6.1.4 Subsidiary Financing Exercise Answer

Unit: Unit 2 – Treasury Applications

Module: Module 6 – Managing the corporate structure

Date: 1 September 2014

Summary: Answers to exercise investigating the implications of using different methods of subsidiary financing.

Keywords: export credit funding, syndicated credit facility, intercompany loan, short term FX swaps, cross currency interest rate swap, implied cost, covenant, breach, local currency funding, translation exposure, stress test.

This proved to be a very difficult question for students in the exam. The model answer is obviously in some depth compared to what could be expected in an examination. The marking scheme is retained for this model answer. This answer is a mix of that provided by the examiners and extra answers by ACT staff. There may therefore be some repetition.

Answer 1

The first thing to note about this situation is that the covenants refer to the performance of a subsidiary. Thus while the performance of the subsidiary contributes to overall credit metric performance, it is merely a subset of the group. To the extent that capital structure (and hence subsidiary credit metrics) is within the control of the group then one possible approach is that there is no problem with covenants in this subsidiary. In extremis the loan can be paid from central resources, thus cancelling the covenants. It is therefore crucial to understand why this loan might have been taken on and why it was drawn in euros.

It is possible that the export credit funding was subsidised, thus lowering the cost of finance. It is possible that the loan was taken on to reduce capital at risk in the Russian subsidiary, in which case the loan should have been non-recourse to the PPP parent (or other non-Russian subsidiaries). We are not told this but could reasonably assume this to be the case. If that is the case then it is reasonable for the lender to have required subsidiary covenants, which are now forecast to be breached. It is also possible (but less likely) that the centre had insufficient facilities to fund the entire project.

It is not clear why the loan was drawn in euros but it is possible that drawings in roubles were not available from the export credit agency. It is also possible that drawings in euros fits in well with the overall cash flows of the subsidiary. While some product is destined for the local market, a significant amount will be exported, earning hard currency and probably euros. It would be useful to consider the consolidated group at this stage. It is likely that a risk averse treasurer might well choose a proportion of group debt in euros to match the cash flows. Thus while the policy of local currency funding has been breached, overall translation risk (and indeed economic type risks) may have been sensibly approached.

The initial choice of debt / equity level is also a consideration; perhaps the tax rates are high in Russia, so that high debt there is justified. Inter-company debt on all other analyses is really equity.

Probably the best way to work out what is going on here is to do a bit of modelling. I know I would do that as a treasurer although in the exam that is probably too much to expect.
We don't have a balance sheet so let's model the project that we know about.

	A		**B**	**C**
	Start		**Start**	**Start**
	EUR		**EUR**	**RUB**
Business assets	350			12,600
Financed by				
Export loan	(90)		(64)	(936)
Inter co loan	(259)			(9,324)
Equity	1			

In column A we have what we know and I have assumed an equity of 1 to help the numbers. In columns B and C we have the breakdown of the balance sheet by currency, allowing for the hedge. We then do a bit of consolidation. This table is the consolidation at the rate of 36, the opening rate.

	D
	Start
	RUB
Business assets	12,600
Financed by	
Export loan	(3,240)
Inter co loan	(9,324)
Equity	36

Suppose that EBITDA was 10,000, then Debt / EBITDA would be 1.26.
Then let the exchange rate move to 46. This table shows the consolidation:

	E
	Start
	RUB
Business assets	12,600
Financed by	
Export loan	(3,880)

Inter co loan	(9,324)
Equity	(604)

If EBITDA remained the same then Debt / EBITDA moves to 1.32. So nothing is hedged here, neither net worth nor the credit ratios. Don't forget however that EBITDA may improve if there are export customers in the sales mix, which in fact there are.

In any case, out of EUR 350 million funding, only EUR 64 million remains in euro, or 18% of total debt (assuming that the ~~inter-company~~intercompany loan is fully hedged centrally). A drop in the rouble from 34 to 46 therefore increases debt in rouble terms as follows:

EUR 286 equiv unchanged
EUR 64 X (46/34) = 86.5

Debt thus increases from EUR 350 equiv to EUR 372.5 equiv, or 6.4%. This is hardly terminal but risk does increase if hedging is not possible or the rouble continues to fall. However, it is also likely that paper selling prices could be increased to reflect the drop in the rouble, as such drops are essentially inflationary and indeed this has already hit 13%.

The next thing to notice is that the subsidiary, admittedly before the rouble drop and economic problems, is actually in a very strong situation and all credit metrics are improving. It is starting to look like the problem here stems from poor setting of initial covenant levels. A jump in levels from 1 to 3 in interest cover, 6 to 3 in debt / EBITDA and 1.7 to 0.9 are so extreme as to be almost ridiculous and point to seriously poor modelling. The covenant table is in euro which is quite surprising, but as borrowings are mostly in roubles, then total debt actually falls in euro terms, compensating for other bad effects.

So while a solution is probably easy, the benefits established would be lost and so it may be worth pursuing remedies.

It is hard to believe that other lenders of the export credit agency would not be in a similar position.

The following analysis is on the basis of pre crisis exchange and interest rates. Thus debt would fall significantly in euro terms although interest rates would increase. It will all be hard to model but frequent re-forecasting is necessary.

Answer 2

Marking scheme - I have 30 points but this is a tough question so ⅓ mark for each good point.

