Olympic Dam's vanishing value

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Morgan Stanley's analysis of the implications of the resource super profits tax for BHP Billiton's proposed $US20 billion-plus expansion of its Olympic Dam project should be required reading for all the members of the Rudd government cabinet because it shows how the tax would kill off one of the largest resource developments in modern Australian history.

BHP has been studying the feasibility of the expansion, which would create one of the largest open-cut mines in the globe, producing nearly four times the volume of copper and uranium that it does today and employing about 9000 people in the construction phase and 4000 once it became operational.

The Morgan Stanley analysis assumes the mine starts production in 2018 and its production reaches maturity around the middle of the next decade.

Once operational, Olympic Dam would generate up to $US5.5 billion of revenue a year and under the current taxation regime would pay about $US900 million a year in taxes and royalties – an effective tax rate of more than 36 per cent.

Under the same regime, once fully up to speed, it would, Morgan Stanley's analysts say, produce profits of about $US1.7 billion a year, or a return on invested capital (ROIC) that would climb to around 20 per cent.

That provides an indication of the levels of capital, export revenues, jobs, lead times and returns involved in a project of the magnitude and risk of Olympic Dam – the last great mineral find in this country. (It was discovered in the late 1970s but it took 12 years before first production).

Morgan Stanley's base valuation of the project under the current settings, using an 8 per cent weighted average cost of capital, is $US690 million. That means it would take 12 years to recover the initial capital invested. During that period the mine would generate taxes and royalties of $US9.7 billion.

So, under the current tax regime, with a solidly positive net present value (NPV), the project probably goes ahead – provided there aren't higher risk-adjusted returns available elsewhere and BHP's board is prepared to put such a large lump of capital into a single and quite complex project.

With the RSPT in its present form, the NPV of Olympic Dam is a negative $US761 million! That's with the expansion completely equity funded – the numbers would be worse if there were any debt funding because the RSPT applies before financing costs.

While the project would produce a ROIC of 14.6 per cent under the RSPT, it is almost inconceivable that BHP would proceed with a project that destroyed shareholder value to that extent and which would ultimately face an effective tax rate above 70 per cent. That's not what one might regard as a fair sharing of the risk and reward of such a major investment of shareholder funds.

Morgan Stanley modelled the impact of a 40 per cent RSPT with an uplift factor of 10 per cent rather than the government bond rate now proposed. That produced a positive NPV of $US85 million.

While it said it believed the project would be developed under those fiscal conditions, one wonders where Olympic Dam would rank under those settings amidst the universe of potential projects within BHP's vast development pipeline.

As a base metals project with complex mineralisation it is inherently riskier than, say, iron ore or metallurgical coal, where at least Australian producers have some degree of influence over the market and where prices tend not to be quite so volatile because of the relative concentration of the supply base.

The analysts said their analysis showed that, at a minimum, the RSPT required some key adjustments in order for Olympic Dam to be economic and investment to proceed.

The headline tax rate needed to be reduced – 20 per cent was more appropriate than 40 per cent – and the uplift factor needed to be lifted from 6 per cent to a minimum of 10 per cent and be more reflective of the weighted cost of capital.

With a 20 per cent RSPT and 6 per cent uplift factor Olympic Dam would have a NPV of $US132 million, a payback period of 12 years and an average ROIC of 16.9 per cent. It would pay $US9.2 billion of taxes and royalties in its first 12 years of production – about $US500 million less than under the current regime but which would represent, by the middle of next decade, an effective tax rate of about 44 per cent.

The analysts actually think the super profit threshold should be set at 15 per cent because this was more reflective of the typical hurdle rate required for high-risk investment by miners and fund managers. The Morgan Stanley team also says that, for existing mines, assets should be revalued to market or replacement value (which would do away with the retrospective dimension of the tax).

So, under the existing tax regime, the expansion would generate almost $US10 billion of taxes and royalties for the government. Under the RSPT as currently proposed – nothing.

There would be no tax on super profits because there would be no profits, or investment. That would be an odd outcome if the tax were, as Kevin Rudd keeps claiming, truly an historic "reform".