6.2.2 Tax and Treasury

Self-Test Questions

Unit: Unit 2 – Treasury Applications

Module: Module 6 – Managing the corporate structure

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Summary: Self-test questions about taxation and treasury

Keywords: effective tax rate, withholding tax, deductible, transfer pricing, double taxation, offset, royalties

Background for questions 1 - 5

Orange Co is domiciled in Orangeland, which taxes corporate income at 35%. Orangeco has a subsidiary, Blueco, which is domiciled in Blueland. Blueland taxes corporate income at 50%. Both countries use currencies pegged to USD.

Orangeco currently makes taxable profit of $100m a year, and Blueco makes $50m.

Orangeco can borrow USD at 2%; Blueco can borrow USD on the same terms locally at 2.5% on a standalone basis.

Orangeco borrows USD50m at 2% and lends the funds on to Blueco at 5%.

Question 1

What are tax costs and ETRs in each co and for the group post this transaction? What is the change in group ETR?

Question 2

Blueland also applies a 20% withholding on loan interest, including that on intercompany loans. The intercompany loan between Orangeco and Blueco includes a gross up clause.

What are the ETRs for Blueco, Orangeco and the Orangeco group now?

- Assume the whole of the WHT element of the remittance to Orangeco is deductible for Blueland tax.
- Assume Orangeland taxes companies on the amount of interest earned as opposed to cash received.

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Question 3
Assuming no change in the transfer pricing issue, consider each of the four possibilities for a double taxation treaty between Orangeland and Blueland, rank each in order of benefit for the Orange group.

a) The tax treaty may provide for exemption from withholding taxes by the payer;
b) Participation exemption prevents the same income from being taxed twice.
c) The overseas tax may be used to offset and reduce any domestic tax liability
d) The overseas tax may simply be allowed as a tax deduction against the domestic tax liability

Question 4
The Orange group has a second subsidiary, Redco, incorporated in Redland. Redco has been struggling in recent years, but a turnaround plan has been agreed. Its balance sheet is as follows:

Item	Curr 000s
Net trading assets	**(250)**
Share capital	150
Reserves	(400)
Total	**(250)**

Orangeco will invest Curr 1,000k to turn Redco around. There are, however, two constraints on the capitalization of subsidiaries in Redland. Firstly Redland has a thin capitalization limit whereby Redco's debt cannot exceed 300% of Shareholders' Funds, i.e. share capital plus reserves. Secondly there is a restriction on upstream loans, which cannot exceed 'Free Equity', being Shareholders Funds, less 150% of share capital.

Calculate the maximum debt that Redco can take on while still meeting thin capitalization limits, giving a debt / equity split for the Curr 1,000k investment. What are the implications for the ability of Redco to upstream cash generated from operations?

Question 5
Orangeco wants to extract royalties from Redco. What are the main issues to ensure the tax advisor covers off?

Question 6
Why might it be prudent to have the shares of a new venture company in, say, a developing Asian country owned by a specially-formed company in, say, Switzerland?

Question 7
Why might a French-domiciled group make loans to its US subsidiary via a Swiss financing subsidiary?

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Answers

Answer 1

The net effect is that Orangeco earns 3% x $50m = $1.5m pa pre tax on the arrangement; while the cost to Blueco is $2.5m pretax.

Blueco:

Blueland's tax authority are likely to challenge the terms of the loan, and may disallow the excess 5% - 2.5% = 2.5% loan cost for tax purposes. Orangeland's tax authority will do nothing – the arrangement earns them extra.

So Blueco will pay tax of 50% x $(50 – (0.025 x 50)m = $24.375
Blueco's ETR is 24.375 / (50 – 2.5) = 51.32%

Orangeco:

Orangeco will pay tax of 35% x $(100 + 1.5)m = $35.525m
Orangeco's ETR is 35.525 / 105 = 35.0%

Group:

The group pays a total of 24.375 + 35.525 = $59.900m
The group's ETR is 59.9 / (101.5 + 47.5 = 149m) = 40.20%

(Check, group net profit is now $150m less $50m at 2% interest = $149m. OK.)

Effect on Group ETR:

Compare – group ETR prior to the transaction was (100 x 35% + 50 x 50%) / 150 = 40%
The transaction has increased group ETR by 0.2%.

Answer 2

Nb Blueco's revised ETR depends on the tax treatment of the WHT by Blueland's fiscal authorities.

The effect of the gross-up clause is that Orangeco requires Blueco to adjust its interest payment so that Orangeco still gets $2.5m cash in hand each year.

So Blueco has to pay a total of $2.5 / (1-0.2) = $3.125m of interest cost to Blueco.

Of this, 0.20 x $3.125 = 0.625m is paid to Blueland's tax authority on behalf of Orangeco, and 0.80 x $3.125 = 2.5000m is paid to Orangeco.

Assuming the whole of the WHT is deductible for Blueland tax, then Blueco will pay 50% x (50 – 1.25 – 0.625)m = 24.0625m .

Blueco's ETR will be 24.0625 / (50 – 3.1250) = 24.0625 / 46.875 = 51.33% (sense check – Blueco's ETR is unchanged because the additional cost of the WHT is allowable for Blueland tax. If that were not the case, the ETR would rise).

Orangeco
Orangeco will pay tax on:

Base profit:	100.0000
Less interest on external loan 50 x 0.02 =	(1.0000)
Add gross interest on Blueco loan	3.1250
Taxable profit:	102.1250
Tax at 35%	35.7438
ETR:	35%

Group:
Total tax paid = 24.0625 + 35.7438 + 0.625 = 60.4313
Group profit = 102.125 + 46.875 = 149.0000 as before

Group ETR = 40.55%, an increase of 0.35% due the double taxation of the intercompany interest.

