VRC

Strong values.

Methods for Valuing Customer Relationships

Valuation Research Corporation

P.J. Patel, CFA, ASA

- Mr. Patel is a Managing Director with VRC and specializes in the valuation of businesses, assets and liabilities for financial reporting purposes.
- Mr. Patel is an active member of the Appraisal Industry Task Force (AITF).
- He is a member of the Appraisal Foundations Working Group preparing an industry Practice Aid for valuing customer related assets.
- Mr. Patel is a frequent presenter on valuation issues for financial reporting purposes and has recently presented on valuation issues relating to ASC 805 (SFAS141R), ASC 350/360 (SFAS142/144), ASC 820 (SFAS157) and other emerging issues. In addition, Mr. Patel was on the Fair Value Panel at the 2008 AICPA SEC Conference. He has been quoted numerous times in the press regarding valuation issues.

Contact Information:

ppatel@valuationresearch.com Direct: 609.243.7030 Mobile: 609.240.1337

Topics Covered in the Valuation Advisory

- Accounting background and overview
- Identification of customer-related assets and valuation considerations
- Valuation methodologies
- Valuation methodology selection
- Other considerations
- Appendix on attrition rate calculations
- Appendix of case studies

Customer Assets Evolve Out of Other Activities



Continuum of Customer Assets



What is the Appropriate Level of Cash Flow: Review Business Functions

Determining the cash flow related to customer relationships is difficult and is the input that has the biggest impact on customer value.



Identification of Customer-related Assets and Valuation Considerations

- Qualitative understanding of the relative importance of the customerrelated asset being valued:
 - Industry characteristics
 - Company characteristics
 - Product/service characteristics
 - Customer-related asset characteristics
- Other key factors to consider:
 - Barriers to change
 - Stickiness of customer relationships
 - Switching costs
- Qualitative attributes are just as important as quantitative attributes in determining the value of customer relationships

Valuation Approaches

- Income Approach
 - Multi-Period Excess Earnings Method
 - Distributor Method
 - With-and-Without Method
 - Cost Savings Method
- Cost Approach
- Market Approach

Summary of Methods: MPEEM

MPEEM based customer cash flow

Company revenue/earnings Less: Taxes Less: Charges for contributory assets Equals: Cash flows related to customer relationships

- Residual cash flow model
- Best used when:
 - Customers are the primary assets or
 - Margins are within a reasonable range of normal industry levels

Revenue Adjusted for Growth	\$100,000	
Remaining After Attrition	95.0%	
Revenue After Attrition	95,000	
EBITA_	19,000	
	20.0%	
Less: Royalty for use of Trademark	(9,500)	10.0%
Adjusted EBITA	9,500	
Less: Income Taxes	3,800	
Debt Free Net Income	5,700	
Debt Free Net Income Margin	6.0%	
Contributory Asset Charges		
Normal Working Capital	(1,425)	
Property, Plant & Equipment	(1,900)	
Workforce	(1,045)	
Return on Supporting Assets	(4,370)	
	-4.6%	
Residual Income	1,330	

Summary of Methods: Distributor Method

Distributor Method based customer cash flow

Company revenue

Earnings of market proxy

Less: Taxes

Less: Charges for contributory assets (based on market proxy)

Equals: Cash flows related to customer relationships

- Residual cash flow model but isolates cash flows relating to customer relationships
- Best used when:
 - Customers are NOT the primary assets or
 - A reasonable market proxy exists for the customer relationships

Sample Distributor Method Cash Flow Calculation

Revenue Adjusted for Growth	\$100,000
Remaining After Attrition	95.0%
Revenue After Attrition	95,000
EBITA	3,895
	4.1%
Less: Royalty for use of Trademark	0
Adjusted EBITA	3,895
Less: Income Taxes	1,558
Debt Free Net Income	2,337
Debt Free Net Income Margin	2.5%
Contributory Asset Charges	
Normal Working Capital	(684)
Property, Plant & Equipment	(238)
Workforce	(95)
Return on Supporting Assets	(1,017)
	-1.1%
Net After Tax Cash Flows	1,321

Summary of Methods: With-and-Without Method

Value of business/entity with customer relationships

Less: Value of business/entity without customer relationships, where customer relationships are re-created

Equals: Value of the customer relationships

- Best used when:
 - Customers are NOT the primary assets or
 - Customer relationships can be re-created
 - Time to re-create the customer relationships is short and does not change the structure of the business

Cost Approach - Overview

- Premise is that a prudent investor would pay no more for an asset than the amount for which the utility of the asset could be replaced.
- May be appropriate when the customer related asset isn't the primary asset and can be recreated in a short period of time.
- Time to recreate is critical if time is significant may point to a value greater than an accumulation of costs.
- May be used for early-stage companies that are unable to forecast revenue with reasonable certainty or when other approaches are difficult or not possible.

Direct Costs

Plus: Indirect costs

Plus: Developer's profit – Reflects the expected return on the investment. Should be a reasonable profit margin based on market inputs.

Plus: Opportunity costs – Profits lost while the asset is being created. Based on a reasonable rate of return on the expenditures while asset is being created. Applicable if asset cannot be used while being created.

Equals: Value of customer relationships

Taxes – Not tax affected. It is believed market participants view expenses on a pre-tax basis.

