The multi-speed economy.

Prof. Rolfe—or multi-speed economy cuts across economic sectors. The sector that is worse affected out of this is probably tourism. It is one of the ones that is doing it toughest because of the exchange rate and the pressure on wages, pushing them up. Queensland and to a lesser extent Western Australia are probably worse off than the other states, because they have the high exchange rate and the tough competition for labour. Tourism is suffering there. To address the two-speed economy by taking money out of Queensland and Western Australia and giving it to Tasmania and South Australia misses the point. It has to be by sector. I had another point.

Senator CAMERON—Farming.

Prof. Rolfe—Yes. Agriculture is certainly affected as well. It varies with agriculture. Cotton and grains have higher commodity prices and sugar is high at the moment. But with beef there has been no real change. So the higher exchange rate—

Senator WILLIAMS—Beef has probably gone up 20 per cent in the last six months.

Senator CAMERON—Not until Coles and Woolies get hold of it.

Prof. Rolfe—I do not think so.

Senator WILLIAMS—I follow the markets every week.

CHAIR—I have a few quick questions. You mentioned in your opening statement how you favour a resource rent tax instead of royalties. But the MMRT is not actually a tax that is introduced instead of royalties, is it?

Prof. Rolfe—No. That is the unfortunate thing. It has it a bit of both ways, doesn't it?

CHAIR—The reason that I am asking is because a lot of the arguments of the advocates of the MMRT are framed in the context of going for a more efficient resource rent tax rather than going for royalties. But what is on the table comes on top of royalties, doesn't it?

Prof. Rolfe—The royalties are credited back. As I understand, if a firm such as BHP pays royalties to the state government but then makes no profit on that operation then the royalties will be credited.

CHAIR—That is right. The argument that Ken Henry used in his report as the policy justification for a resource rent tax rather than a royalty charged on production is that it remove distortions in investment and production decisions for projects in their start-up phases that otherwise might not get up and for projects in their decline phase that might otherwise close sooner because the royalties are unaffordable. But projects in those phases of development will continue to pay royalties. They may well get credits but they will not get refunds. The MMRT does not replace state royalties. To the extent that there are distortions, those distortions will continue, because royalties will continue to be payable. Unless you end up paying more tax at some point, you will never get a refund.

Prof. Rolfe—I am not as familiar with the actual mechanics. My advice is that it would be much better to come up with a sharing agreement between the states. In a perfect world, you would do away with royalties.

CHAIR—Of course, the recommendation by Henry was that a profit-based resource rent tax replace Australian territory royalties. His recommendation was also that the Australian government should negotiate with state and territory governments on how that was to happen as part of a fairer and simpler tax system. But, of course, my argument is that—and I guess I am inviting your comment—that did not happen. There were no such negotiations with state and territory governments before the RSPT or the MRRT were announced, which is why we initially had the refunding arrangement and now have the crediting arrangement and all of the complexities that follow with it. I am just commenting on your observation in your opening statement that you prefer resource rent taxes vis a vis royalties. That may well be the case, but what is on the table right now is not that.

Prof. Rolfe—I think one of the deficiencies I saw with the Henry proposal was that it said, as you rightly point out, that the Commonwealth and states should negotiate, but it did not give any principles to help guide that discussion. In this submission I have tried to say, 'Well, resource rent should be paid to the states where they are investing in public capital; they should be paid where it is replacing natural capital and it should be paid where it is addressing some of the externalities—some of the spill over effects.'

CHAIR—In your opening statement you talked about the confounding effects in the way the MRRT was designed—the issues of scale—and that you had some criticism of that, but you never actually really went into the issue. What criticisms do you have of the issue of scale?

Prof. Rolfe—Let us say that the proposal had come forward to replace royalties with a rent tax, which is a little bit like the way that the Queensland government tried to set their 10 per cent on coal royalty a few years back—trying to capture some of that extra surplus. If it had only replaced royalties with a rent tax, I think there would not have been much argument. The argument has occurred because we got the royalty change and then, initially, the proposal to go to a 40 per cent tax. So, not only did we change the system but we went for a much larger scale. That is where the problem is.

Is it right at the moment—essentially 30 per cent less a 25 per cent discount? It is very hard to tell, because we just do not have that primary evidence there about what change in capital is required, what the externalities are and what public infrastructure is being supplied. But I do make the point that I think it is going to be very hard to get everybody in the resources sector to agree to it because essentially it means that they pay more, and that is difficult.

