

# ***VALUATION OF INVENTORY AND DEFERRED REVENUE***

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## ***Introduction***

### ***Inventory Valuation***

- **Introduction to inventory valuation**

- Inventory valuation is often overlooked when scoping engagements, and the methodologies employed in practice are often oversimplified, which may result in practical challenges.
- Inventory accounting must be fully understood in order to correctly value inventory acquired in a business combination.
- The fair values for work-in-progress (“WIP”) and finished goods inventory acquired in a business combination are generally measured using a net realizable value computation. The net realizable value computation takes the expected sales price of the inventory reduced for all costs expected to be incurred in the completion and disposition of the inventory as well as a profit on those costs.

## ***Introduction***

### ***Inventory Valuation***

- **Inventory valuation remains an area in which there is diversity in practice**
  - Many practitioners apply a number of simplifying assumptions which may significantly impact the valuation analysis.
    - Implied “finished goods value” for work-in-process inventory.
    - “Gross-up” method to determine the inventory selling price.
  - Practice also varies with respect to the allocation of profit to various functions.
    - Identification of expenses and efforts for which the seller is not generally entitled to a profit (e.g., raw materials, royalties, outsourced manufacturing).
    - Inclusion of indirect operating expenses or disposition costs (e.g., general and administrative expense to support manufacturing or sales functions).

## ***Introduction***

### ***Inventory Valuation***

- **Inventory valuation can have a significant impact for both financial reporting and tax purposes**
  - The step-up in inventory results in increased costs of goods sold (“COGS”) and decreased earnings in the periods subsequent to a business combination. The impact of this adjustment is typically realized in the period over which the acquired inventory will be sold.
    - For financial reporting purposes, the inventory step-up results in greater dilution in the periods immediately after the transaction, when companies are most concerned about earnings per share.
    - In a taxable transaction, the inventory step-up results in tax savings. This savings is also realized in the near-term and therefore is valuable on a present value basis.

## ***Introduction***

### ***Types of Inventory***

- **What is inventory?**
  - Inventory is comprised of several different categories:
    - Ready to be sold in the normal course of business (“finished goods”);
    - In production for future sale (“work-in-process or WIP”); or
    - Used in the production of goods to be sold (“raw materials”).
  - The inventory balance reported on the balance sheet represents the accumulated cost of the inventory and is measured at the lower of cost or market.
    - If the cost exceeds market, the inventory is written down to market on the balance sheet.
    - The nature of such inventory reserves may also vary based on the circumstances of the subject company.

## ***Introduction***

### ***Types of Inventory (continued)***

- **Inventory can generally be classified in two groups:**
  - Merchandising
    - Goods purchased by wholesale and retail companies primarily in finished goods form.
    - These companies are often intermediaries in the process of moving goods from the manufacturer to the end-user.
  - Manufacturing
    - Manufacturing companies produce the goods they sell to wholesalers, retailers, or other manufacturers.
    - Inventory for a manufacturer typically consists of (1) raw materials, (2) WIP, and (3) finished goods.
  - The cost of inventory represents all necessary expenditures to acquire the inventory and bring it to its desired condition and location for sale or for use in the manufacturing process.

## ***Introduction***

### ***Inventory Measurement***

- **Merchandising**

- Inventory costs includes the purchase price of the product as well as freight costs and insurance costs while the goods are in transit (if freight on board (“FOB”) shipping point), and the costs of unloading, unpacking, and preparing inventory for sale.
  - These costs, called product costs, are expensed in cost of goods sold (“COGS”) only when the related products are sold.
- Costs not capitalized in inventory are deemed period expenses and expensed through the income statement.
- As a starting point in a valuation analysis, the subject company’s inventory accounting policies and capitalization methods must be understood.

