



SOCIETY OF ACTUARIES

**US GAAP for International Life Insurers – Hong Kong
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Session 10: Purchase Accounting – SFAS 141 & 142

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Merger/Acquisition and Purchase Accounting

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M&A Process Overview – Before the Close

- M&A drivers
- Preparing to sell
- Pre-marketing – identify possible buyers
- Marketing
- Preparing materials
- Evaluating the opportunity on the sell side
- Selecting final candidates
- Due diligence
- Final bids & negotiations
- The path to closing – regulatory, boards, sales force, shareholders



M&A Drivers

- Need to grow
- Integration – access to producers or customers
- Diversification
- Geographic expansion
- Regulation – enter a region or buy a shell



Preparing to Sell – Assemble the Team

- Investment bankers – team leader
 - Organization
 - Process
 - Financial structure
 - Negotiations
- Lawyers
- Accountants
- Actuaries



Pre-Marketing – Identify Possible Buyers

- Size
- Strength
- Channel conflict
 - e.g., a company that relies on independent brokers or agents may alienate these people if it acquires company with captive sales force.



Preparing Materials

- “Teaser” document
- Confidentiality agreement
- Bid process
- Actuarial appraisal
- Review room, physical or virtual



Evaluating Prospects from the Sell Side

- Must show financial strength
- Track record in M&A
- Regulatory barriers
- Preliminary bid
- Select final candidates



Due Diligence

- 3–6 weeks to confirm
- Create buyer's appraisal; including PGAAP
- Integration team appears
- Confirm value
 - Strategic
 - Financial
 - Operational



Due Diligence – Construction of Final Bid

- Price =
- + Buyer's appraisal
 - + Value for strategies, synergies, hidden values, marginal expenses
 - Fixes, volatility, unknowns, costs of acquisition, costs of integration



Final Bids & Negotiations

- Exclusive time period
- Office relocation
- Utilization of staff
- Employment agreements



Path to Closing

- Regulators
- Rating agencies
- Boards
- Sales force
- Shareholders



Recent Life Company Transactions – GAAP

Year	Buyer	Acquired Unit	Price/ Earnings	Price/ Book
2001	AIG	American General	17.5	2.7
2002	Sun Life	Clarica	16.8	1.7
2003	Manulife	John Hancock	12.4	1.3
2005	Lincoln National	Jefferson Pilot	13.4	1.9
2005	Met Life	Travelers	12.8	1.3
2006	Protective	Chase	12.4	1.6



M&A Process Overview – After the Close

- Financing
- Close books at purchase date
- Preparation of new financial statements
 - Statutory
 - Tax
 - GAAP
- Integration



Financing – Common Sources

- Venture capital
- Initial public offering
- Public security offerings
- Shelf registrations
- Banks
- Private placements
- Private equity
- Seller financing
- Reinsurance



Integration

- Corporate integration unit
- Personnel, systems and location consolidators
- New culture



Accounting

- Out with Historical GAAP (HGAAP)
- In with Purchase GAAP (PGAAP)



Purchase Accounting Background

- Prior guidance
 - *APB Opinion No. 16* and *17*, Business Combinations and Intangible Assets
- FASB released two pronouncements in 2001
 - *SFAS No. 141*, Business Combinations
 - *SFAS No. 142*, Goodwill and Other Intangible Assets



PGAAP Balance Sheet Process

- Determine who is the acquirer and the purchase price
- Record price as contributed capital (equity)
- Revalue all assets and liabilities to fair value
- Goodwill is the balancing item



Purchase Price Allocation

- Assign fair value to all financial assets
 - Marketable securities at current market prices
 - Appraised value for illiquid investments
 - Real estate at appraised value
- Establish fair value of liabilities
- Going forward your costs are assigned to an SFAS
 - Never FV again
- Provide deferred taxes on all book/tax differences



Purchase Price Allocation (continued)

- Identify and assign fair values to certain assets (i.e. brand name, distribution channel, state licenses)
- Excess purchase price is allocated to goodwill
 - Goodwill may = \$0 in a favorable deal
- If there is a deficit ($PP - (FVA - FVL) < 0$)
 - Double check to make sure you are right
 - Reduce identifiable intangibles pro rata
 - If $PP - (FVA - FVL) < 0$ after writing intangibles to zero, remainder is recognized as extraordinary gain (rare with insurance companies)



PGAAP Reserves

- Fair value of liabilities – common practice has been:
 - *SFAS 60* Recalculate with current assumptions
 - *SFAS 97* No change from seller's basis (i.e., AV)
 - *SFAS 120* No change from seller's basis (i.e., NLP reserve using dividend basis)
 - Restate reserves for bonuses, unearned revenue, and premium deficiencies as needed