CHAIR—But in your opening statement you said that the design favours the mining industry; but it is not quite right to say that it favours the mining industry, is it? The arguments that have been put to this committee quite assertively by the small- to-mid-tier mining companies are that the wider tax—the MRRT—was designed to favour the big three that were sitting around the table, because they get a significant tax shelter from the market-based valuation which the smaller ones do not. They are multicommodity, multiproject and multinational companies, and they have got better capacity than the small- to mid-tier companies to directly channel investment into other areas.

There was the proposition told to us this morning that it is probably less attractive now to invest in higher-risk projects, rather than lower-risk projects. BHP and Rio were higher-risk projects 30 or 40 years ago and their becoming the success story of today suggests that maybe if there are reduced investment and higher-risk projects now, where are the future success stories for 20, 30 or 40 years from now going to be?

Do you think it was appropriate for the government to negotiate the design of a new tax with three taxpayers, excluding all of their competitors—making it harder for their competitors to compete with the big three—and all other stakeholders, including state and territory governments? Having excluded all of those from the process, do you think that was an appropriate way to design a tax?

Prof. Rolfe—Let me comment on the actual tax. There are two issues: the design of the MRRT and the transition rules. The design to my mind does not discriminate much between larger companies and smaller companies. I think the only issues turn up in the transition rules where the larger companies have probably more opportunity to write off existing capital, so they have been there for a long time, have large market capitalisation and the rules allow them to write that off. It is true that larger companies probably have better transitional arrangements than the smaller companies. But, in terms of the structure of the MRRT, leaving aside the transitional rules, I do not see there is much difference.

CHAIR—Except that the larger companies also will get a full refund for the royalties paid whereas small- to mid-tier companies will continue to have to pay royalties as well as having to go through the compliance mechanisms to prove that they remain outside the scope of the new tax. Compared to the status quo, small- to mid-tier companies are worse off, aren't they?

Prof. Rolfe—I saw that the royalties are being refunded, so I did not—

CHAIR—No, the MRRT does not propose to refund them. The MRRT—

Prof. Rolfe—It proposes to give them a carry forward—

CHAIR—It proposes to give them a carry forward. That carry forward only has value if you ever end up in the circumstance where you will be subject to the MRRT. By definition, if your project is in a decline phase, for example, you will never end up in a circumstance where you will be subject to the MRRT but you will have to continue to pay royalties and that was supposedly the time in the life of a mine when that distortion was to be removed by having a profit based tax. That has not happened, has it?

Prof. Rolfe—I am wondering whether it is possible to design a tax that does not have any kinks in it. That is one of the difficulties.

CHAIR—I am not here to argue with you; I am going to argue with the government. My view would be that, rather than just sit around the table with three big taxpayers and excluding their competitors, it would have been preferable to have an open, transparent and inclusive process where everybody at the outset got a chance to have their say. That will be a matter for the political debate.

You made the very interesting and I think very valid point that really the proposition should be that, as we deplete natural capital, we should replace it with other forms of capital. Of course, we are opposed to this tax but, if there were to be a tax like this, that is of course what should happen. Again, that is not what is on the table, is it?

Prof. Rolfe—No, and that is one of my criticisms. It is not clear enough. I support the principle of a resource tax—it has a lot of economic arguments in favour of it—but in terms of how the money is then spent, what it is to be used for, I do not see that it is clear enough that it is going to be there to really replace capital and increase productivity.

CHAIR—I think it is very clear as to where it will go. A significant chunk will go to take the budget out of deficit back into surplus, bits of it will go to the one per cent reduction in company tax and bits of it will go to make up the loss in income tax revenue from increasing the super guarantee from nine per cent to 12 per cent. Then there is \$6 billion out of \$100 billion in revenue over 10 years from the original RSPT and \$38.5 billion from the MRRT that will go into so-called infrastructure spending. None of that is replacement of capital, except perhaps the \$6 billion out of the \$100 billion on infrastructure spending but even that is through government spending programs not by putting money into a wealth fund or something of that sort. Listening to your evidence this morning you think that that is the wrong way to go?

Prof. Rolfe—I would like to see a much bigger chunk allocated to infrastructure spending and to productivity measures.

CHAIR—And replacement of capital?

Prof. Rolfe—And replacement of capital. Productivity can be investment in human capital—better education and better skills—

CHAIR—So when you say 'replacing natural capital' you would add improving human capital?

Prof. Rolfe—Improving human capital and technology—it does not have to be just—

CHAIR—Before you talked about financial capital, which I took to mean putting it into something like a wealth fund—

Prof. Rolfe—I see a wealth fund as another potential way of doing it so long as the wealth fund is there to create wealth and not to create future consumption.

