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Exempt - section 22

From: Bartley, Scott
Sent: Friday, 14 May 2010 7:43 PM
To: McDonald, Hamish
Cc: Davis, Graeme
Subject: A couple of things [SEC=~~PROTECTED~~]

Hamish

1. I have attached a couple of documents we have been working on to explain how the RSPT works. The idea is to put something on the website to remove much of the ambiguity and misinformation in the market place. It would be good to get an initial reaction to expedite releasing them (subject to some further tinkering). We will give you a further opportunity to comment on the finished product.

The documents still need some work but the parts dealing with the RSPT calculation, the RSPT capital account and the company tax interaction are pretty close now. The bits dealing with the decomposition of the cash flows into the project asset and the deferred tax asset still need some work to get the story across more simply. I will try to add some value to these over the weekend. This extra bit is important to inform the market about the existence of the risky project asset and the risk free deferred tax asset which is central to the neutrality of the tax.

2. Did something come up from Mandy Fitzpatrick today on the WA royalty issue we discussed last night? There were some dot points on the Pilbara royalty concession and the gold royalty that I put together. The messaging I passed on last night from Mandy about a CGC document referring to an increase in the royalty rate on iron fines (5.625%) to the lump iron rate (7.5%) appears to be incorrect. The CGC document appears to be referring to the removal of the Pilbara concession rather than increasing the royalty on iron ore fines from 5.625% to 7.5%.

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RESOURCE SUPER PROFITS TAX: STYLISED WORKED EXAMPLE

OPERATIONAL FEATURES OF THE RSPT

			Pre-announcement	Pre-commencement		Resource Super Profits Tax commences							
			2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
	Investment												
1	Capital expenditure		1,200	1,000	1,000	750	0	250	0	250	0	250	0
2	Exploration expenditure		50	50	50	50	50	0	0	0	0	0	0
	RSPT calculations												
3	Assessable revenue				1,500	901	1,550	3,039	3,191	3,350	3,015	1,583	0
4	*less* Operating expenses				700	901	1,300	1,339	1,379	1,420	1,254	646	500
5	*less* Exploration expenses	A				50	50	0	0	0	0	0	0
6	*less* Depreciation of new capital	B				254	291	304	316	329	341	354	0
	less RSPT allowance												
7	Starting base	C				156	156	156	155	83	0	0	0
8	New capital	D				130	160	142	139	120	116	95	88
9	Prior year losses	E				0	35	62	0	0	0	0	0
10	Total					286	351	360	294	203	116	95	88
11	*less* Prior year losses	F				0	589	1,031	0	0	0	0	0
12	*less* Refund of final year new capital closing balance	G											1,474
13	RSPT tax base excluding starting capital depreciation	H				589	1,031	5	1,201	1,398	1,305	489	2,062
14	*less* Depreciation of starting base	J				0	0	5	389	260	0	0	0
15	*less* Depreciation of starting base carrying balance	K				0	0	0	812	1,129	0	0	0
16	RSPT tax base	I				589	1,031	0	0	9	1,305	489	2,062
17	RSPT payable	L				0	0	0	0	4	622	196	825
	RSPT Capital Account												
	Starting base												
18	Opening balance (end-of-year prior to announcement)	M	1,000	2,310	2,449	2,596	2,596	2,596	2,590	1,389	0	0	0
19	Pre-commencement RSPT allowance	N	60	139	147								
20	Pre-commencement capex		1,200										
21	Pre-commencement exploration	A	50										
22	Depreciation	O				0	0	5	1,201	1,389	0	0	0
23	Closing balance	P	2,310	2,449	2,596	2,596	2,596	2,590	1,389	0	0	0	0
24	Starting base carrying balance	Q				934	1,557	1,941	1,129	0	0	0	0
	New capital												
25	Opening balance			0	1,050	2,163	2,659	2,368	2,314	1,998	1,919	1,578	1,474
26	Pre-commencement RSPT allowance	R			63								
27	Capex			1,000	1,000	750	0	250	0	250	0	250	0
28	Exploration	A		50	50								
29	Depreciation	B				254	291	304	316	329	341	354	0
30	Refund of final year new capital closing balance	G											1,474
31	Closing balance	S		1,050	2,163	2,659	2,368	2,314	1,998	1,919	1,578	1,474	0
32	Prior year losses	T				589	1,031	0	0	0	0	0	
33	RSPT capital account	U	2,310	3,499	4,759	5,844	5,995	4,904	3,386	1,919	1,578	1,474	0
	Company tax calculations	V											
34	Revenue		0	0	1,500	901	550	3,039	3,191	3,350	3,015	1,583	0
35	*plus* Royalties credit	W	0	0	0	63	108	213	223	235	211	111	0
36	*plus* Refund from RSPT	L											825
37	*less* Operating expense		0	0	700	901	1,300	1,339	1,379	1,420	1,254	646	500
38	*less* Exploration expense		50	50	50	50	50	0	0	0	0	0	0
39	*less* Royalties	W	0	0	105	63	108	213	223	235	211	111	0
40	*less* Depreciation	X	0	0	370	458	495	508	520	533	545	558	1,145
41	Taxable income / loss before RSPT		-50	-50	275	-508	-295	1,193	1,292	1,398	1,216	380	-820
42	*less* RSPT		0	0	0	0	0	0	0	4	622	196	0
43	Taxable income / loss		-50	-50	275	-508	-295	1,193	1,292	1,394	594	184	-820
44	Less prior company tax losses		0	0	-100	0	0	803	0	0	0	0	0
45	Taxable income		0	0	375	0	0	1,995	1,292	1,394	594	184	0
46	Company income tax	Y	0	0	113	0	0	599	388	418	208	55	0
	Memorandum Items:												
47	Company tax loss carry forward		50	100	0	508	803	0	0	0	0	0	820
	Cash flow	Z											
48	Project asset												
49	Deferred tax asset												
50	Total												