## ***Introduction***

### ***Inventory Measurement (continued)***

- **Manufacturing**

- The cost of manufacturing inventory can be separated into the following categories:
  - Raw materials – Represents the cost of components purchased from other manufacturers that will become part of the finished product. Raw materials costs also includes freight costs, insurance costs while the goods are in transit (if FOB shipping point), and the costs of unloading, unpacking, and preparing inventory for sale.
  - Work-in-process – Includes the cost of raw materials used in production, the cost of labor that can be directly traced to the goods in process, and an allocated portion of manufacturing overhead.
    - Overhead costs include electricity and other utility costs to operate the manufacturing facility, depreciation of manufacturing equipment, and many other manufacturing costs that cannot be directly linked to the production of specific goods.
  - Finished goods – Once the manufacturing process is complete, the costs that have accumulated during the WIP stage are included in finished goods.

## ***Introduction***

### ***Inventory Measurement (continued)***

- **Inventory accounting methods**
  - The first-in, first-out (“FIFO”) method assumes units sold are the first units acquired / manufactured. Ending inventory consists of the units acquired most recently and COGS consist of the inventory acquired first.
  - The last-in, last-out (“LIFO”) method assumes units sold are the most recent units acquired / manufactured. Ending inventory consists of the units acquired first and COGS consist of the inventory acquired most recently.
  - The average cost method assumes that COGS and ending inventory consist of a mixture of all the goods available for sale. The average unit cost applied is not simply an average of the various unit costs of purchases during the period but an average unit cost weighted by the number of units acquired at various unit costs.

## ***Introduction***

### ***Inventory Measurement (continued)***

- **Reserves**

- The LIFO reserve is the difference between the value of the inventory on the subject company's balance sheet under LIFO and what it would be if they used FIFO inventory accounting. By adding the LIFO reserve to the subject company's inventory balance, one can state the subject company's inventory on a FIFO basis.
  - Subject companies that use LIFO are required to disclose the LIFO reserve in the notes to their financial statements.
  - Additionally, it is possible to convert LIFO COGS to FIFO COGS by subtracting the increase in the LIFO reserve over the same period as the COGS are measured from LIFO COGS.
- The economic obsolescence reserve is a balance sheet account which consists of the difference between the book value of the inventory and the most likely sale value for the inventory.

## ***Fair Value of Inventory***

### ***Inventory Valuation Accounting Guidance***

- Inventory acquired in a business combination must be measured at fair value. As ASC 805 does not specifically address inventory valuation and no further guidance has been issued, the guidance from FAS 141 and ASC 820 is applied in practice. It is important to note however, FAS 141 has been superseded by FAS 141R (ASC 805)
- According to FAS 141, paragraph 37, the general guidance for assigning fair value to inventory is presented in the table below:

<b>Raw materials</b>	Current replacement cost.
<b>WIP</b>	Estimated selling price less the sum of (1) costs to complete, (2) costs of disposal, and (3) a reasonable profit allowance for the completion and selling effort of the acquiring entity based on the profit for similar finished goods.
<b>Finished goods</b>	Estimated selling price less the sum of (1) costs of disposal and (2) a reasonable profit allowance for the selling effort of the acquiring entity.

## ***Fair Value of Inventory***

### ***Inventory Valuation Accounting Guidance (continued)***

- The following resources are available when performing an inventory valuation:

FAS 141, Business Combinations (though technically superseded, still relied upon in practice)

Accounting and Reporting Manual 5042.5 – Business combinations under ASC 805

Valuation Resource Group Summary of Meeting Discussions, September 23, 2008

IRS Revenue Procedure 2003-51

*Guidance related to inventory can be found in ASC 820-10-55-21.*

## ***Fair Value of Inventory***

### ***Inventory Valuation Example***

- **Raw materials**
  - General practice is to value raw materials based on a replacement cost method.
  - Caution must be used when assuming the fair value of raw materials is equal to book value. Diligence around surplus and obsolete inventory, stale raw materials pricing, and current market prices for commodities (*e.g.*, metals, petroleum products) must be performed.
  - Company ABC management indicated they anticipate using all raw materials inventory for future production needs. Through the due diligence process, no information was identified which would suggest the book value of raw materials was not representative of current market values.
  - Therefore, the fair value of raw materials is equal to its net book value or replacement cost:

