

UNDERTAKING A PURCHASE PRICE ALLOCATION



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7th Annual M & A
Valuation for CFO's Conference



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December 10-12 2008

Introduction



- Mergers are ubiquitous
- Nearly every business in history has been involved in one or more, as an Acquirer or Target
- A lot has been published on making them happen

Introduction



- Yet, according to KPMG, only 17% of the over 700 they studied, created real value
- More than half destroyed it
- There is virtually nothing written on the numerous endeavours that have to occur immediately after closing

Introduction



- One of the most complex of those is the Purchase Price Allocation (“PPA”) process
- This is required by SFAS 141 (US), Handbook Sec 1581 (Can) and IFRS 3, to be undertaken for every Business Combination.

Introduction



- In it, the Fair Value of the consideration paid, be it cash, notes, shares or anything else, is allocated between the Fair Values of various recorded and un-recorded assets of all kinds – financial, physical and intangible – of the Target, as well as the liabilities assumed

Introduction



- Everything involved, both known, and unknown (contingencies and the like), assets have to be valued, as well as the similar liabilities
- Any unallocated balance representing the unknowable assets, as well as by definition the assembled workforce, is recorded as Goodwill

The Process



- The PPA process has five, interconnected phases
 1. Determine the Acquirer
 2. Establish the Fair Value of the purchase price consideration

These two are not covered by this presentation.

The Process



3. Identify the various assets, liabilities, technologies and contingencies involved
4. Select appropriate valuation techniques
5. Estimate their Fair Values and reconcile the underlying rates of return

Identifying the Items Involved



- Many companies making an acquisition do not know exactly what they are getting
- The price is normally based on historic earnings, projected future cash flows and the expected benefits of synergies (unions of two related things)

Identifying the Items Involved



- In every case, a rigorous analysis of what the Acquirer has actually received is essential
- This will almost certainly involve unrecognized assets as well as hidden liabilities

Identifying the Items Involved



- The initial step is fairly simple
 - Identify the tangible assets
 - Normally found on the Balance Sheet
 - Classify everything else as an intangible

Identifying the Items Involved



- Then determine the Fair Values of the tangibles
- Adjustment will be needed for receivables
- Typically required for inventories
- All capital assets require restatement

Capital Assets



- Independent real estate and technical appraisers are recommended to determine Fair Values
- They should apply the “highest and best use” concept
- For lands and buildings this may not necessarily be what is actually happening

Capital Assets



- For the plant and equipment it will normally be their present functions
- It is important to include all fully written off but still useful items
- moulds, tools, jigs and dies

Intangible Assets



- After dealing with the financial and physical (tangible) items (both assets and liabilities), the focus shifts to the most difficult arena
- Intangible Assets
- They are normally divided into five categories:

Intangible Assets



- Marketing related – trademarks, Internet domain names, non-compete agreements, etc.
- Customer-related – customer lists, contract and relationships, order backlogs, etc.
- Contract-based – licenses, royalties, service/supply contracts, leases, franchises, etc.

Intangible Assets



- Technology-based – technology, software, databases, trade secrets, etc.
- Artistic-related – literary works, musical works, pictures, videos, etc.

Intangible Assets



- An “assembled workforce” is deemed to be part of Goodwill
- But its Fair Value has to be calculated in applying several of the accepted methodologies

Intangible Assets



- The goal is to establish each of the identifiable intangible assets involved
- Then determine their Fair Values
- Any residual amount is Goodwill
- In every case the three traditional approaches (Cost, Market and Income) are considered

Selecting Appropriate Methodologies



- Many companies have similar identifiable intangibles:
 - *Customer relationships* – All Acquirers must recognize any customer relationships, from contracts or otherwise
 - Normally valued using the Income Approach
 - Attributable cash flows are estimated and discounted

Selecting Appropriate Methodologies



- **Key assumptions required:**
 - Attrition rate – how fast would someone expect sales from the customer relations to erode
 - Expected (EBIT or EBITDA) margins
 - Contributory asset charges – the notional costs for use of other necessary assets (tangible, intangible & assembled workforce)

Selecting Appropriate Methodologies



- *Trademarks and Technologies* –typically valued using the relief from royalty method
- Based on the concept that if the entity did not own the item, how much would it be willing to pay to use it?