Answer 3

a) The tax treaty may provide for exemption from withholding taxes by the payer; i.e. no WHT applicable, so as calculated in example and Q1 above.

	Tax paid $m	ETR
Blueco	24.375	51.32%
Orangeco	35.525	35.0%
Group	59.900	40.20%

b) Participation exemption prevents the same income from being taxed twice.
Blueco – as above.
Orangeco:
Because Orangeco now pays tax on the net interest receivable from Blueco, its tax calculation is as per Q1 and a. above.

Group:
Total tax paid = 24.0625 + 35.525 + 0.625 = 60.2125
Group profit = 149.0000 as before

	Tax paid $m	ETR
Blueco	24.0625	51.33%
Orangeco	35.5250	35.0%
Group	60.2125	40.41%

c) The overseas tax may be used to offset and reduce any domestic tax liability
Blueco – as above in Q3.
Orangeco
Orangeco will pay tax on:

Base profit:	100.0000
Less interest on external loan 50 x 0.02 =	(1.0000)
Add gross interest on Blueco loan	3.1250
Taxable profit:	102.1250
Tax at 35%	35.7438
LESS: Overseas tax paid:	(0.625)
Net tax to pay	35.1188
ETR:	34.39%

Group:
Total tax paid = 24.0625 + 35.1188 + 0.625 = 59.8063
Group profit = 149.0000 as before

	Tax paid $m	ETR
Blueco	24.0625	51.33%
Orangeco	35.1188	34.39%%
Group	59.8063	40.14%

d) The overseas tax may simply be allowed as a tax deduction against the domestic tax liability,
Blueco – as above.
Orangeco
Orangeco will pay tax on:

Base profit:	100.0000
Less interest on external loan 50 x 0.02 =	(1.0000)
Add gross interest on Blueco loan	3.1250
Less: Overseas tax paid:	(0.625)
Taxable profit:	101.50
Tax at 35%	35.525
ETR:	35%

Group:
Total tax paid = 24.0625 + 35.525 + 0.625 = 60.2125
Group profit = 149.0000 as before

	Tax paid $m	ETR
Blueco	24.0625	51.33%
Orangeco	35.5250	35%%
Group	60.2125	40.41%

Commentary:

- The optimum treaty result is to get a like for like, full deduction for WHT suffered abroad, i.e. option c).
- Options b) and d) produce the same result IN THIS PARTICULAR CASE, but the logic and rules will vary between treaties.
- Often treaties using option b) or d) limit the allowance for overseas tax paid to WHT calculated at the recipient's country's tax rate. In this example the WHT rate was 20%; had it been 50%, the relief for Orangeco might have been limited to Orangeland's 35% rate.

Answer 4
This can be modeled by spreadsheet or managed with some simple algebra.

If debt = D and equity = E, then

$$\frac{D}{-250+E}=3$$

D+E=1,000

These solve very simply to D = 562.5, E = 437.5

If Redco were to be financed in that way, then 'free equity' becomes:

Net assets less 1.5 X Share capital
= (-250 + 437.5) - (1.5 X (150 + 437.5)) = (693.75)

Thus Redco is a long way from being able to make any intercompany loan. Suppose it generates enough cash (and let's assume profit) to repay the loan. Then 'free equity' becomes:

Net assets less 1.5 X Share capital

= (-250 + 437.5 + 562.5) - (1.5 X (150 + 437.5)) = (131.25)

Thus unless some restructuring is made, there will always be trapped cash of 131.25.

Answer 5
Issues include:

- Consistency of plan with overall Group Tax Strategy.
- Formal royalty agreement in place prior to any payment being made (note formalities may require board resolutions etc).
- Get advice at least; tax clearance at the paying end or even a legal opinion on top.

- Arms length terms, consistent with similar agreements elsewhere in the market.
- Check implications for WHT, grossing up, income taxes, stamp duties, value-added taxes.
- Check routing of royalties – direct or via an intermediary?
- Agreement to include scope for prompt renegotiation (e.g. if tax rules change).
- Check the existence of any relevant tax treaties to minimise WHT tax leakage.
- Check threat of double taxation.
- Check opportunities for 'double dip' tax deductions.
- Appropriate systems and records to back up royalty calculations and payments.
- Any implications for thin capitalisation or earnings stripping, e.g. if royalty rate is unreasonably high, royalties may be deemed dividends by the paying company's tax authority. Or royalties may lead to company becoming overborrowed / undercapitalised.

Also:

- Consider attitude of / agreements with local lenders, and effect of stripping cash out via royalties on company's credit.
- Royalties are commonly due to the owner of the underlying asset such as intellectual property. Is the royalty recipient the optimum ultimate destination for the funds? If not, need a structure to remit on.
- Check effect of proposal on tax metrics e.g. ETR, CTP.
- Include the (new) royalty stream within the group's FX risk management and cash management strategies.

Answer 6

There might be high or unpredictable taxes on disposal of assets or businesses in the country of the new venture. This compares with the known, hopefully stable, and low tax rate in Switzerland. The Swiss holding company could then be sold instead of the new venture company. But note the Vodafone issue in India.

Answer 7

Lower tax rates in Switzerland than France and also than US. So (arm's length) interest paid by the US company saves tax at a higher rate than the tax paid on the interest received by the Swiss company, which is at a lower rate than if the loan was made direct from France.