

Financial Modeling Fundamentals – Module 11

More Advanced Merger Models –

Quiz Questions

- 1. Which of the following are key differences between a cross-border M&A deal and a normal M&A deal between two companies in the same country?**
 - a. In cross-border deals, buyers cannot issue stock as easily since the seller is traded on a different stock market.
 - b. The currency exchange rate (FX rate) is critical, and you must consider how it impacts both the purchase price and the seller's financials, converted to the buyer's currency, afterward.
 - c. It is more difficult to use excess cash from the buyer or seller to fund the deal because the respective cash balances may be in different currencies.
 - d. There may be different accounting standards for items like transaction fees and the purchase price allocation schedule, which you have to reflect in the model.

- 2. Suppose that a Japanese company announces the acquisition of a US-based company, and shortly thereafter the JPY-USD exchange rate increases from 100 JPY per \$1.00 USD to 110 JPY per \$1.00 USD. How will EPS accretion / dilution for the deal be affected?**
 - a. The deal will become more dilutive because the US-based seller is now more expensive for the Japanese company to acquire.
 - b. The deal will become more accretive because the US-based seller's Pre-Tax Income will be worth more in Japanese yen when added to the buyer's Pre-Tax Income.
 - c. Most likely, there will be no EPS impact because the more expensive purchase price will be offset by the more valuable Pre-Tax Income from the seller.
 - d. It depends on the JPY-USD exchange rate in future years following the transaction close, what the seller's "yield" is, and other factors.

3. Consider the Purchase Price Allocation schedule shown below for a cross-border deal between a Japanese acquirer and a US-based seller:

Purchase Price Allocation:

Goodwill Calculation:	¥ in Billions	\$ in Millions
Equity Purchase Price:	¥ 1,473.0	\$ 14,046.8
Less: Seller Book Value:	(553.2)	(5,275.3)
Plus: Write-Off of Existing Goodwill:	268.2	2,557.8
Total Allocable Purchase Premium:	¥ 1,188.0	\$ 11,329.3
Less: Write-Up of PP&E:	(4.3)	(41.2)
Less: Write-Up of Intangibles:	(1,033.6)	(9,856.5)
Less: Write-Off of Existing DTL:	(55.9)	(532.9)
Plus: Write-Off of Existing DTA:	-	-
Plus: New Deferred Tax Liability:	693.9	6,617.2
Total Goodwill Created:	¥ 788.1	\$ 7,515.9
Goodwill Amortization Period (Years):	20	
Yearly Goodwill Amortization Expense:	39.4	375.8

Fixed Asset Write-Up:		¥ in Billions	\$ in Millions
PP&E Write-Up:	5.0%	¥ 4.3	\$ 41.2
Depreciation Period (Years):	8		
Yearly Depreciation Expense:		0.5	5.2
Intangible Asset Write-Up:			
Excess Purchase Price to Allocate:		¥ 1,188.0	\$ 11,329.3
Indefinite-Lived Intangibles:	82.0%	974.2	9,290.0
Definite-Lived Intangibles:	5.0%	59.4	566.5
Amortization Period (Years):	5		
Yearly Amortization Expense:		11.9	113.3
New Deferred Tax Liability:		693.9	6,617.2

This schedule is currently based on Japanese GAAP (J-GAAP) standards. If you wanted to show this same schedule under IFRS or US GAAP instead, which of the following assumptions would you change?

- Goodwill is never amortized for book purposes under IFRS or US GAAP, so you would have to remove that assumption and not factor it into the DTL calculation.
- Typically, indefinite-lived intangibles cannot represent 80%+ of the excess purchase price in an M&A deal under US GAAP or IFRS, so you would have to shift some of that to Goodwill or definite-lived intangibles instead.
- The Deferred Tax Liability would be different because only PP&E write-ups, not intangible asset write-ups, factor into the DTL under US GAAP or IFRS.
- If transaction fees have been added to the Equity Purchase Price, as they are under J-GAAP, you would have to remove them and use *just* the normal Equity Purchase Price in a schedule based on IFRS or US GAAP.
- Existing DTLs and DTAs are not adjusted under US GAAP or IFRS, so you would remove those line items in the Goodwill calculations.

4. Suppose that you are combining the Cash Flow Statements of the buyer and seller in a full-blown merger model where you have projected all three statements for each company.

Which of the following items are you MOST likely to exclude or remove from this analysis?

- a. Scheduled debt principal repayments by the seller – these are no longer relevant since the buyer has to refinance the seller’s debt.
 - b. Stock issuances and repurchases, especially anything the seller had planned to issue or repurchase.
 - c. Purchases of long-term or short-term investments by the seller, especially if these plans existed only because the seller had excess cash flow.
 - d. The full amount of CapEx from both companies, because typically in an M&A deal the buyer and seller reduce their combined CapEx needs.
5. You have built an M&A analysis for your client that shows accretion / dilution on an IFRS or US-GAAP basis as well as on a “Pro-Forma” basis.

The Pro-Forma numbers exclude new Depreciation & Amortization from asset write-ups, as well as other non-cash effects from the deal.

Your client sees that the deal is highly accretive on a Pro-Forma basis, but neutral to EPS on an IFRS or GAAP basis.

What’s the downside of justifying an M&A deal based on the Pro-Forma EPS accretion / dilution numbers?

- a. It’s too much of a “free lunch” – if you pay a huge premium over book value for the seller, that price has to be reflected somewhere.
- b. The bigger problem is that no one agrees on exactly what is excluded from the “Pro-Forma” numbers, so it can be difficult to describe and compare your results.
- c. Relying on Pro-Forma numbers places too much emphasis on EPS when other metrics, such as the credit stats and ratios, may be more meaningful.
- d. These Pro-Forma figures do not capture major Cash Flow Statement line items such as integration costs or substantially higher debt principal repayments.
- e. All of the above.