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RISK DECOMPOSTION ANALYSIS

		Pre-announcement	Pre-commencement		Resource Super Profits Tax commences								
		2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
	Project cash flow											
51	Revenue	0	0	-1,500	901	550	3,039	3,161	3,350	3,015	583	0
52	Capital expense	-2,200	-4,310	-4,449	760	0	-250	0	-260	0	-260	0
53	Operating expense	0	0	-700	901	300	1,339	370	420	1,264	846	-500
54	Exploration expense	-50	-50	-50	50	50	0	0	0	0	0	0
55	RSPT	0	0	0	0	0	0	0	0	0	0	0
56	Company tax	0	0	-113	0	0	599	388	418	522	196	825
57	State royalties	0	0	-105	68	108	213	223	235	208	155	0
58	State royalties credit	0	0	0	63	108	213	223	235	211	311	0
59	Net cash flow	-2,250	-4,360	-3,916	800	200	852	424	258	1,031	436	325
60	Net cash flow before all taxes			-4,759	800	200	1,450	1,812	680	1,761	1,687	-500
61	Net cash flow after RSPT			-4,759	800	200	1,450	1,812	676	1,239	1,921	325
62	NPV at 6% before RSPT			-39								
63	NPV at 6% after RSPT			-24								
64	NPV post-RSPT/NPV pre-RSPT			0.600								
	Risk free asset cash flow											
65	Cash flow			-1,903	320	80	580	725	668	183	79	-625
66	NPV at 6%			0.000								
	At risk asset cash flow											
67	Cash flow			-2,855	480	120	870	1,087	1,008	1,057	412	-300
68	NPV at 6% before RSPT			-39								
69	NPV at 6% after RSPT			-24								
70	NPV post-RSPT/NPV pre-RSPT			0.600								
71	NPV at 10% before RSPT			-760								
72	NPV at 10% after RSPT			-456								
73	NPV post-RSPT/NPV pre-RSPT			0.600								

Notes:

A Exploration expenses during the transitional period are capitalised into the starting capital base and uplifted. Exploration expenses post commencement (1 July 2012) are expensed.