CHAIR—Because of course the revenue estimates from the MRRT—and we have already seen it, even though it is a tax that has not been introduced yet; we have been debating it for the last five months—have been fluctuating from \$5 billion to \$24 billion, \$10.5 billion and \$7.4 billion. Some people suggest it will be now less than \$5 billion over the forward estimates. It is quite risky to attach recurrent spending commitments to the expected revenue levels in the good times, isn't it?

Prof. Rolfe—Yes. Clearly we are in a sector where there are large variations in income. I have had my own go at trying to predict how much money would be generated by the tax but I do not have the same information that Treasury would have. This is an area where there are large variations. That is why there are a lot of arguments for a wealth fund, because it can almost be the shock absorber. The money that is left over after direct commitments is then transferred to a wealth fund

CHAIR—I agree with that proposition. If there were to be such a tax, and I do not think there should be, the money should go into building capital rather than just being spent and consumed. So we agree on that point.

Senator CAMERON—I have some questions for Professor Rolfe.

CHAIR—Professor Freebairn has been waiting a while, so we will get him in on the action, so to speak. I am sure both witnesses will be happy to answer questions.

Prof. Freebairn—That is fine. Thank you for the invitation. I want to make two sets of comments. One is about how you tax the economic rent on state-owned natural resources. The current system is primarily the royalty system exercised by the states.

CHAIR—Plus company tax.

Prof. Freebairn—Yes. We do have an economic rent tax, which is the petroleum resource rent tax, on the offshore stuff, and a little bit on Northern Territory uranium.

CHAIR—And no royalties offshore, of course.

Prof. Freebairn—Yes, that is right. The royalty system is about the most distorting tax you can think of. It is a tax regardless of whether or not you have got a very good mine, which is, say, a Queensland coalmine with about one metre of overburden and 20 metres of almost perfect coal underneath that is easy to get out. That mine pays exactly the same tax as another coalmine that has to be underground and has a seam of, say, two or three metres with lots of impurities. What happens is that a lot of marginal mines that would be worth developing do not go ahead. A lot of mines that are coming to the end of their lives are not extended. If we go to the Henry review, the most distorting, expensive tax is the current royalty system. They estimate it costs us 70 cents per dollar of revenue collected. Income tax, corporate tax and so on are in the 20 to 30 cents stuff. This is the most distorting tax you can think of.

It is also not a very fair tax. For that very well endowed mine—the one with no overburden, a great deep seam and so on—the royalty it pays as a share of its economic rent is peanuts, whereas the marginal mine is paying almost 100 per cent of its economic rent. As economists we would argue that there is a much better model around; it is to tax the economic rent itself. So if that very well endowed mine were to pay, say, 40 per cent of its economic rent, it would be a big slab of money. It would be a lot more than the current seven plus three per cent. The mine that is currently marginal will actually become submarginal and pay a little bit of economic rent, but it will be much less than the current royalty. Also, some marginal mines that are a more productive use of Australia's labour and capital will come into production.

So then the debate is about what form that tax is going to take. Is it going to be an expenditure tax? Is it going to be the Henry review's ACC tax relabelled by government as the resource super profits rent tax? Is it going to be the resource rent tax, which is really the petroleum one? Is it going to be an optional thing? I am willing to debate those when they come on.

To follow up your discussion—what does the MRRT and the extension of the PRRT to onshore stuff do?—that retains all the worst effects of the royalty system. That tax as proposed is that you pay the minimum of the royalty and if you earn some more rent then you pay a bit more to the Commonwealth. It has got all the disasters of the royalty system. The question is: how do you get over that? As Henry said, you have to renegotiate Commonwealth-state relations. That is not easy. But then, as Henry said, there are lots of other bloody awful state taxes like conveyance duties and so on. Why do people not insure when we have natural disasters? Because states have got this whopping great stamp duty on it. So that ought to be No. 1 in tax reform. Is it going to get into the tax summit? Probably not because—

CHAIR—Will the mining tax be in the tax summit as part of the overall discussion?

Prof. Freebairn—Yes. It should be there. So that tax as proposed is really a disaster.

Then we come to the next point that I want to make. How much special tax should we take out of the mining industry? Let us remember that they are paying corporate tax, motor vehicle taxes,

conveyance duties and so on. This is over and above, because they are using state owned natural resources.

What Henry argued, and I am willing to elucidate that argument, is that we are part of a global economy and what we should do is change the tax mix away from factors that are in what we call high-supply elasticity—they flow in and out of the country. That is capital. It is not only Chinese, American, Japanese and Singaporean money. It is where Australians decide to put their money. They are interested in the after-tax return.