PGAAP Reserves: *SFAS 60*

- Method requires a starting point, setting either:
 - Net-to-gross ratio (“defined valuation premium method”, DVPM)
 - Beginning reserve (“defined initial reserve method,” or DIRM)
- Guidance in American Academy of Actuaries Interpretation 1-D, as described in *GAAP Textbook*
- Other simplified methods may be acceptable



PGAAP Reserves: DVPM

- Select a net-to-gross premium ratio ($n/g\%$)
 - Consistent with the ratio for new business
- PGAAP reserves equal:
 - $PV(\text{benefits \& expense}) - PV(\text{valn. net prem})$
 - Valuation net premium equals $n/g\% \times \text{gross prem}$



PGAAP Reserves: DIRM

- Select an initial reserve amount
 - HGAAP reserve or statutory
- PGAAP reserves equal
 - $PV(\text{benefits \& expense}) - PV(\text{valn. net prem})$
 - Valuation net premium equals $n/g\% \times \text{gross prem}$
 - Solve for $n/g\% = [PV(\text{benefits \& exp}) - \text{initial reserve}] / PV(\text{gross premium})$



PGAAP Reserves: Assumptions

- Recalculate reserves with current post-acquisition assumptions
 - Interest – reflect asset revaluation at fair value
 - Decrements – reflect current and expected experience, including actions to be taken
 - Expenses – reflect administration changes, if any
- Include PADs for *SFAS 60*, not *97* and *120*
- Assumptions are from the acquirer's perspective
- Assumptions used to determine reserves and VOBA must be internally consistent



Initial VOBA

- Follows determination of reserves
- No specific guidance exists for the initial VOBA
 - Common interpretation: VOBA is another component of reserves, like a contra-liability, not simply an intangible asset
- Does not include value of new business
- Company purchase – Initial VOBA must be calculated, then solve for goodwill



Initial VOBA (continued)

- Common Methods:
 - DIRM / DVPM – often for *SFAS 60* business only
 - ROI Methods – often for *SFAS 97* and *SFAS 60*, maybe *SFAS 120*
- Actuarial Appraisal Method
 - For any business



VOBA: Common Methods

- ROI Method
 - Initial VOBA = PV future GAAP profits or
 - Initial VOBA = PV future GAAP margins
 - Projected GAAP earnings reflect change in PGAAP reserves, investment income at market rates, excluding DAC or VOBA amortization
 - Discount at risk rate of return



VOBA: Common Methods

- Actuarial Appraisal Value Method
 - Initial VOBA tied to actuarial appraisal used in determining purchase price
 - PV distributable earnings
 - Value of inforce business only
 - Includes cost of capital
 - Reflect reserve and asset differences, appraisal basis vs. PGAAP basis
 - VOBA under AAV similar to embedded value



VOBA: Fundamental Equation

- $FVIA + VOBA = FVL + DTL + \text{Price}$
 - FVIA fair value of investments funding policy obligations and surplus
 - VOBA the only intangible asset in the example
 - FVL fair value of liabilities
 - DTL deferred tax liability



VOBA Discount Rate Basis

- Capital structure of acquired company (WACC)
- Riskiness in assumptions
- Supply/demand impact on price
- Level of interest rates
- Rate(s) in appraisal



Actuarial Appraisal Value Method

- VOBA =
Appraisal value of inforce + (PGAAP reserve – stat reserve) +
(stat inv assets – PGAAP invested assets) + DTL
- DTL =
35% [(Tax resv – PGAAP reserve) + (PGAAP inv assets – tax
inv assets) + (VOBA-proxy DAC)]



VOBA Example: Background

- Company purchase, additional consideration paid
- No intangibles other than VOBA and goodwill
- Assume no stat/tax differences, ignore proxy DAC, and tax rate = 35%
- Price = 1,778

Statutory C&S		1,000
Appraisal Value of inforce (AAV)		
PV book profits	686	
Less cost of capital	(508)	178
Additional amount		<u>600</u>
Total price		1,778



VOBA Example 1: ROI Method

- Discounted GAAP profits = 1,055, consistent with appraisal value assumptions and discount rate
- PGAAP Balance Sheet

Invested Assets	11,000	Reserves	10,000
VOBA	1,055	Deferred Tax	369
Goodwill	<u>92</u>	Equity	<u>1,778</u>
Total Assets	12,147	Total Liabs	12,147