Selecting Appropriate Methodologies



- The assessment of expected sales focuses on the Company's plans
- The determination of an appropriate royalty rate looks to available market-based information

Selecting Appropriate Methodologies



- *In-process research & development* – the ongoing product development efforts by the Target
- GAAP requires immediate expensing
- Normally a Discounted Cash Flows method is applied using probabilities

December 2007 Balance Sheet



		<u>Purchase Price Allocation</u>				
		<u>Book</u>	<u>Fair</u>	<u>WARA</u>	<u>Return</u>	
		<u>Value</u>	<u>Value</u>	<u>Rate</u>	<u>Return</u>	
		<u>S' 000</u>	<u>S' 000</u>	<u>%</u>	<u>S' 000</u>	
Purchase Price			165,000			
<u>Assets Acquired</u>						
Current						
	Cash & equivalents	35,122	35,122	1.50%	527	
	Receivables	4,227	4,185	6.00%	251	
	Inventories	3,241	3,354	6.50%	218	
	Other	726	726		-	
<u>Liabilities Assumed</u>						
	Notes and accounts payables	-621	-621	1.50%	-9	
	Other Payables	-923	-923	1.50%	-14	
	Advance receipts for common stock	-2,662	-			
Working Capital		<u>39,110</u>	<u>41,843</u>	<u>2.30%</u>	<u>974</u>	

December 2007 Balance Sheet



			<u>Purchase Price Allocation</u>		
		<u>Book</u>	<u>Fair</u>	<u>WARA</u>	
		<u>Value</u>	<u>Value</u>	<u>Rate</u>	<u>Return</u>
		<u>\$ '000</u>	<u>\$ '000</u>	<u>%</u>	<u>\$ '000</u>
Equity in Affiliate		4,798	4,798	21.00%	1,008
Fixed					
	Property & Equipment Net	1,213	16,809		
	Prepayment--Equipment	3,121	<u>3,121</u>		
		<u>4,334</u>	<u>19,930</u>	9.00%	1,794
Other					
	Purchased Intangibles				
	UI Listing	851	851	16.60%	141
	Know-how	122	122	22.00%	27
	Trade-name	2,771	2,771	25.00%	693
	Miscellaneous	155	155		-
		<u>3,899</u>	<u>3,899</u>	22.10%	861
Net recorded position		<u>52,141</u>	<u>70,470</u>	6.60%	<u>4,636</u>

December 2007 Balance Sheet



- The difference of \$113 million between:
 - consideration of \$165 million
 - reported equity of \$52 million
- Suggests a significant unrecorded Intangible Assets

December 2007 Balance Sheet



- Discussions with management determined at least the following:
 - Customer Relationships
 - Trade-name
 - Assembled Workforce (in Goodwill)
 - Furnaces knowledge (in Property & Equipment)
 - Tools, Jigs, Dies and Moulds (in Property & Equipment)

December 2007 Balance Sheet



		<u>Purchase Price Allocation</u>			
		<u>Book</u>	<u>Fair</u>	<u>WARA</u>	
		<u>Value</u>	<u>Value</u>	<u>Rate</u>	
		<u>\$ '000</u>	<u>\$ '000</u>	<u>%</u>	
				<u>Return</u>	
				<u>\$ '000</u>	
Unrecorded Intangible Assets					
	Customer relationships		6,700	25.00%	1,675
	Assembled Workforce		670	20.00%	134
	Trade-name		26,000	25.00%	6,500
	Goodwill - Other		61,160	35.50%	21,705
			<u>94,530</u>	31.80%	<u>30,014</u>
			<u>165,000</u>	21.00%	<u>34,650</u>

Property & Equipment



- Company's assets included a great deal of unrecorded know-how
- Some relating to its major plant
- When bought in 2000 it had 48 non-functioning specialized furnaces

Property & Equipment



- Half are now in service
- Their replacement cost is about \$600,000 each
- The know-how allows them to be rehabilitated for only \$150,000

Property & Equipment



- Engineering studies indicate they have an economic/physical life of 25 years
- Substantially the same as the 30 years specified for new units

Property & Equipment



- The increase to depreciated replacement cost of the 24 operating units is \$9,600,000 (\$400,000 each)
- The present value of the future savings from rebuilding is \$4,671,000 over 3 years
- The total increase is \$14,271,000

Property & Equipment



- Necessary moulds, with an indefinite physical life, had been written-off
- The are recorded at replacement cost of \$1,325,000

Customer Relationships



- This industry functions as if the European and American markets are totally different
- In reality both are mainly supplied by Asian producers

Customer Relationships



- From 2004 to 2008 the unit price in Euros (unconverted) differed by less than 5% from the similar dollar cost in the US
- In April 2004, European sales were €46.40 (US\$56.50) a unit, US \$43.00 in the US

Customer Relationships



- Three years later the Euro price was €47.10 (\$73.30) compared with US \$47.10 in America
- In 2007 European gross margins were about 26.3% compared with 10.2% for the US

Customer Relationships



- Management expects this benefit to continue
- Value based on reversion over 10 years

Customer Relationships



- Present value at 25% of the net benefits over 10 years from sales to European customers is \$6,700,000
- Reflects contributory charges for capex, working capital, assembled work force & trade-name

Trade Name



- Valued by the relief from royalties method
- Royalty rate of 2.75%
- Present value at 25% of ten years projected sales with 3%, subsequent growth gives after tax savings from ownership of \$26 million

Conclusion



- Preparing a PPA is a complex technical process
- In many ways more difficult than valuing an overall business
- In a PPA, Management and Valuators must assess numerous cash flows and establish rates of return applicable to each of them