What you want to do is shift the tax burden onto factors that cannot move, that are inelastic in supply. Included in that list are land tax—as Henry said, let us get the land tax system fixed up—and natural resource rent taxes. Another one is nice rents created by state governments on limited gambling casinos and poker machines and so on. What Henry proposed is a switch in the tax mix: more on these fixed supply factors, including natural resources, and less on capital, which is the drop in the corporate tax rate. If one took Henry literally, whatever that net revenue windfall was would primarily go into funding a lower corporate tax rate.

The earlier discussion you had is that it could conceivably go into other capital investments. You might want to argue that more money in human capital or even more money in state infrastructure is an equivalent, good investment. So that stuff is up for grabs. But to put in your superannuation does not make any sense, and that was not argued by the Henry review anyway. The Henry review said leave the superannuation rate at nine per cent, but Henry did say to make the taxation of superannuation much more equitable than it is at the moment. So my opening salvos are that the royalty system is about the worst tax we can have on the mining sector and that moving to an economic rent based tax is the way to go but it is challenging because it involves Commonwealth-state financial relations.

I go along with Henry that we should increase the overall tax burden on the mining sector, particularly the very well-endowed mines not the marginal ones, and use that to fund lower corporate tax rates. That will in due course bring more capital into the country, more productive workers, higher wages and it is the average person in the street who ends up being the winner down the track, not the mining companies or their shareholders.

CHAIR—Thank you very much. You captured again that royalties are the worst of all taxes. But of course, as you have said, the MRRT in a sense is the worst of all royalties.

Prof. Freebairn—Yes.

CHAIR—You say yes to that. When you signed the statement in support of a resource rent tax which would replace state and territory royalties, you would not have signed a similar statement in support of the MRRT as it is on the table?

Prof. Freebairn—When we wrote that statement the MRRT was not actually out. It was the super profit resource tax which was going to be a replacement.

CHAIR—If you were asked to sign a statement supporting the MRRT, you would not sign it?

Prof. Freebairn—No.

Senator CAMERON—Thank you, Professor. In terms of the MRRT isn't an Australian government faced with similar problems that the Zambian government has? I have raised this this morning with the three other professors and none of them knew anything about the battle that is going on in Zambia to try to get a fair return to the government from companies like BHP, Rio Tinto and Xstrata. There is a fair bit of political and financial muscle being used to try to push back a reasonable tax on mining companies and I think we have seen that happening in Australia. Given the amount of muscle and money that was used—a massive demonstration of the power of business in this country I must say—is it not better that we get something out of these mining companies in addition to what we are getting now because the other option is to get nothing?

Prof. Freebairn—It is never at all surprising that somebody complained about the tax rate being put on them. If I were BHP or Rio and I had the choice of spending \$100 million on either lobbying the government to not increase the tax on me, with the fear that if Australia changed its taxes, Zambia and other countries would as well, or learning how to get ore out of the ground cheaper than I do now it is pretty clear that the most sensible investment of the boardroom was to lobby the government. That is how it has worked out. So it is a really tough challenge for government to convince the disinterested masses that their proposal is actually in the advantage of the country and is not necessarily as destructive to the miners as they claim. Their claims that the super profit resource tax would cause them to stop investment, cut employment and so on does not stand up to scrutiny. They should never have been allowed to get away with that nonsense. In fact quite the contrary would have happened.

As I described, the royalty system is a tax on investment and employment in the mining industry in Australia. A resource rent tax is less so. After all the way it is calculated is that you can pay for all your machines, labour and materials what you have got to pay to pull them away from manufacturing in the service sector and you still have some money left over. Mining is still a very profitable business and for BHP and Rio to say, 'We are the only people in the world who do mining,' does not stand up to scrutiny. Think about where the money is coming from for the gas seam projects in Queensland. It is not all coming from the traditional miners; it is coming from energy companies. There is a world of billions of dollars slushing around, wanting to find a profitable investment.

Senator CAMERON—You have indicated your concern about the MRRT. What would be better: to simply stick with and increase taxes through the royalty system, or to increase taxes through the proposed MRRT?

Prof. Freebairn—From my understanding, what the MRRT will do for those mines that are really well endowed, in those periods where we have price spikes, is that extra surplus will go to the Commonwealth as the MRRT, over and above the royalties that now go to the states. So there will be some extra revenue collected. How big it is depends on what commodity prices do. I think the public have unfairly screwed Treasury and ABARE and whatever, because none of us knows how long this current commodity boom is going to last. China could fall over in two years time, and then there would be no MRRT revenue at all; it would just be royalties. But China and India could keep going along very nicely; Indonesia, the Philippines and so on could also get on the growth bandwagon; and suddenly the demand for steel and manufactured materials would keep shifting out and out, and the boom might last for a decade or so.

Forecasting is a mug's game, and whether this will make \$20 million or \$10 billion is something that nobody in their right mind can honestly tell you.