B New (post-commencement) capital is depreciated under the general provisions. In this model a simplifying assumption of 10-year straight-line depreciation has been assumed. It is assumed that assets receive half-year depreciation in the year that they are purchased. { 0 if (3) = 0 }

C The opening balance of the RSPT starting base capital account is indexed by the allowance rate (the long-term bond rate - assumed to be 6 per cent). { (18) x 6% }

D The opening balance of the RSPT new capital account is indexed by the allowance rate (the long-term bond rate - assumed to be 6 per cent). { (25) x 6% }

E Prior year losses are indexed by the allowance rate (long-term bond rate - assumed to be 6 per cent). { (32) x 6% }

F { If (16) < 0 in previous year; (11) = (32); otherwise (11) = 0 }

G Undeducted new capital expenditure at the end of the project is deductible. A refundable RSPT credit will arise in the final year if undeducted capital expenditure exceeds net project income in that year. { negative of (25) - (27) - (29) }

H { (3) - (4) - (5) - (6) - (10) - (11) - (12) }

I { (13) - (14) - (15) }

J The starting capital base is depreciated on an accelerated basis of 36% (2012-13); 24% (2013-14); 15% (2014-15); 15% (2015-16); 10% (2016-17). As starting capital is not transferable or refundable, depreciation of this component can only be deducted to the extent that the RSPT tax base is non-negative. Unused starting capital depreciation is recorded in the starting base carrying balance (24) and is available for depreciation in later years. { If (13) = 0; (14) = 0; otherwise (14) = minimum (13) or starting base (18) x accelerated depreciation provisions. }

K Records depreciation of any unused starting capital depreciation. { If (13) > 0; (22) - (14); otherwise = 0 }

L { (16) x 40% } Note: a refundable RSPT credit will arise in the final year if undeducted capital expenditure exceeds net project income in that year.

M Starting capital at the close of the previous income year (assumed to be 2008-09) is assumed to be $1000. { Equal to closing balance (23) of previous year }

N Pre-commencement capital is indexed by the allowance rate (long term bond rate - assumed to be 6 per cent). The RSPT transitional allowance would be pro-rated for a balance date later than June 2009. { (18) x 6% }

O { If (13) < 0; 0; otherwise minimum of (13) and previous starting base carrying balance (24) + starting base (18) x accelerated depreciation provisions previous } See also note I.

P { (18) + (19) + (20) + (21) - (22) }

Q Records unused starting capital depreciation. { previous value (24) + starting base (18) x accelerated depreciation provisions - (22)

R { (25) x 6% }

S { (25) + (26) + (27) + (28) - (29) + (30) }

T { If (16) = 0; absolute value of (16); otherwise = 0 }

U { (23) + (31) + (32) }

V For simplicity, it is assumed in this model that assets are disposed of at their written down value.

W Companies will receive a refundable credit for royalties paid to State governments following commencement of the RSPT. The refundable credit will be available at least up to the amount of royalties imposed at the time of announcement, including scheduled increases and appropriate indexation factors.

X For RSPT purposes, depreciation is applied to the uplifted amount for pre-commencement investment. For company tax purposes, depreciation is applied to the book value of investment. Depreciation is on a straight-line basis over 10 years. Assets receive half-year depreciation in the year that they are purchased.

Y The corporate tax rate is 30 per cent up to and including 2012-13, 29 per cent in 2013-14 and to 28 per cent from 2014-15.

Z Project cash flows can be separated into two components (assets). The first is the project as if the RSPT were applied as a refundable tax (a cash flow tax). The second is the deferred tax asset created through the delayed tax relief for capital expenditure and project losses.

Resource Super Profits Tax
Stylised worked example (explanatory memorandum)

The link below provides a snapshot of the cash flows of a hypothetical mining or petroleum project and the impact on those flows of the Government's proposed RSPT, as well as company income taxation. The Government has announced that the RSPT would commence 1 July 2012.