## ***Fair Value of Inventory***

### *Inventory Valuation Example*

- **Work-in-process**

- The fair value of WIP is typically estimated using the comparative sales method and is calculated as the estimated selling price of the inventory less the sum of (1) costs to complete, (2) costs to dispose, and (3) a reasonable profit allowance for the completion and disposal efforts of the acquiring entity.
- Care should be taken to assess the nature of the WIP inventory balance and ensure assumptions are applicable across the pool(s) of WIP inventory.
- The formula for the comparative sales method is as follows:

<b>Fair value calculation</b>
Estimated inventory selling price
Less: Costs to complete manufacturing
Less: Other costs to complete
Less: Profit on completion effort
Less: Costs to dispose
Less: Profit on disposal effort
<b>Estimate of work-in-process fair value</b>

## ***Fair Value of Inventory***

### ***Inventory Valuation Example (continued)***

- **Finished goods**
  - The fair value of finished goods inventory is the estimated selling price less the sum of (1) selling cost and (2) a reasonable profit allowance for the selling effort of the acquired entity.
  - The fair value of finished goods inventory should consider general & administrative costs to the extent they are related to the selling effort but exclude holding costs and financing costs.
  - The fair value of finished goods inventory is calculated as:

Fair value calculation
Estimated inventory selling price
Less: Costs to dispose
Less: Profit on disposal effort
<b>Estimate of finished goods fair value</b>

## ***Advanced Topics in Inventory Valuation Scenario Considerations***

Scenario	Potential Impact
LIFO vs. FIFO	LIFO inventory accounting results in a relatively aged cost base which is more likely to exhibit a discrepancy from market pricing than FIFO inventory. All else equal, in a rising cost environment, this will result in a larger-step-up.
Pre-approval Inventory	In the medical device and pharmaceutical industries, inventory acquired before a therapy is approved is often expensed in the period and carried at zero cost. As such, some degree of step-up will occur and given industry pricing, the extent of the step-up is often material.
Outsourced Manufacturing	While the book value of inventory for companies that outsource their manufacturing process may represent the arm's length price for the inventory (i.e., the price paid to a contract manufacturer), it does not reflect the value of the Intellectual Property inherent in the product. As such, inventory manufactured by a contract manufacturer will typically be stepped-up to the extent of any IP relied upon in the manufacturing / R&D process.
Profitability	Relatively high gross margins are typically expected to result in a higher degree of step-up, all else equal. This is due to the large gap between book value and expected selling price and the level of profit which can be attributed to the manufacturing function (i.e. the seller of the inventory). May also be due to large IP value not currently recorded in the inventory's book value.

## ***Advanced Topics in Inventory Valuation***

### ***Holding Costs***

- **Inclusion of inventory holding cost in the fair value calculation**

- Diversity in practice exists with respect to the definition of and inclusion of holding costs.
  - Explicit holding costs associated with the disposition of the inventory (*e.g.*, warehousing, logistics).
  - Imputed costs associated with the opportunity cost of “holding” the inventory.
- Some practitioners, in addition to subtracting the costs and related margins for physically holding inventory for disposition from selling price, are also subtracting an imputed financial holding cost.
  - This holding cost is an imputed interest expense related to how long it will take to dispose of inventory.
  - Often, the margin that is applied to reduce selling price is a normal operating margin (typically EBIT).
  - If the subject company has a normal operating cycle, the operating margin should reflect working capital financing and therefore the inventory holding cost.
  - Imputing an interest cost incremental to this margin is a double count.
  - Explicit costs associated with the disposition effort should be included in the valuation.

## ***Advanced Topics in Inventory Valuation***

### ***Cost of Reproduction Method***

- **Merchandising (retail) inventory valuation**
  - While the comparative sales method is most common for financial reporting purposes, the cost of reproduction method may also be appropriate, particularly in the case of retail inventory.
  - Under the cost of reproduction method, the fair value of inventory is equal to the book value of the inventory plus any costs incurred in bringing the inventory to its current state in addition to a profit on these costs.
    - In the case of a retailer, these costs would include the costs related to purchasing the inventory (e.g., merchandising and an allocation of the appropriate indirect costs).
  - Under the cost of reproduction method and the comparative sales method, the fair value of the inventory should be the same.