Senator CAMERON—What Treasury have said is that it is better than asking your uncle. That is about as high as they put it.

Prof. Freebairn—Well, you only have to look at Treasury's forecasting on the budget! They are mortal, like the rest of us—and the uncle!

Senator CAMERON—Yes. Professor Rolfe, you have indicated what your priorities would be with any increased funding through the MRRT, but don't a cut in company tax, superannuation and more infrastructure add to the wealth of the country? Don't they shift the balance a bit? I am saying this because one of the big problems that we are finding in Africa at the moment is that mining companies are an enclave. There is not a lot for the mining companies in terms of a sophisticated manufacturing base or even an engineering base to service those mining companies. Everything is brought in, even workers. They are an enclave. We are not going down that path, hopefully, but there is an enclave element in the mining industry in this country. So, in terms of the three propositions that we are putting up—given that the Africans are dealing with this issue of an enclave that is causing social problems—your criticism of superannuation is, 'Well, that's deferred income.' But isn't it important that you try to keep a balance in social support for these companies that are operating in an enclave like manner?

Prof. Rolfe—I will deal with the easy one first. I do agree with using some of the money to reduce company tax because, essentially, for your other business sector that is sometimes badly affected by exchange rates, it is a way of increasing productivity in the economy and it helps to deal with some of the flow-on effects. In terms of your second proposition, that this helps deal with some of the social issues, I do not see that putting the money in a superannuation fund for 20 years deals with the social issues. I think that when you have got a spillover effect—and in mining we are seeing a lot more of this flyover effect as we are getting a lot more fly in, fly out—that is where state governments in particular have a job to do, to deal with some of those social impacts. And they need the money now. You cannot wait 20 years. So I think that, where you have that, you have to work out the need for both state and Australian governments to spend in that area.

Senator CAMERON—Professor Rolfe, with great respect, super funds just do not operate like that. Super funds get their money in and they invest. And the role of the superannuation industry in the global financial crisis was quite significant.

Prof. Rolfe—There is no doubt that, when money is put into super funds, you have it there in capital. But, really, what you are doing then is: you are taking money out of the mining industry and running it through a superannuation fund; it ends up back in the private markets as capital. There is no difference, really, in terms of capital availability. So I do not think you are actually changing much, except that you have got some political economy benefits by doing it. But I do not think that, in terms of productivity, you are making any difference.

Senator CAMERON—On the issue of where the money should go: you have outlined these problems that the states have, but there is horizontal fiscal equalisation, which has been a feature for as long as we have been a federation, I think. How do you deal with horizontal fiscal

equalisation and the multispeed economy if you simply reinvest everything back into the states that are lucky enough to have the resources there?

Prof. Rolfe—Well, at the moment we have the Grants Commission, so I think that we should be using the Grants Commission and probably trying to change the way in which the Grants Commission reallocates, to make faster changes. I think that would be better than trying to use a resource rent tax and redistributing income, on top of the Grants Commission. In effect the current proposal is to get a second mechanism up, to get some balance. I think it would be much better to make the first mechanism stronger and leave everything else neutral.

Senator CAMERON—Do you have any views on horizontal fiscal equalisation, Professor Freebairn?

Prof. Freebairn—It is an enormously complicated area. Its philosophy is: if states use average revenue raising capacity, and provide average type services to their citizens, that is what HFE is supposed to do. So a state that has a particularly lucrative tax base—which could be either resource rent or, as in the Sydney housing boom, conveyance duty out of New South Wales—pays some money into poor old Tassie, or a state that has very expensive provision of services, such as the Northern Territory with its high Indigenous population, is given more money than compact Victoria. That is the sort of equity-driving story.

There are economists with different views as to whether that has efficiency effects or not. One argument is that it has adverse efficiency effects. Why should Western Australia really fix up its resource rent tax if most of the money is going to be redistributed to the rest of the states? So it sort of sits on it and does whatever it likes. On the other hand, if the Northern Territory has this very expensive service provision, why would you want to tax businesses located in the Northern Territory more than businesses located in Victoria simply because they have more Indigenous people or a higher proportion of oldies? So those arguments run both ways.

Where they turn out in the middle is kind of an empirical issue that I do not think, as a profession, we have our hands on. So it is a contentious issue. It ought to be on the 'to be looked at' agenda. And I would not like to be invited to the inquiry to provide advice on it.

Senator CAMERON—You might actually be invited! But, in terms of royalties, and I think I asked this question of previous witnesses: from what I have read, most advanced economies are moving to a profit based tax approach on minerals. In some of the developing countries, they have a problem because they do not have the bureaucracy in place, they do not have the training and they do not have the capacity to know what is happening—like Zambia—and so they have a real problem. Why would most advanced countries be moving to a profit based tax and away from royalties?