.pdf file link

The worked example is provided to illustrate possible operation of the main features of the RSPT (line items 1 to 50) and to provide an appreciation of the close relationship between the RSPT and a 'pure' cash flow tax (the 'Risk Decomposition' section, line items 51 to 73).

The operational features of the RSPT in the worked example include:

- treatment of pre-announcement expenditure (starting base) and pre-commencement expenditure (part of new capital);
- treatment of ongoing post-commencement expenditure (operating expenses, exploration expenditure and new capital expenditure);
- application of the long term bond rate (LTBR) to uplift from year to year – via the RSPT allowance – both written-down value of capital expenditure and annual RSPT losses.

This latter operational feature concerning the LTBR uplift is also crucial to an understanding of the financial equivalence of the RSPT and cash flow taxation.

The example is a stylised illustration only. Many specific features incorporated in the example, such as the order of write-off of depreciation of pre-announcement and later capital expenditure, are yet to be settled. Consultation is continuing on these features and these consultations will assist final decisions on them. Working assumptions have been made to enable a reasonably comprehensive working example but they must be viewed as such.

Following is a guide to the features of the RSPT in the main body of the worked example, as well as the end 'Risk Decomposition' section. Further details are in the notes to the table.

OPERATIONAL FEATURES OF THE RSPT

Assumptions

- For simplicity, assets are depreciated on a straight-line basis over 10 years. It is assumed that assets receive half-year depreciation in the year that they are purchased. Assets are also assumed to be disposed of at their written down value.
- The project's company pays *ad valorem* royalties to the State Government at a rate of 7 per cent.
- The long-term bond rate (the allowance rate) is assumed to be 6 per cent.
- Year-by-year RSPT losses cannot be transferred to other projects as the company does not have any other projects subject to RSPT.

RSPT calculations

- The RSPT tax base (16) is calculated as assessable revenue (3) less operating expenses (4), less exploration expenses (5), less depreciation of new capital (6), less the RSPT allowance (10), less prior year losses (11), less depreciation of any starting base (14 - 15).
  - As starting capital is not transferable or refundable, depreciation of this component can only be deducted to the extent the RSPT tax base excluding starting capital depreciation (13) is non-negative.
  - The RSPT payable (17) is calculated as 40 per cent of the RSPT tax base (16). In the final year, if the RSPT tax base (including any undeducted new capital) is negative, an amount equal to 40 per cent of this RSPT loss is refunded.

- The RSPT Allowance (10) is calculated by multiplying the allowance rate (assumed at 6 per cent) by the RSPT capital account (33). For ease of exposition, this is disaggregated into the stating base component (7 = 18 x 6%), the new capital component (8 = 25 x 6%) and the prior year losses component (9 = 32 x 6%).

RSPT capital account

- The RSPT capital account tracks undeducted capital expenditure and any unutilised losses from previous years. Due to the differing treatment of the starting base and new investment, it is necessary to separately identify these amounts in the capital account.
  - The RSPT capital account (33) is the sum of the starting base and new capital closing balances (23 + 31), and any undeducted prior year losses (32).
- During the pre-commencement period, the starting capital base and new capital expenditure and exploration is uplifted by the allowance rate to ensure its real value is maintained. Post-commencement of the RSPT, the capital uplift is included as a deductible expense in the RSPT calculations (10).
  - The capital base is not depreciated prior to commencement of the RSPT. Post-commencement, the starting and new capital is reduced by depreciation (which is included in the RSPT calculations as a deductible expense). Capital spending within the year (less any depreciation) is added to the base to arrive at the closing balance.
  - The starting capital base is depreciated on an accelerated basis of 36% (2012-13); 24% (2013-14); 15% (2014-15); 15% (2015-16); 10% (2016-17). Due to the non-transferability of the staring base, depreciation deductions are limited to the positive value of the RSPT tax base excluding starting capital depreciation (13). Any undeducted starting capital depreciation is added to the RSPT starting base carrying balance (24). This balance is deductible in later years to the extent that the RSPT tax base excluding starting capital depreciation (13) is non-negative.
- Where the RSPT tax base is negative, prior year losses are uplifted by the allowance rate to compensate investors for the deferred tax credit.