## *Advanced Topics in Inventory Valuation*

### *Cost of Reproduction Method*

#### **Merchandising (retail) inventory valuation (continued)**

	Amount
Comparative sales method	
Estimated inventory selling price	7,692
Less: Disposal costs	1,202
Less: Profit on disposal costs	481
Estimate of merchandise inventory fair value	<b>6,000</b>

	Amount
Cost of reproduction method	
Merchandise inventory book value	5,000
Plus: Expenses incurred to purchase inventory	721
Plus: Profit on expenses	288
Estimate of merchandise inventory fair value	<b>6,000</b>

## *Advanced Topics in Inventory Valuation*

### *Inventory Step-Up in Intangible Asset Valuations*

#### **Inventory step-up in intangible asset valuations**

- When valuing intangible assets acquired in a business combination where there is also an inventory step-up, the profit included in the inventory step-up must be removed from the projected financial information (“PFI”) of the intangible asset so that the profit is not recognized more than once.
- The full amount of the inventory step-up must be removed from the PFI of the intangible asset over the time period in which the acquired inventory is expected to turn.

Asset	Allocated	Unallocated
Net working capital, excl. inventory	2,000	2,000
Inventory	27,828	27,828
Fixed assets	5,000	5,000
Technology	21,900	29,400
Trade name	4,000	4,000
Goodwill	7,272	(228)
<b>Total purchase price</b>	<b>68,000</b>	<b>68,000</b>

## Advanced Topics in Inventory Valuation Inventory Step-Up in Intangible Asset Valuations

Remove the total inventory step-up from gross profit and...

Adjusting for Step-Up (Correct)		2011	2012
Technology revenue		\$ 100,000	\$ 105,000
Percent attributable to developed technology		100.0%	90.0%
<b>Revenue attributable to developed technology</b>		100,000	94,500
Total cost of goods sold		50,000	47,250
<b>Gross profit</b>		<b>50,000</b>	<b>47,250</b>
Gross margin		50.0%	50.0%
Inventory step-up		24,407	
<b>Adjusted gross profit</b>		<b>25,593</b>	<b>47,250</b>
Total SG&A expense		37,000	34,965
<b>EBITA</b>		<b>(11,407)</b>	<b>12,285</b>
EBITA margin		-11.4%	13.0%
Income taxes	40.0%	(4,563)	4,914
<b>After-tax earnings</b>		<b>(6,844)</b>	<b>7,371</b>
After-tax capital charges	% of revenue		
Net working capital	0.7%	56	680
Fixed assets	0.3%	23	284
Trade name	0.6%	47	567
Assembled workforce	0.1%	8	95
<b>Total capital charges</b>	<b>1.7%</b>	<b>134</b>	<b>1,625</b>
Net cash flow		(6,978)	5,746
<b>Estimate of developed technology fair value</b>		<b>21,614</b>	

### Year 1 CAC charge revenue calculation

Unadjusted revenue for 2011	100,000
Partial year revenue	50,000
Less: Revenue attributable to acquired inventory	46,103
Revenue attributable to new inventory	3,897
Divided by: Partial period	0.50
<b>Grossed up revenue attributable to new inventory for CAC</b>	<b>7,794</b>

...remove the expected inventory sales price from the revenue base used to calculate the contributory asset charges

Ignoring Step-Up (Incorrect)		2011	2012
Technology revenue		\$ 100,000	\$ 105,000
Percent attributable to developed technology		100.0%	90.0%
<b>Revenue attributable to developed technology</b>		100,000	94,500
Total cost of goods sold		50,000	47,250
<b>Gross profit</b>		<b>50,000</b>	<b>47,250</b>
Gross margin		50.0%	50.0%
Inventory step-up		-	
<b>Adjusted gross profit</b>		<b>50,000</b>	<b>47,250</b>
Total SG&A expense		37,000	34,965
<b>EBITA</b>		<b>13,000</b>	<b>12,285</b>
EBITA margin		13.0%	13.0%
Income taxes	40.0%	5,200	4,914
<b>After-tax earnings</b>		<b>7,800</b>	<b>7,371</b>
After-tax capital charges	% of revenue		
Net working capital	0.7%	720	680
Fixed assets	0.3%	300	284
Trade name	0.6%	600	567
Assembled workforce	0.1%	100	95
<b>Total capital charges</b>	<b>1.7%</b>	<b>1,720</b>	<b>1,625</b>
Net cash flow		6,080	5,746
<b>Estimate of developed technology fair value</b>		<b>29,366</b>	