Prof. Freebairn—It really was only in the late seventies-early eighties that the economics profession really twigged that royalties were not a very smart way of taxing the mining industry and that there were these other options of taxing the economic rent. It was the mid-eighties before the PRRT came in, and that has gone through difficult stages. I think we are only just starting to learn what is a better way of doing things; this is a transition. It is really difficult in Australia because it would appear that the royalties are a state tax and, as understood, an economic rent tax would be offered by the Commonwealth. I am not sure of the legalities of all

of that, but that creates problems for Australia to transition from what is an old-fashioned, highly-distorting tax to a more modern, more efficient tax.

Senator CAMERON—I asked Professors Ergas and Pincus this morning about the globalisation of mining companies. They argued that what happened in Australia—that is, if the Mining Resource Rent Tax or the superprofits tax got up—had no effect on governments in Africa. That was not my reading in the newspapers about what was happening overseas. Chile and Zambia said, 'We want to do something.' Do you have any analysis of the reason why mining companies fought so hard against the globalisation of increased taxes? Is why they fought so hard against it a real issue in your mind?

Prof. Freebairn—No. I think they fought hard against it because it was an extra tax on them. We do not actually have the data, to my knowledge, to answer your question explicitly but, in terms of principles, with global flows of money and with the potential of new mining companies—businesses and now miners becoming mining companies—if you look at, say, a 10-year horizon, as long as a company can see that it can make more than the normal rate of return on investing in Australian mining they will invest in it. These economic rent taxes retain a normal rate of return and a bit more unless the rent tax is 100 per cent, and nobody is saying that. Norway, for example, has a much higher economic rent tax on its oil than we do. There is no evidence that companies are running away from Norway. I just think that is a simplistic scare campaign run by the miners that would not stand up to scrutiny. But you would have to take a longer term view, a 10-year view, that if Gates or whoever else had great piles of money saw enormous opportunities in Australian mining because the BHPs and Rios had formed a cartel and gone on strike then in due course they would say, 'Okay. I can buy the mining expertise. Australians will walk out of BHP and Rio if they want to work for a new Gates mining company.' So I do not buy the scare campaign.

Senator CAMERON—You reject the scare campaign?

Prof. Freebairn—I reject the scare campaign.

CHAIR—Picking up on that point, do you accept the proposition that the higher the risk, the higher the rate of return that investors will be looking for?

Prof. Freebairn—Yes.

CHAIR—The statement that you have just made, 'As long as the rate of return is more than a normal rate of return, there will be investment' is true, but investment would go to the lower risk projects first. A lot of the investment in the mining industry is highly speculative at the beginning and some of them end up being the BHPs and the Rios that we have now. BHP and Rio started off as highly speculative investments at some point. Do you accept the proposition that it is the prospect of higher returns that entices investors to make investments in high-risk projects?

Prof. Freebairn—That is true, but it is also true that the way the ideal economic rent tax works is that the government becomes a shareholder equivalent to the tax rate. So if we take the 40 per cent rate, if a project ends up making profits the government gets 40 per cent of the

economic rent. If the project ends up being a dud the government contributes 40 per cent to the loss.

CHAIR—That was the RSPT model, but it is not the MRRT model.

Prof. Freebairn—No, that is right. I am talking about the ideal one. It is either the RSPT model or, what I would say is a much better tax, the expenditure tax.

CHAIR—We are here investigating the MRRT that is on the table.

Prof. Freebairn—Okay, the MRRT clearly increases the risks faced by miners because all it is doing is taking gains if there are gains to be had, and if there are losses it is not sharing in those losses at all. The MRRT, as proposed, is an asymmetric tax treatment of wins and losses.

CHAIR—So it increases risk for miners. In that sense, it has a distorting effect in its own right, doesn't it?

Prof. Freebairn—Yes.

CHAIR—This is on top of the distorting effects of the royalties, to extent that they are there?

Prof. Freebairn—Yes.

CHAIR—Compared to the status quo, does the MRRT put us into a better or worse position?

Prof. Freebairn—It puts the mining companies into a more riskier position because they still get the same treatment if it is a dud and they lose more if it is a success.

CHAIR—So the government sort of becomes a shareholder that shares the spoils but is not exposed to the downside?

Prof. Freebairn—Which most treasurers love.

CHAIR—I am sure. Professor Rolfe, you also signed a statement supporting:

... the introduction of a resource rent tax to replace existing royalties.

I assume the operative words here are 'existing royalties.' We have already established in the discussion that what is on the table does not replace state royalties; it comes on top of state royalties. You also support the concept of replacing natural capital with other forms of capital. Would you have signed a statement in support of the MRRT as it is on the table?

