

PURCHASE PRICE ALLOCATION



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The Process



- The PPA process has five, interconnected phases
 1. Determining the Acquirer
 2. Establishing the Fair Value of the Purchase Price (consideration)

The Process



3. Identifying the various assets, liabilities, technologies and contingencies involved
4. Selecting appropriate valuation techniques
5. Estimating their Fair Values and reconciling the rates of return

The Process



- Several (3, 4 & 5), of these complex activities must be undertaken for each Reporting Unit into which the acquired assets and activities of the Target, as well as the liabilities assumed, have been transferred, to establish the appropriate amounts of Goodwill

The Process



- This process is a source of potential problems for Auditors
- They believe, often rightly, that it can give management opportunities for shenanigans similar to those that sometimes occurred in the past with one-time-charges

Fair Value of the Purchase Price



- In most deals there are several components
- Typically cash, notes and shares
- “cash is cash”
- Other elements may need adjustment

Fair Value of the Purchase Price



- Sometimes an earn-out clause provides for a higher price should certain EBITDA targets be exceeded
- These must be added to the consideration on a probability basis

Fair Value of the Purchase Price



- Up to now, the various transaction costs of the Acquirer have been included in the purchase price
- Under the revised standards they are charged against Income

Identifying the Items Involved



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

Identifying the Items Involved



- In every case, a rigorous analysis of what the Acquirer has actually received is essential

Identifying the Items Involved



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

Identifying the Items Involved



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

Valuing Receivables



- Fair Value is usually lower than cost
- It is the present value, at current borrowing rates, of the amounts expected to be received
- Including a full provision for difficulties in collection

Inventories



- Their Fair Value is somewhat counterintuitive
- Normally they are carried at the lower of cost or net realizable value
- For finished goods, the excess of selling price over incurred cost is not recognized until a sale

Inventories



- In an acquisition the inventory is considered sold
- Not to a customer but to the Acquirer
- Accordingly, some of the value-added is recognised

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

Liabilities



- Assume all liabilities
- Loans or pension obligations are restated to Fair Values
- This is to create a Fair Value tangible Balance Sheet

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 six 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.
- Government granted – licenses, etc.

Intangible Assets



- An “assembled workforce” is deemed 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 identifiable intangible asset involved
- Then determine its Fair Value
- Any residual intangible value is Goodwill
- In every case the three traditional approaches (Cost, Market and Income) are considered

Selecting Appropriate Methodologies



- Most 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 Entity
- The determination of an appropriate royalty rate looks to available market-based information

Selecting Appropriate Methodologies



- *Non-compete agreements* – typically part of most transactions
- Valued using an income approach
- Expected cash flows are estimated
- With and without the agreement in place

Selecting Appropriate Methodologies



- The probability of competition actually occurring must also be assessed
- The more likely the employee would compete without the agreement, the higher its Fair Value

December 2008 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 and Equipment	1,311	16,809		
	Accumulated Depreciation	-98			
	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 2008 Balance Sheet



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

December 2008 Balance Sheet



		<u>Purchase Price Allocation</u>			
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		<u>Value</u>	<u>Value</u>	<u>Rate</u>	<u>Return</u>
		<u>\$ '000</u>	<u>\$'000</u>	<u>%</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>

Current Assets



- The cash is simple
- Receivables a bit more complicated
- Their fair value is obtained by deducting a discount to reflect when, if at all, payment is likely to arrive
- Inventories were discussed previously

Property Plant and Equipment



- The Capital Assets include 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 Plant and 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, mainly new controls

Property Plant and Equipment



- After they are rebuilt, they are effectively as good as new
- Engineering studies indicate the rehabilitated furnaces have as an economic/physical life of 25 years

Property Plant and Equipment



- Substantially the same as the 30 years specified for new units
- The increase to the depreciated replacement cost of the 24 operating units is \$9,617,000

Property Plant and Equipment



- The present value of the future savings from rebuilding is \$4,671,000
- The total increase is \$14,288,000

Tools, Jigs, Dies & Moulds



- Another significant part of the know-how relates to casting technology
- Obtaining particular physical properties for which customers pay a premium

Tools, Jigs, Dies & Moulds



- Necessary moulds, with an indefinite physical life, had been written-off
- They are recorded at replacement cost of \$1,210,000

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



- Four years later the Euro price was €47.10 (\$73.30) compared with US \$47.10 in America
- In 2008 European gross margins were about 26.3% compared with 10.2% for the US

Customer Relationships



- Management expects this benefit to continue for a number of years
- The Fair Value was calculated based on reversion to the mean over 10 years

Customer Relationships



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

Trade Name



- Valued by the relief from royalties method
- Using a market royalty rate of 2.75%
- Present value at 25% of ten years projected after-tax savings from ownership is \$26 million

Conclusion



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