VOBA Example 1: AAV Method

- Appraisal value of inforce = 178
- VOBA = 274, DTL = 96
- PGAAP Balance Sheet

Invested Assets	11,000	Reserves	10,000
VOBA	274	Deferred Tax	96
Goodwill	<u>600</u>	Equity	<u>1,778</u>
Total Assets	11,874	Total Liabs	11,874



AAV / ROI Comparison

- AAV increases goodwill relative to VOBA
 - Implies higher future net income
- Goodwill difference between ROI and AAV methods due to cost of capital in this example
 - Goodwill difference $600 - 92 =$ cost of capital
- Other differences exist to extent stat and tax reserve and asset values vary



VOBA Amortization

- Not a function of how initial VOBA is set
- Defined by EITF 92-9, same method used to amortize DAC
- **SFAS 60:**
 - Amortize over premium
 - Interest rate = earned rate
 - VOBA pattern locked-in
- **SFAS 97 (and 120):**
 - Amortize over EGPs
 - Interest rate = credited rate
 - EGPs unlocked
- Recoverability must be established in similar manner as DAC



Reserves & VOBA: Impact on Earnings

- Future earnings influenced by initial level and growth pattern of reserves
- Higher initial reserves lead to higher intangible assets
- Range of assumptions and discount rate impact profit emergence
 - Conservative assumptions decrease initial VOBA
 - Higher discount rate decreases initial VOBA
 - Lower initial VOBA results in increased goodwill and increased future earnings



PGAAP: Practical Issues

1. Negative VOBA
2. Re-opening the initial balance sheet
3. Goodwill impairment test should be contemplated during the establishment of the opening balance sheet
4. Value of agency force



PGAAP: Practical Issue #1

- Negative VOBA
 - May occur, since assets marked-to-market, but reserve had normally been held at AV (i.e., guarantee of 6% assets earn 5%)
 - What to do? One option is to establish a reserve for the FV/BV difference in interest, then determine VOBA
 - Referred to as an 'excess interest reserve'
 - Amortize additional reserve to normalize expected margins



PGAAP: Practical Issue #2

- Re-opening the initial PGAAP balance sheet:
 - Generally has been allowed by the SEC, under certain circumstances
 - Material error corrections
 - Certain information or system functionality not available at deal close date, in process and disclosed
 - Not allowed due to experience variations since the deal close date



PGAAP: Practical Issue #3

- Goodwill impairment test
 - Important to contemplate during establishment of the opening balance sheet
 - Must know all levels at which the test will be required – may be standalone audits in addition to consolidated basis



PGAAP: Practical Issue #4

- Value of acquired sales force
- Not much uniformity
- Could project out as an actuarial appraisal
- With or without agent decrement
- Amortizable



FASB Statement No. 141

**Business Combinations and
Intangible Assets**

Issued and effective 2001



Key Provisions – SFAS 141

- Defines a single approach for all business combinations
 - purchase accounting
- Disallows “pooling of interests”
 - Preserves current accounting rules for all prior poolings
- Sets rules for determining and allocating the cost of an acquired entity and other contingent considerations – use fair value
- Clarifies what is and is not a business combination



What is a Business Combination?

- “A business combination occurs when:
 - an entity acquires net assets that constitute a business or
 - acquires equity interests of one or more other entities and obtains control over that entity or entities”
- Insurance business combinations
 - Purchase of common stock of a life insurance company or a life insurance holding company
 - Acquisition of net assets through:
 - coinsurance
 - assumption reinsurance
 - Merger of two life insurance companies



Key Provisions – SFAS 141

- Recognition of more intangible assets
 - Acquired intangible assets be recognized apart from goodwill if they meet either of two criteria – legal and separability
 - Goodwill includes those intangibles that do not meet the legal/separability requirement
 - The majority of intangible assets continue to be amortized against earnings
 - Provides a list of examples of recognized intangible assets
- Broadens disclosure requirements, especially in year of purchase



FASB Statement No. 141R

**Business Combinations – Revised
Issued December 4, 2007**

Effective December 15, 2008



Key Revisions – *SFAS 141R*

- Expanded definition of business combination
- Increased use of Fair Values
- Acquisition costs expensed, not capitalized



Key Revisions – *SFAS 141R*

- When finalizing initial accounting, restate previously-issued financial statements
- Negative goodwill treatment – no longer reduce asset values; recognize the “bargain purchase” in earnings



FASB Statement No. 142

Business Combinations and Intangible Assets

Issued and effective 2001



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Key Provisions – SFAS 142

- Eliminates regular amortization of purchased goodwill
- Certain identifiable intangible assets will not be amortized
 - Intangible assets determined to have an indefinite useful life are not amortized
 - No minimum and maximum presumptions for the useful lives of identifiable intangible assets exist
- Requires amortization of recognized intangible assets that have a finite useful lifetime
- Requires allocation of all purchased assets and liabilities, including Goodwill, to “reporting units” (RU’s)
- (Paragraph 34) Goodwill shall be assigned to RU’s of acquirer that are expected to benefit from the synergies of the combination.



