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PURCHASE PRICE ALLOCATION

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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 ASC 805 (US), Handbook Sec 1581 (Can) and IFRS 3R, to be undertaken for every Business Combination

Introduction

- In it, the Fair Value of the consideration paid, be it cash, notes, shares and 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 financial and physical 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 plant & equipment it will normally be their present functions
- It is important to include all fully written off but still useful items
- Example - moulds, tools, jigs & 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 six categories:

Intangible Assets

- Marketing oriented – 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 – transferrable licenses and permits

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 for other intangible items

Intangible Assets

- The goal is to establish each of the identifiable intangible assets involved
  - Then determine its Fair Values
  - Any residual amount 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)

- *Trademarks & 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* –ongoing product development efforts by the Target
  - Normally valued by a Discounted Cash Flows method using probabilities
  - Capitalized with indefinite life subject to impairment
  - When life no longer indefinite, amortized

Target Inc.

- Lets look at an example
  - BigCo acquired Target Inc. at 31 December 2007
  - Paid $165 million in cash and shares
  - Recorded equity $52 million
  - Difference $113 million
  - Suggests significant unrecorded assets

Target Inc.

December 2007 Balance Sheet	Book Value S' 000	Purchase Price Allocation: Fair Value S' 000	WARA Rate %	Return S' 000
Purchase Price		$165,000		
Acquired				
Current Assets				
Cash & equivalents	$35,122	$35,122	1.5%	$527
Receivables	$4,227	$4,185	6.0%	$251
Inventories	$3,241	$3,354	6.5%	$218
Other	$726	$726		-
Liabilities Assumed				
Notes and accounts payables	($621)	($621)	1.5%	($9)
Other Payables	($923)	($923)	1.5%	($14)
Advance receipts for common stock	($2,662)	-		
Working Capital	$39,110	$41,843	2.3%	$974

Target Inc.

December 2007 Balance Sheet	Book	Purchase Price Allocation		
		Fair	WARA	
	Value	Value	Rate	Return
Capital Assets Acquired	$ '000	$ '000	%	$ '000
Equity in Affiliate	4,798	4,798	21.0%	1,008
Fixed				
Plant & Equipment Net	1,213	16,809		
Prepayment--Equipment	3,121	3,121		
	4,334	19,930	9.0%	1,794
Purchased Intangibles				
Ul Listing	851	851	16.6%	141
Know-how	122	122	22.0%	27
Trade-name	2,771	2,771	25.0%	693
Miscellaneous	155	155		-
	3,899	3,899	22.1%	861
Net recorded position	52,141	70,470	6.6%	4,636

December 2007 Balance Sheet

- Discussions with management determined at least the following intangibles:
  - Customer Relationships
  - Trade-name
  - Assembled Workforce (in Goodwill)
  - Tools, Jigs, Dies and Moulds (in Plant & Equipment)
  - Furnace rehabilitation know-how (in P & E)

December 2007 Balance Sheet

	Purchase Price Allocation		
	Fair Value	WARA Rate	Return
	$'000	%	$'000
Unrecorded Intangible Assets Acquired			
Customer relationships	6,700	25.0%	1,675
Assembled Workforce	670	20.0%	134
Trade-name	26,000	25.0%	6,500
Goodwill	61,160	35.5%	21,705
	94,530	31.8%	30,014
	165,000	21.0%	34,650

Property & Equipment

- Target's 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
- Valued at $10,000 each

Property & Equipment

- 24 are now in service
- Replacement cost is about $600,000 each
- Know-how allows rehabilitation for only $150,000

Property & Equipment

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

Property & Equipment

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

Property & Equipment

- Essential tools, dies, jigs and moulds with indefinite physical life, had been written-off
- Their Fair Value is replacement cost of $1,325,000

Customer Relationships

- Target’s 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 European unit price in Euros (unconverted) of Target's main product 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
- The Fair Value of such customer relationships is based on reversion to the same price 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 Valuator must asses numerous cash flows and establish rates of return applicable to each of them

ANY QUESTIONS?