Prof. Rolfe—I would not have, actually.

CHAIR—We had a discussion on horizontal fiscal equalisation. All royalty revenue from resources gets equalised across Australia. Are you aware that state gambling revenue does not get equalised?

Prof. Freebairn—I am aware.

CHAIR—It seems to be a very unsatisfactory situation. State governments have, in effect, a perverse incentive to maximise their own sourced revenue from gambling because they get to keep it all; whereas, any revenue they collect from a growing and prospering resources sector gets spread across the rest of the country. Would you care to comment on that?

Prof. Freebairn—Not quite 100 per cent of it is spread around; they get a little bit. But their incentive to take more resource rent tax or a better resource rent tax is very heavily dulled by the way—

CHAIR—You mean royalties?

Prof. Freebairn—Yes. An argument has been made, 'Why don't the states get rid of their royalties and go to an economic rent tax?'

CHAIR—Why haven't they?

Prof. Freebairn—One of the arguments is that there is not much incentive for them to do it. Although, on the other hand, I would argue that the distortions of the royalty system might be worth the candle.

CHAIR—Essentially, your argument here today with us is in favour of resource rent taxes replacing royalties. Your argument here today is not in favour of the MRRT.

Prof. Freebairn—Correct.

CHAIR—The proposition was put to you that investment in the mining industry will continue to grow—and, of course, it will. But the mining industry is a very broad industry which includes uranium, gold, nickel and all sorts of resources many of which are not subject to the MRRT. You have said the MRRT will distort investment on top of any distortions from royalties, which will continue. Does it put minerals other than iron ore and coal in a more favourable position in attracting investment? Conversely, does it put iron ore and coal at a less favourable position in attracting investment into the future? Does it provide a distortion that way?

Prof. Freebairn—Looking at the status quo, the answer has to be it makes these other minerals not touched relatively more attractive than the ones that are now facing a slightly higher tax bill.

CHAIR—Other than what is on the table, they are not touched.

Prof. Freebairn—That is right.

CHAIR—So it makes the other resources now more attractive for investment than iron ore and coal?

Prof. Freebairn—Slightly more, yes.

CHAIR—It depends on what your assessment is of the distortions that come from the MRRT.

Go **Prof. Freebairn**—Again, it depends on how big the economic rents are. My understanding of gold is that if you look at this state you will see goldmines are closing, rather than opening. There are no economic rents being made on those goldmines. There is no royalty on Victorian gold either. If there are going to continue to be big economic rents on new coal, iron ore and gas projects then they will go ahead.

CHAIR—This morning Professor Ergas and his colleagues put the proposition that the way that the MRRT is designed favours the big-three mining companies that were sitting around the table because the design includes features like using the market values as a starting base, which reduces the entry liability for projects with high current market values, which include those of the BHPs, Rios and the like, compared to other less developed projects. It talks about the fact that it favours projects which are mature and hence have acquired rights of return that are lower compared to higher risk projects et cetera. I have not asked you that question, Professor Freebairn. Do you agree with the proposition that the design of the MRRT, given the way it currently stands, favours the big three—BHP, Rio and Xtrata—compared to their competitors?

Prof. Freebairn—I honestly cannot answer that question.

CHAIR—Would you be able to reflect on it on notice and perhaps give us your thoughts? If you can tell us that this is not an area of your expertise or one that you can properly assess then I will leave it at that. If, on reflection, you might be able to share some thoughts with us, I would be interested.

Prof. Freebairn—It is not my area of expertise. I read the Argus report. It had three options for how you phase mines in. I do not have the detailed data to address those choices. For what it is worth, my view is that we should have tried to copy how an economic rent tax would have worked—that is, I would use cash-flow accounting that is available on the books, work out the accumulated profit or loss or whatever it is and then proceed. To some extent, one of Argus's options—I think it is the third option—going back eight years, goes close to that. But I do not see why you do not go back to the beginning of the mine life.

The economic rent tax is a cash-flow tax. You record receipts from selling the products and you take away expenditure on equipment, buildings and materials and, if there is a surplus, then that is economic rent. If there is a deficit then, under the MRRT and so on, it is carried forward depending on what the escalation rate is. I honestly do not know why they did not follow the theoretical model.

CHAIR—Under the MRRT it is carried forward at an uplift of about 12 or 13 per cent. Some of your colleagues have argued this morning that is, in fact, creating a perverse incentive to slow down production. You can make more money risk-free and tax-free by just accumulating your credits and letting them sit there, rather than by continuing to process. Do you have any comments on that?