## ***Introduction***

### ***What is Deferred Revenue?***

#### **Defining Deferred Revenue**

Deferred Revenue (“DR”) represents a performance obligation to provide products/services to a customer where payment for such products/services has been made prior to meeting applicable revenue recognition criteria

- Classified as a liability account on the balance sheet, which represents the remaining performance obligation
- The liability is reduced and recognized as revenue as the obligation is fulfilled

Common examples:

- Subscription services (e.g., magazines, prepaid phone cards, etc.)
- Post-contract customer support for licensed software
- Bundled transactions such as a software license and a maintenance contract.

## ***Introduction***

### ***What is Deferred Revenue?***

#### **Deferred Revenue Accounting Methodologies**

- Cash Accounting
  - Transactions are recorded when cash is received/paid
  - Revenues are recorded when cash is received
  - Expenses are recorded when cash is paid
  - DR is not recognized in cash accounting
- Accrual Accounting
  - Impact of business transactions is recorded when the performance occurs
  - Revenue Recognition Principle
    - » Revenues are recognized when realized or realizable and earned
    - » Expenses are recognized when incurred

## ***Fair Value of Deferred Revenue*** ***Accounting Guidance***

### **When to Fair Value Deferred Revenue?**

- ASC 805 requires an acquiring entity to FV the assets acquired and liabilities assumed as of the acquisition date.
- An acquirer must recognize the FV of DR to the extent that a performance obligation exists, regardless of whether the target has a DR liability recorded on the closing balance sheet.
- The key challenge in fair valuing DR is defining what a legal/performance obligation truly is. For example, in the software industry, is it maintenance or a combination of maintenance and upgrades?
  - A computer software company has contracts with customers which include elements of maintenance service and upgrades.
  - Some believe that both the maintenance service and upgrades represent a legal obligation, yet others believe that only the maintenance service represents a legal obligation.

## ***Fair Value of Deferred Revenue Valuation***

### **How to Fair Value Deferred Revenue?**

- DR liabilities are measured in accordance with ASC 820, Fair Value Measurements and Disclosures, and must be determined from a market participant perspective
- There are currently two different general methodologies which are applied to determine the FV of deferred revenue:
  - Bottom up approach
  - Top down approach
- Both approaches are consistent with GAAP, and the one to apply is primarily determined by the availability of information
- This typically results in a reduction to the book value of deferred revenue (i.e., FV is less than book value)
- SEC speeches indicate that the fair value of the deferred revenue should be based on the nature of the activities that are to be performed and the related costs that are to be incurred to service the performance obligation

## *Fair Value of Deferred Revenue Valuation*

### Bottom-up Approach

The general elements of the bottom-up approach are:

- Costs to fulfill the legal performance obligation
- Plus: Profit (or mark-up) associated with costs to be incurred to service the obligation
- Equals: FV of deferred revenue

Book value of deferred revenue		\$120 million
<b>Cost to fulfill or service</b>		<b>\$60 million</b>
Profit margin (% sales)		40%
<b>Reasonable profit (% cost)</b>		<b>66%</b>
FV of deferred revenue		\$100 million
Adjustment to book value		(\$20 million)

### Common Challenges

Difficult to obtain information at required level of detail (i.e., breakdown of costs between those that have already been incurred to create the obligation versus those that are still to be incurred to fulfill the obligation)

## ***Advanced Topics in Deferred Revenue***

### *Valuation*

Market Price	\$120 million
Less: Sunk costs	\$12 million
Less: Profit on sunk costs	<u>\$8 million</u>
FV of deferred revenue	\$100 million

### **Top-down Approach**

- The general elements of the top-down approach are:
  - Market price (should confirm the deferred element)
  - Less: Costs which have already been incurred (e.g., content/selling). We need to define sunk costs and if there are any overhead costs to be allocated
  - Less: Reasonable profit on that selling effort
    - Equals fair value of DR
- The market price would be ideal; however given this is unlikely to exist for many activities, vendor specific objective evidence ("VSOE") is often applied. Keep in mind that the concept of entities' own evidence is applied broadly.
  - VSOE governs how a company that licenses, sells, leases or otherwise markets the product must recognize the revenue.