Company Taxation Calculations

- The RSPT is deductable expense for income tax purposes. Post-commencement of the RSPT, resource entities receive a refundable credit for state royalties paid (35 and 39).

RISK DECOMPOSITION ANALYSIS

- At the end of the worked example is some analysis of the overall cash flows of the project highlighting the relationship between the RSPT and cash flow taxation. This should assist an understanding of investment decision-making before and after the RSPT.
- A number of line items (51 to 59) are included showing annual cash flow associated with revenue, exploration expenditure, other capital expenditure, operating expenses, RSPT (negative for refunds and positive for payments), and so on, as well as overall net cash flow.
- Line items 60 and 61 show the project's cash flow before all taxes and after RSPT with the up-front expenditure in 2011-12 made up of the opening balance in 2012-13 for pre-announcement expenditure (item 22) and for pre-commencement expenditure (item 31). Line items 60 and 61 provide the basis for assessing how the RSPT might impact on investment decision-making by comparing it to a cash flow tax.

Cash flow tax benchmark

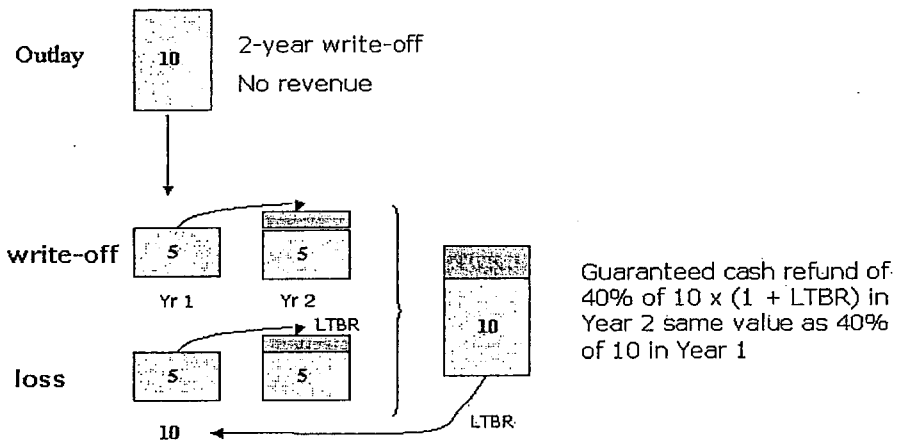
- The benchmark for assessing the quality of the RSPT as a tax with little effect on investment decisions is the RSPT operated as a 'pure' cash flow tax. Under such a tax:
  - annual negative cash flow (revenue less than expenditure) would be reduced by the 40% RSPT tax rate; and
  - annual positive cash flow (revenue less than expenditure) would be also reduced by the 40% RSPT tax rate.

- This balanced 40% reduction of pre-RSPT cash flow means that a project's internal rate of return (IRR) is not affected by the tax and the project's pre-RSPT net present value (NPV), with discounting at any investor's discount rate, is reduced by 40%. Project risk is reduced in a balanced way with minimal effect on investment decision-making.

RSPT compared to cash flow tax

- How does the RSPT compare to the cash flow tax ideal? The post-tax RSPT cash flow line (64) has been split into two separate line items to demonstrate that the RSPT, while containing different features to a cash flow tax, is financially equivalent to such a tax.

- The RSTP is designed to achieve the effect of both immediate write-off of expenditure and immediate cash refund of annual losses, the central operational features of cash flow taxation. The RSPT design achieves this through: (1) the application of the LTBR to uplift from year to year both written-down value of capital expenditure and of annual RSPT losses; plus (2) the ultimate guaranteed cash refund of the value of RSPT losses carried forward. The figure below explains this:



Equivalence with RSPT of immediate expensing plus cash refund

- The figure illustrates the situation where $10 of capital expenditure, which hypothetically attracts 2-year write-off under the RSPT, is made in Year 1. No RSPT revenue is available to write-off RSPT deductions from the expenditure in Years 1 or 2. The associated project is abandoned end Year 2.