Prof. Freebairn—That is a known deficiency of the resource rent tax model. That uplift factor, anything above the long-term bond rate, is essentially to recognise the risk that the project will be a loser at the end. Under the resource rent tax, the government would not pay out to a

loser but it would always tax a winner. So it has this asymmetric treatment of wins and losses. For a mine that has really well endowed resources and is clearly going to be a winner then those options that Ergas and Pincus talked about will be played because essentially they can borrow money at less than this long-term bond rate plus seven per cent and play games. But for a marginal mine, for which it is said this has got a chance of ending up being a loser, that risk rate is not even high enough. So we get different decisions by mines with different taxable endowments within a particular industry.

CHAIR—The Henry tax review was supposed to be about root and branch reform of our tax system to give us a fairer, simpler tax system. The report was tabled at the same time of the announcement of the RSPT and there was not any consultation. The public probably were not ready for what was coming their way. Then the whole things fall apart. There is a change of Prime Minister and the MRRT gets negotiated in a private room with the three biggest taxpayers. It is not a very good public policy development process. Clearly, you have given this resource taxation area a lot of thought—as have you, Professor Rolfe. From a public policy development process perspective what would have been a better way to progress proposals of this nature?

Prof. Freebairn—The example I fall back on is the Campbell committee of inquiry. They wrote a green paper and then that was circulated around the system for 12 or more months before they actually wrote their final report. Then, in fact, most of what Campbell recommended was implemented later on after another report, by the Hawke-Keating government. There is also this kind of debate. Henry did not really put that report out with a view that everything should be adopted within six months or in the next term of government. He took the view very much of the Asprey committee back in 1975 and said, while thinking about the whole tax system, 'If you had a clean sheet of paper and you wanted to have an informed debate, what would be the beacon on the hill?' A lot of the stuff in Asprey, like basebroadening the income tax, came in 1985, 10 years later, and the GST in 2000—later again—and the Ralph reforms of company tax, later again. My guess is that Henry will suffer a similar fate: long after Ken has finished looking after hairynosed wombats his epitaph will say, 'We've listened to you, Ken'.

CHAIR—The thing is that the government essentially picked one recommendation, changed it and took it in isolation of everything else. It looked very much like a grab for cash rather than genuine reform. All the difficult decisions, such as changes to Commonwealth-state relations that were negotiated and so on, were not actually pursued, were they?

Prof. Freebairn—No. I am not a politician; that is the tough, challenging job you guys have got. My view as an academic is that we should write something like Henry saying, 'Here are some ideals that we think in principle you should aim for,' and then the parliament has the real challenge of: what can you sell to people? Your job is to get 50-odd per cent of the vote.

CHAIR—But if after the Henry report there had been a green paper and then a white paper, people like you would have been able to say, 'This is good and this is bad, for these reasons,' and then the government could have formed an informed view. But that did not happen.

Prof. Freebairn—No.

CHAIR—But it is never too late, really. If the government were serious about tax reform they should take a step back and send it to a tax summit or send it through a comprehensive, open,

transparent and inclusive process where not just BHP, Rio and Xstrata but also Atlas Iron, FMG and people like you would get a chance to have a proper say. That would be a preferable way of doing it, wouldn't it?

Prof. Freebairn—I agree.

Senator CAMERON—Professor Freebairn, you say you are not sure why the theoretical model was not followed. I suppose the theoretical model was not followed because politics intervened. Do you understand that politics does intervene on the theory at times?

Prof. Freebairn—Oh yes. If I was that convinced of my theory I might have tried to mimic John Hewson and stand for parliament—and I would certainly have done much worse!

Senator CAMERON—I understand that you favour the Henry review resource rent tax, but do you agree with the existing PRRT?

Prof. Freebairn—In its operation offshore. There is no royalty involved in the offshore stuff, so that has got most of the advantages. The only downside with the PRRT relative to the theoretical ideal is that there is an asymmetrical treatment of wins and losses. If an oil or gas field, in net, makes money, it pays the 40 per cent PRRT to the Commonwealth. If an oil field actually ends up running at a loss, the mining company and its shareholders have to wear all of that loss. That is why there is an escalation factor of 15 per cent for exploration and five per cent for development expenditure.

Senator CAMERON—Doesn't the MRRT basically have the same design—no refunds for losses, high uplift rates and immediate expensing?

Prof. Freebairn—Except that it retains the royalty system as a credit, which means at a minimum you pay the royalty.

Senator CAMERON—So the royalties are the problem, not the MRRT?

Prof. Freebairn—That is right. If the royalties were replaced then it would have similar properties.

CHAIR—Thank you very much for your contribution today.

Committee adjourned at 2.59 pm