

# The Australian

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## About the rent we're charging

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**STRUGGLING with the proposed mining tax, mooted changes and their possible impacts? Here are some key concepts.**

1) What are rents? You and I till our fields, each needing to be paid a bushel of corn. If my field is relatively fertile and yields three bushels, while yours yields one, the extra bushels I get are a rent.

2) Why tax rents? Taxes cause inefficiency by changing behaviour. But taxes that fall only on rents won't have that effect. Were those two surplus bushels taxed, I would still till the field (and the field can't go away). Rent taxes are therefore the holy grail of tax policy.

3) So why don't we have lots of rent taxes? Pure rents are not of this world. Does my field yield more because it is more fertile or because I work harder? And what about my clever ploughing technology? Because the two bushels are partly the return I get on each of these, a tax on them is a tax on effort, and will cause distortions that increase with the tax rate.

4) Is there a solution? If the government owns the fields, it should auction the right to till them. If we compete to buy that right, I will pay no more than the amount you could get from it. (Remember: to win I need only to beat your highest bid.) That leaves me my return on superior brains and effort, avoiding the tax distortion.

5) What if the government imposes taxes instead? No known tax can completely solve the problem, though some do better than others. In a pure Brown tax, government pays a share of all costs and gets the same share of all revenues. This is about as good as it gets, but even it fails because the government is a passive shareholder that free-rides on any effort private shareholders invest in keeping management honest.

6) Is the government's original proposal a Brown tax? No, because it doesn't pay out costs. It only gives a promise to pay, leaving companies to finance any losses in the meantime. Since the promise is only as good as the time parliament takes to change tax laws, it is hardly risk-free. But it only allows companies to carry those costs forward at the bond rate. And only "reasonable" costs can be carried forward. The definition excludes lots of past costs and bodes poorly for future costs.

7) What is the effect on incentives? The proportion of a mine's revenue paid in tax rises steeply as the mine moves from being marginal to being highly profitable. Low base levels will keep marginal mines going a bit longer, but society gains little from that (as they barely cover their operating cost), while losing a lot as the higher tax take, greater risk and diluted incentives slow productivity growth at the best mines. In contrast, the present regime penalises marginal mines but rewards those that achieve high returns.

8) How great is the effect on productivity? The best way of assessing this is to ask "if a mine cuts costs by \$1, how much of that dollar do shareholders get?" A reasonable estimate for Australian investors facing a personal income tax rate of 46.5 per cent is that they will get 32c in each dollar of costs saved under the new tax, compared with 53.5c today. In contrast, cutting costs does not increase the royalties a mine pays, giving strong incentives for productivity improvements.

9) Would setting a higher threshold at which the tax kicks in, but not allowing losses to be carried forward, improve matters? Not really, for two reasons. First, setting a single rate above which additional tax is payable distorts investment decisions away from high-risk mining projects to low-risk mining projects. The reason for this is simple. High-risk projects require a higher rate of return (on which they will be forced to pay higher taxes). Second, the appropriate rate for any project depends on project stage (exploration, development, and extraction). This is because project risk changes during

the life of the project. A single rate distorts the incentive to gather information about a deposit, the timing of investment and the rate of extraction. The fact is that it is impossible for a resource rent tax to be neutral. Indeed, a prominent supporter of the tax has written a paper entitled "The impossibility of a neutral resource rent tax". The mooted changes will cause a distortion of investment decisions within mining itself, as well as chilling mining investment generally.

10) But so long as the tax leaves miners earning their cost of capital, won't they keep investing? No. You could fill a room with research showing that (for very good reasons) companies are capital constrained and set hurdle rates for investment well above their cost of capital. So if miners can use what capital they have to earn rents in Canada but not here, our projects won't go ahead.

11) What about the tax's retrospective application? The tax's retrospective application amounts to at least partial expropriation of mining companies' profits. If you take away the gains people made by working hard yesterday, they are unlikely to work as hard tomorrow. Little surprise that you could fill another room with papers showing that countries that renege on their debts struggle to borrow, while countries that have expropriated the investments of private companies are punished by chronic under-investment. This increased sovereign risk compounds the effects discussed.

12) But isn't this simply the price miners have to pay for their super-profits? "Super profits" is not a term in economics. It was coined by Lenin in his book on imperialism and popularised in Soviet Cold War propaganda. Regardless, mining, in the long run, hardly earns excess profits. Data from the Australian Bureau of Statistics shows that from 1987 to 2009 the nominal before-tax rate of return on capital in the mining sector averaged 12.5 per cent. In the same period, the government bond rate averaged more than 8 per cent, so the returns do not even cover the risk premium for equity (generally estimated to be 6 per cent to 8 per cent), much less the higher risks of mining.

13) The bottom line? True, the tax will raise large revenues in the short run precisely because the sunk investments it taxes can't flee the country. But it threatens future investments and discourages productivity growth. Jam today for hard bread tomorrow. Is that what we need?