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Key Provisions – SFAS 142

- RU's can be elements of acquiring company
- Requires impairment testing procedures to Goodwill and other intangible assets with indefinite useful lives be applied at least annually
 - Tests to be applied at the reporting unit level on a fair value basis
 - Impairment test differs based on whether identifiable intangible assets are non-amortizing or amortizing
- Establishes extensive disclosure requirements for goodwill, recognized intangible assets and impairment losses



Testing Goodwill for Impairment

- A. Identify reporting units ("RU"): paragraph 30 – a business for which discrete financial information is available and management regularly reviews the operating results of that component.
- B. Allocate and perform annual impairment test
 - Test: assets, liabilities, and goodwill to reporting units
- C. Purchase price allocation two-step approach
 - Perform interim impairment test if there is an indication that the reporting unit's fair value may be below its carrying amount
 - If goodwill is impaired, record impairment charge in income from operations



Goodwill (GW) Impairment Testing 2 Step Procedure

Step 1

- Compare FV of reporting unit with carrying value amount (including goodwill)
 - If the fair value is less, proceed to Step 2
 - If greater, Goodwill is not impaired and no further testing is required

Step 2

- Compare implied FV of Goodwill to its carrying amount
 - Record any excess of carrying value over implied FV as an impairment loss, and set carrying amount of Goodwill to implied FV
- Once written down for impairment, Goodwill cannot be reinstated



Goodwill Impairment Testing 2 Step Procedure

Step 2 (continued)

- "Implied FV" is calculated as if the RU has just been acquired, with the FV of the RU considered the "purchase price." Any excess of this purchase price over the FV of amounts assigned to assets and liabilities of the RU is the implied FV of GW for the RU
 - Taken as a hypothetical acquisition at the valuation date
 - Assets and liabilities are stated at fair value
 - Implied FV of Goodwill is equal to FV of RU less net assets "acquired"
 - This process allows unrecognized intangibles to be considered



Goodwill Impairment Test (Example 1)

Reporting Unit Balance Sheet		
Item	Carrying Value GAAP BV	Fair Value Recomputed PGAAP
Invested Assets	1,250	1,250
DAC	50	-
VOBA	200	323
Goodwill	100	80
Total Assets	1,600	1,653
Policy Liabilities	1,350	1,350
Deferred Tax	50	93
Total Liabilities	1,400	1,443
Equity: RU Value	200	210

- Step 1 test
 - RU Fair Value 210
 - RU Carrying Value 200
- Excess of FV over
 - Carrying Value 10
- Potential impairment? NO



Goodwill Impairment Test (Example 2)

Reporting Unit Balance Sheet		
Item	Carrying Value GAAP BV	Fair Value Recomputed PGAAP
Invested Assets	1,250	1,250
DAC	50	-
VOBA	200	323
Goodwill	100	60
Total Assets	1,600	1,633
Policy Liabilities	1,350	1,350
Deferred Tax	50	93
Total Liabilities	1,400	1,443
Equity: RU Value	200	190

- Step 1 test
 - RU Fair Value 190
 - RU Carrying Value of RU 200
- Excess of FV over
 - Carrying Value <10>
- Potential impairment? YES



Goodwill Impairment Test (Example 2)

- Step 2
 - Implied FV of GW 60
 - Carrying Value of GW 100
- Impairment Loss <40>



Key Provisions – SFAS 142

Annual Impairment Test

- Annual goodwill impairment test may be performed any time during fiscal year provided test is performed at the same time every year (i.e., one time selection for each RU)
- Different reporting units may be tested for impairment at different times
- Subsequent to the initial determination, entity may presume current FV of a reporting unit exceeds carrying value if all of the following criteria are met:
 - Assets and liabilities of reporting unit have not changed significantly
 - Previous computation of FV substantially exceeded carrying amounts
 - No adverse events that would indicate a likelihood that current FV has fallen below carrying amount



Key Provisions – SFAS 142

Interim Impairment Test

- May be required between annual tests if changes occur that more likely than not would reduce FV of RU
- Examples cited include:
 - Adverse changes in legal factors, regulation, competition, business climate, personnel
 - A “more-likely-than-not” expectation exists that a reporting unit (or significant portion) will be sold or otherwise disposed of
 - A subsidiary recognizes an impairment loss in its stand-alone GAAP financial statements