The most serious [1] breach is in the EBIT Interest cover, from Q2 2012 to Q1 2013. [2]

In Q2 2012 EBIT is only 46% [3] of the required level, and 76% [4] by Q1 2013. At worst an EBIT deficit of 56.6mill [5]

EBIT is growing fast by [6] 2013 but maybe 15 months too late for the sharp step-up [7] in the covenant to 3.0.

At worst 18.9mill too much interest or excess debt of around 18.9 / 0.11 = 172mill, [8] (11.0% is the effective interest rate in Q2, 2012). The debt/EBITDA/covenant is only breached in Q2, 2012 [9] with debt 19% or 51mill, [10] too high or EBITDA shortfall of 17.1mill.

This suggests that the levels of the two covenants are not consistently aligned, [11] as well as reflecting the varying but large differences between EBIT and EBITDA. [12]
TNW shortfall is 38mill max and covers only two quarters, the [13] easiest to fix.
The Debt/TNW breach covers Q2 & Q3, 2012, with debt 13% and 7% too high respectively, ie 38 to 19 [14] of excess debt. Of course, swapping equity for debt would require only 38/2 new equity = 19mill. [15]

An obvious solution is to convert some of the inter-company loan [16] to equity capital - 52 [17] million sorts out the second and the third covenants, 112 million [18] would also sort out all but the Q2 2012 interest cover, which the banks might accept. The parent could reduce the interest rate [19] on the loan to fix that. But the parent may not want permanent reduction in debt/increase in equity. The parent could also subordinate the inter-company debt, [20] if not already done at the outset. This has the effect of increasing net worth. The interest could also be rolled up and excluded from covenant definitions. [21]

Then look for possible improvements in EBIT [22] or reduction in interest paid – simulate different fx, inflation and interest-rate [23] scenarios for the next 2 years, look at internal [24] transfer prices into E. Europe and Israel, also group [25] overhead charges into Russia, investigate short-term cost cutting [26] and cash-saving [27] exercises. This seems a high operational price to pay for poor initial financing arrangements.

Then explore re-negotiation [28] of covenants, especially the sharp step-up in Q2 2012, [29] which was obviously premised on reaching a significant stage in the profitability of the project which has not been achieved yet because of the delays.

It is also possible to re-set [30] covenants on the basis of group performance, rather than Russian performance. In that case, however, the loan might have to be made with recourse (guarantee from) the parent, which might not be desirable.

Answer 3

Marking scheme - I have 26 points but this is a difficult, complex question so ⅓ mark for each good point. In the end I was just looking for some clear thinking and some logical analysis for awarding marks.

The biggest issue here is that the covenant table is set[1] in Euros, which seems completely inappropriate and was obviously based round the export credit agency loan which was made in Euros. This should ideally be changed as it distorts the picture and does not reflect the management of the business, which is run in roubles.[2]

Interest on the 64m[3] EUR unhedged export credit facility will cost more[4] in rouble terms with the devaluation of the rouble (about 28% [5] currently, so interest rate say 3.8% instead of [6] 3%).

But bank covenant table is in EUR so interest stays same and (rouble-based) EBIT, EBITDA will reduce [7] having some adverse effect on covenants,[8] assuming no non-rouble [9] element in EBIT, EBITDA. Debt falls in EUR terms because the debt is mostly drawn in or hedged back to euros. [10] Covenants are hopefully defined so that derivatives are included in debt, allowing the reduction to cover the hedged element of the export credit debt.

The 26m[11] hedged facility will maintain EUR value, increase in rouble terms, along with TNW so gearing[12] aspect not hedged. Rouble interest will increase[13] dramatically (up to 22%, but the increase is offset by than the amount of the rouble devaluation[14] to date, so interest will probably increase in Euro terms[15]**.** (The interest rate has increased from 6% to 10% or more. That is a minimum increase of 66% so interest will probably go up in euro terms as 66% is more than the 21% fall in debt in euro terms).

The interest cost of the 350m inter-company [16] loan, being financed via short-term swaps during the (delayed) construction period, has gone from 10% to 30/55%,[17] but is this to be passed on to the Russian subsidiary? [18] The Euro equivalent interest rate is 28/43%[19] instead of the original 10%, so a serious[20] impact on the interest cover covenant. The balance sheet is hedged.

The key question is how long will the[21] crisis last - will it be over before the actual covenant period in 15 months' [22] times and, if so, what will be the residual[23] impact on debt (therefore interest) and TNW?

If the situation persists the unhedged element represents a big problem[24] and it would have to be re-financed. In any case the swap-financed inter-company loan is the biggest problem[25] especially as the swap market could close. Needs to be refinanced, an equity swap being the safest solution.[26]

Answer 4
Marking scheme - ½ mark for each good point.

Obviously cross-default clause[1] implications, with all the associated costs and dangers,[2] especially as PPP is seeking an investment grade[3] rating.

Also reputation[4] risk with banks and markets generally. Re-pricing risk, especially recently.[5]

How avoided? - for complex current situation avoid P&L[6] plus B/S covenants. Somehow allow for project slippage[7] re. step-up covenants. Avoid tricky[8] short-term financing where currency likely to be under threat or market not very robust. Reference financing methods to economic/currency[9] forecasting. Precise covenant definition[10] is critical (B/S[11] versus P/L effects, accounting treatment etc).

Hedging policy should have been observed.[15] Isolate external debt from inter-company debt in covenants.[12] Stress test covenants against project performance scenarios.[13] Avoid 100% debt finance on high risk projects.[14]