## ***Advanced Topics in Deferred Revenue Valuation***

### **Emerging View**

- ASU 2009-5, "Measurement of Liabilities" directs valuing liabilities at "the price paid to transfer a liability in an orderly transaction between market participants at the measurement date"
- This standard has redefined how the fair value of DR is to be determined ("Emerging View").
  - A DR liability does not have to be a legal obligation; therefore, the broader definition of an obligation should be applied, i.e., a constructive obligation as well as a legal obligation.
  - A DR liability can however be recognized under fair value accounting regardless of whether a DR liability has already been accounted for under book value

## *Advanced Topics in Deferred Revenue Valuation*

### Emerging View

- The Emerging View considers the fair value of DR to be the sum of the costs a market participant buyer of the obligation would incur to satisfy the DR obligation as well as a reasonable profit margin for their efforts ("Emerging View - Bottoms Up" or "EVBU")
- DR value under the EVBU approach  $>$  DR value under the Traditional Bottom's Up ("TBU") approach
- In the EVBU approach market participants may factor in costs that an acquirer of the DR will not have to expend in cash when satisfying the obligation (i.e. sunk cost of the seller, created technology, right of ownership of assets needed to satisfy the obligation, etc).

## ***Advanced Topics in Deferred Revenue Valuation***

### **•Emerging View**

May result in smaller differences between fair value and DR book values than current accepted approaches

- Considers that the obligation is to deliver the underlying asset/service and NOT just the delivery of the asset/service
- Considers that the DR obligation can be discharged separately from the underlying business
- Considers costs that the acquirer will never cash outlay – typically, asset access rights (e.g. software license)
- Increased asset fair value to reflect “hypothetical” asset access cash inflows; Fair Value is based on the actual cash costs to be expended to satisfy the DR obligation

Constraint is Selling price less selling costs to resign contract giving rise to DR (inclusive of reasonable mark-up)

Be skeptical of instances where the FV > BV.

## ***Advanced Topics in Deferred Revenue Valuation***

### **•Financial Statement Impact**

- Balance Sheet
  - Incremental costs considered in the Emerging View, relative to the Bottom's Up Approach, typically relate to costs to asset right payments that the seller of the DR was already entitled to prior to the deal.
  - If these incremental asset right payments were to be factored into the fair value of the DR obligation, the owner of the asset in question (Acquiror) would hypothetically receive additional cash flows related to the asset resulting in a higher asset value by the net incremental cash flow asset right payment.
- Income Statement
  - A higher DR balance under the Emerging View will result in greater revenues being recognized post-combination.
  - Higher amortization cost which would counter the increased revenues recognized

*In essence the Emerging View is a gross-up of the P&L Statement's revenues and amortization costs. On a net basis, the net profit realized under the Emerging View, should mirror the result of Traditional Valuation Approaches i.e. net profit reflects the profit margin on the actual future cash costs to be incurred to satisfy the DR obligation.*

## ***Advanced Topics in Deferred Revenue Valuation***

### **Example from the film broadcasting industry**

- Company A owns the rights to distribute the film Batman
- Company B paid Company A \$1,000 for the exclusive right to air Batman in the U.S. the month of January 2012.
- Company A records \$1,000 DR liability.
- Assume Company A's costs to fulfill the obligation is \$10 and represents the cost pushing an uplink button to deliver the Batman programming content and the reasonable profit is 2%.
- Company A is acquired on December 31, 2010. Based on the above facts, the fair value conclusion under the Traditional Valuation Approaches and the Emerging View is summarized as follows.