- $5 of deductions available in Year 1 create a $5 loss in that year. Under the RSPT, not only does that loss attract uplift at the LTBR into Year 2 but the $5 written-down value of the asset also attracts the LTBR uplift into that year. Thus, in Year 2 the RSPT deductions available total the full $10 of initial capital expenditure plus LTBR uplift on the $10. Project closure in that year gives rise to a guaranteed cash refund of 40% of the $10 plus LTBR uplift – an amount financially equivalent in present value terms to a cash refund in Year 1 had the $10 of capital expenditure been expensed in that year and a 40% cash refund provided then on the resulting $10 loss.

Stripping the certain (risk-free) cash flows from overall project flows

- This simple illustration in the above figure shows how the RSPT design with its is financially equivalent to the immediate expensing plus cash refunds of a cash flow tax. Despite shifts in RSPT deductions relative to cash flow taxation, the design of LTBR uplift and guaranteed deferred refunds produces financial equivalence with cash flow taxation. This design is embedded in the worked example and the associated shifts in the timing of RSPT deductions are therefore reflected in the overall cash flows of the project.

- It would not be sensible to discount these shifts in the timing of uplifted RSPT deductions at discount rates higher than the LTBR. Unlike other project flows, these shifts in the timing of RSPT deductions have their associated value assured via guaranteed cash refunds (or prior write-off against revenue). Under the RSPT, the overall cash flows can be viewed as incorporating an asset with certain future payouts plus the risky project cash flows.

- Discounting the overall project flows post-RSPT at the LTBR will pull the certain future flows back to their values under cash flow taxation. Thus, the resulting post-RSPT NPV (item 61) is 40% less than the project's pre-RSPT NPV (item 60) with discounting at 6% (the LTBR used in the worked example). Before RSPT, the project's NPV is $2040 and after RSPT the project's NPV is $1224, a 40% reduction (item 64).

- Were investment decisions taken on the basis a complete probability distribution built up by discounting each possible cash flow outcome of the project using the LTBR (as a risk-free interest rate), further analysis would not be needed.

- Were, however, post-RSTP project cash flows to be discounted using rates higher than the LTBR, sensible analysis could be undertaken in a number of ways:

  - lowering the discount rate in recognition of a combination of risk-free and risky assets in the project's cash flow;

  - converting the delayed certain payments within the overall flows into up-front cash equivalents (what immediate write-off plus cash refund would have provided); or

  - separating the overall flows into two streams – one reflecting the cash flows that would have been associated with cash flow taxation, the other the difference between overall post-RSPT flows and the flows consistent with cash flow taxation. These latter flows should show early deficiency in after-RSPT flows relative to cash flow taxation with these early deficiencies offset by later guaranteed cash refunds. These later guaranteed payouts should neatly match the early cash deficiencies in discounted terms – with discounting at the LTBR reflecting the guaranteed nature of the cash refunds.

- Line items 65 to 73 in the 'Risk Decomposition' section show the last of the above methods.

  - 'At risk' asset (item 67): shows project cash flows as if cash flow taxation applied – that is, 40% reduction in all project cash flows before RSPT (positive and negative). Discounting at any discount rate produces a 40% reduction in post-tax NPV relative to pre-tax NPV. With discounting at 6%, for example, post-tax NPV is $1224 (item 69), a 40% reduction (item 70) in the $2040 pre-tax NPV (item 68). (These are the same pre- and post-tax outcomes obtained from discounting overall pre and post-RSPT flows at 6% – items 62 to 64) With discounting at 10%, the pre-RSPT NPV of the project's risky asset is $1132 (item 71) and post-RSPT the NPV is $679 (item 72), again representing a 40% reduction (item 73).

  - Deferred 'risk-free' asset (item 65): shows the difference in year-by-year cash flows between post-RSPT flows and cash flows under cash flow taxation. Discounting these flows at the assumed 6% LTBR results in the expected zero up-front NPV (item 66).