Cost Approach - Example

Direct & Indirect Costs		% of Total Value			
Direct Costs	15.0	55.8%			
Indirect Cost	6.0	22.3%			
Total Costs	21.0				
Developer's Profit					
Developer's Profit Margin (1)	20%				
Developer's Profit	5.25	19.5%			
Opportunity Cost					
# of Customers	1,000				
Average Lead Time (Months)	3				
Required Return	12%				
Investment per Customer (2)	0.021				
Opportunity Cost per Customer (3)	0.00063				
Total Opportunity Costs (4)	0.630	2.3%			
Total Cost	26.880	100.0%			
Calculations					
1 - (Cost / (1 - Margin) * Margin) such that the margin earned is 20%.					
Profit / (Revenue) = 5.25 / (21.0 + 5.25) = 20% margin.					
2 - Total Costs / # of Customers					
3 - Lead Time in Vears * Required Return * Investment ner Customer					
S - Leau Thile in Fears Trequireu Return Thivestment per Customer					

4 - Opportunity Cost per Customer * # of Customers

Valuation Methodology Selection

Valuation Techniques	Pros	Cons	Best Used When
MPEEM	 Consistent with PFI Assumptions / inputs available 	- Large number of assumptions needed, i.e. LTGR, attrition rate, other	- Customers are the primary asset of the business
Distributor Method	 Inputs are available Reduces reliance on CACs Some portion of goodwill not included in value Allows use of MPEEM to value primary asset 	 Market inputs can be subjective and require valuer judgment Requires availability of appropriate market inputs. 	- Customers are not the primary asset
With-and-Without Method	- Underlying theory is intuitive	 Key assumptions are very subjective and difficult to support 	- Customers are not the primary asset
Cost Approach	 Objective, if good data is available Goodwill not included in value estimate 	 Data difficult to find May understate the value 	- Customers are not the primary asset and cost data is readily available

Valuation Methodology Selection

- Method selection can be difficult
- The cost approach may not capture all future benefits
- The with and without method requires a significant number of inputs which are typically subjective
- The income approach methods tend to be the most commonly used methods in valuing customer relationships
- Value is based on the present value of expected future cash flows attributable to the asset being valued
- Three primary factors
 - Cash-Flow
 - Life
 - Discount Rate

Attrition/Life

- Attrition and economic life are typically based on historical observations and reflective of a market participant perspective as of the valuation date
- Many methods to calculate attrition
 - Customer churn
 - Revenue churn
 - % of revenue from existing customers to imply attrition
 - Impact of shock churn or migration churn
- Attrition rate may be stable or changing
- Economic life reflects attrition but also life of related product or technology
- Amortization life is an accounting concept not valuation issue
- Determining the straight line equivalent to the pattern of benefits may be difficult

Acquirer – Large publicly-held food & beverage producer

Target – Leading producer of branded snack products in the Southeast. Founded in 1905, its brands are iconic in the region

Rationale – Leading brands, immediate entry into region, ability to expand distribution, significant cost synergies, prevent another firm from acquiring.

- Income MPEEM
- Income Distributor Method
- Cost
- Income With and Without

Case Study 2 – Government Contractor

Acquirer – Mid-cap, publicly traded, government contractor providing IT services to the federal government.

Target – Provider of IT services to certain intelligence entities

Rationale – Established relationships with agencies and departments with the US military and defense community and a highly qualified workforce of engineers and programmers with clearances.

- Income MPEEM
- Income Distributor Method
- Cost
- Income With and Without

Acquirer – PE firm in conjunction with management.

Target – Leading regional provider of packaging solutions.

Rationale – Target is a well-run, mid-size company; leader in its region; strong reputation; customer relationships are stable and highly recurring.

- Income MPEEM
- Income Distributor Method
- Cost
- Income With and Without

Acquirer – Publicly-traded company focusing on developing hardware and software products

Target – Leading provider of hardware components which other manufacturers integrate into assembled systems.

Rationale – Strong existing technology platform and development platform as well as ongoing and recurring purchases by customers.

- Income MPEEM
- Income Distributor Method
- Cost
- Income With and Without

Should the MPEEM (almost) always be used?

Yes: Subject entity financial performance is due to the assets in place.

No: Often performance is explained in part by aspects for which there is no identifiable intangible – scale, location, manufacturing expertise, other.

What is the appropriate framework for thinking about the value of customer relationship in a PPA?

- a) TM/Tech valued based on market royalties and all residual income allocated to CR
- b) TM/Tech valued based on contribution (simulated royalty rates) with residual income allocated to CR
- c) TM/Tech valued based on market royalty rates. CR valued using a direct approach i.e. approach other than an MPEEM

Comments/Questions

- Customer value is minimal in most situations. Why would customers pay a premium? CRA is not controlled and is the result of other activities.
- Can the distributor method be used in all situations? Why should the MPEEM be used to value another asset?
- Should the distributor method be used only in situations where products are distributed by a distributor?
- Is there an industry bias to using the MPEEM to value CRA?
- What happens in situations where customer data shows no attrition?
- The discount rate cannot offset forecast risk relating to margin expansion

Conclusions

- Valuation methods converge
- Valuing CRA is not a mechanical process; it requires thought, qualitative and quantitative analysis
- Different schools of thought remain
- Best practices continue to evolve

Questions