	Traditional View Bottom's-Up	Emerging View Bottom's-Up
Cash Costs post deal to satisfy obligation	\$10	\$10
Plus: Profit on Selling Effort at 20%	2	2
Plus: Costs to obtain the licensing rights to Batman	n/a	900
<b>Fair Value</b>	<b>\$12</b>	<b>\$912</b>

## ***Advanced Topics in Deferred Revenue Valuation***

### **Example from the film broadcasting industry- Takeaways**

- Under the TBU approach
  - In performing the obligation related to the DR, from a Business Combination Acquirer's perspective, the air rights to Batman are not considered in the Traditional Valuation approach.
- Under the EVBU approach:
  - The obligation is "to deliver Batman on January 2011" independent of whether the title rights to Batman were acquired thru a business combination.
  - Market participants would not take on an obligation to deliver Batman in January 2012 without acquiring the broadcasting rights to Batman.
  - A market participant would consider in the current cost for obtaining right to Batman (\$900) to satisfy the obligation with the following adjustments:

## Advanced Topics in Deferred Revenue Valuation

### Financial Statement Impact from Acquisition Accounting

*Balance Sheet:* Recognize hypothetical asset for the Batman rights resulting in higher asset values

*Income Statement:* Higher fair value of DR results in increased revenues recognized post-combination and a higher amortization cost which produces net P&L impact of zero.

- On a net basis, the net profit realized under the Emerging View, should not differ from the Traditional Valuation Approaches (i.e., net profit reflects the profit margin on the actual future cash costs to be incurred to satisfy the DR obligation).

	Traditional View Bottom's-Up	Emerging View Bottom's-Up
<b>Balance Sheet</b>		
Hypothetical Asset (Batman Rights)	n/a	\$900
Revenue	12	912
Expense - Cash costs expended to fulfill	(10)	(10)
Incremental Amortization Expense	n/a	(900)
Net Profit	\$2	\$2

## ***Advanced Topics in Deferred Revenue***

### ***Valuation***

#### **Traditional View vs. Emerging View – Pros and Cons**

##### ***TRADITIONAL APPROACH ARGUMENTS***

**Unit of Valuation** – FVM ED allows consideration of liabilities in unit of valuation

**Form over substance:** Emerging View is based on a very literal read of the accounting literature – unintended consequence

**Economics:** Traditional View is consistent with the economics of DR in a business combination

- Acquirer never receives the upfront cash paid to the Seller and thus there should be no hypothetical asset created
- What happens Day 2 to asset
- Immediate gain on grossed up liability?

What has changed such that Emerging View is coming out now?

##### ***EMERGING VIEW ARGUMENTS***

- FVM ED guidance on unit valuation specifically states the unit of valuation is to derive **asset** value
- Traditional Approach is an entity specific notion
- Emerging View is consistent with accounting trends to presenting related assets/liabilities on gross basis
  - Unfavorable/favorable contracts
  - Bond premiums/discounts
  - Rented building
- **Economics:** Acquirer is in the same position as the seller cash wise
- Emerging View for considering access to asset costs is consistent with asset valuation approaches
- Form over substance argument – need to be consistent
  - Only FASB can change
- Valuation for financial reporting methodologies constantly evolving

## ***Advanced Topics in Deferred Revenue***

### ***Deferred Revenue Implications – Business Valuations***

#### **Deferred Revenue Key Considerations**

General implications of deferred revenue in business valuations

- Balance sheet – especially net working capital (“NWC”)
- Income statement – revenue and profitability
- Discounted cash flow model – NWC requirements
- Intangible asset valuations using an income based approach – cash flows and contributory charges for NWC

DR is an aspect of purchase accounting that is often oversimplified by practitioners when assisting companies with their financial reporting.

## ***Advanced Topics in Deferred Revenue***

### ***Deferred Revenue Implications – Business Valuations***

#### **Treatment of DR in Discounted Cash Flow Analyses/IRR**

- When cash flows are on GAAP basis and deferred revenue is recurring, deferred revenue should be included in NWC
- If the forecasts are prepared on cash basis deferred revenue should not be included in the NWC
- Ultimately, the definition of NWC is a function of company projections and cash collection patterns
- Relying on comparable guideline public companies, as well as historical analysis, for indication of normalized NWC levels should be carefully vetted to ensure consistency with the cash payment patterns of the subject company

# Q&A