



SOCIETY OF ACTUARIES

**International Financial Reporting for Insurers: IFRS
and U.S. GAAP
September 2009**

**Session 1: Background on Financial Reporting
(US GAAP – IFRS)**

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Basic International Financial Reporting

Hong Kong
September 7, 2009



Introduction to Accounting

- A short walk down through the centuries of insurance accounting development
- Theory and technology influence business, which influences accounting



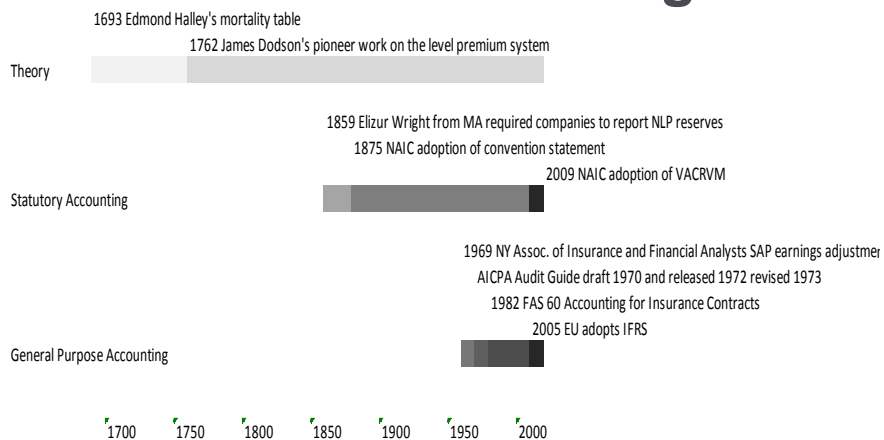
Evolution of Accounting

■ 3 Eras

- 1693 – 1950 Net Level Premiums
- 1950 - 2005 US GAAP
- 2005+ EU IFRS / US GAAP
- 2010+ Convergence?



Evolution of Accounting



Net Level Premiums

- Early work of Halley (1693) & Dodson (1762) created foundation of long term life insurance business model
- Net level premium reserve concept still important 3 centuries later



Statutory Reporting

- More than 1 century old
- Imposes uniformity – comparability among companies
- Objective to have conservative bias (not always successful)



General Reporting

- Evolved from investor need
 - 1950's new stock insurance companies formed
- AM Best
 - adjusted SAP earnings for unearned commissions



General Reporting, continued

- 1969 NY Association of Insurance & Financial Industry Analysts
- 1970-72 AICPA Audit Guide for Insurance Companies
- 1982 FASB FAS 60 Accounting for Insurance Contracts

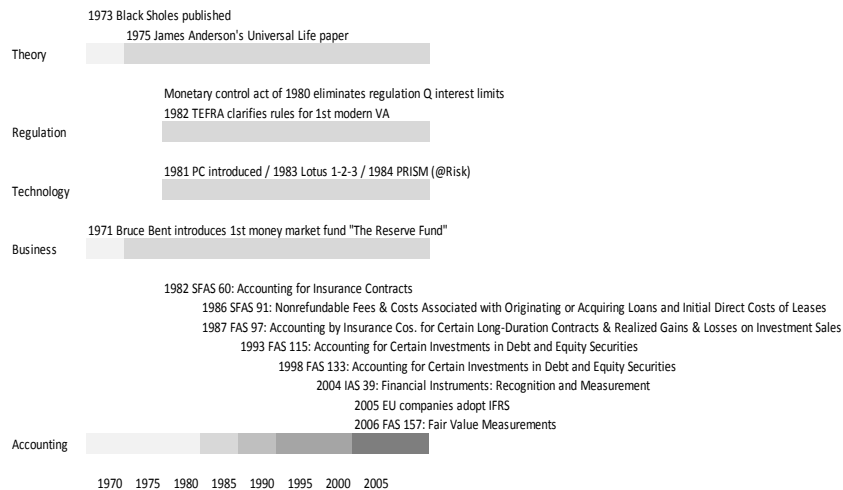


US GAAP Era

- 1950 – Now
- 3 Product Stages
 - Traditional Products (e.g. whole life)
 - Interest Sensitive Products (e.g. UL)
 - Financial Products (e.g. GMxB)
- Asset Valuation: Book to Market



History of US GAAP



Traditional Long Duration Contracts

- Evolved from Net Level Premiums
 - Adds expense and lapse assumptions
 - Changes from implicit to explicit (realistic) margins
- Accrual method - Incorporates both
 - Service concept
 - Release from Risk concept
 - Capitalization



Traditional Long Duration Contracts

- Primary US GAAP guidance
 - FAS 60
 - FAS 97 if premiums cease before benefits end



From NLP to US GAAP

■ NLP

- ${}_{t+1}V_x = (1+i)[NLP + (1 - q_{x+t}) {}_tV_x] - q_{x+t}$

■ US GAAP

- Net Reserve = ${}_{t+1}R_x - {}_{t+1}DAC_x$
- ${}_{t+1}R_x = (1+i_t)[VP + (1 - q_{x+t} - l_t) {}_tR_x] - q_{x+t} + E_t$
- ${}_{t+1}DAC_x = (1+i_t)[DP + (1 - q_{x+t} - l_t) {}_tDAC_x]$
- Where l = lapse and E = expense



Accrual Concepts

- Gross Premium = $VP + DP + PP$
- VP = valuation premium
 - Includes margin for adverse deviation
 - Margins: Release from Risk accrual
- DP = DAC amortization premium
 - DAC = Deferred Acquisition Cost
 - Initial Commissions capitalized
- PP = profit premium
 - Sale/Service (pro rata) accrual



Interest Sensitive Life

- Money Market Funds – response to US Regulation Q
 - 1971 Reserve Fund

- UL – response to Money Market Fund
 - 1975 Andersen Paper



Interest Sensitive Life

- Similar to Bank Savings Products
- Deposit accounting
 - Premiums are not revenue
 - Account value liability
- Primary US GAAP Guidance
 - 1986 FAS 91 – Deposit accounting
 - 1987 FAS 97 – UL accounting



Interest Sensitive Life

- Challenges
 - Large acquisition costs
 - Insurance mortality risk
 - Liability = account value
- Response (FAS 97)
 - DAC amortization in proportion to PV of Expected Gross Profits (EGP)



GMxB: History

- 1950's First Variable Annuity (VA)
- 1973 Black Scholes
- 1981 PC
- 1984 PRISM (@Risk Precdecessor)
- 1982 TEFRA clarifies tax treatment of VA



GMxB: FAS 133

- 1999
- Derivatives – Fair Value
- Embedded derivatives
 - Bifurcated (separated)
 - Fair value



GMxB: SOP 03-1

- Clarified Separate Accounts
 - Legally separated requirement
- Amortization of GMxB costs
 - Similar to FAS 97 DAC
 - $R_{t+1} = R_t (1+i) + f * EGP - \text{Claim}$



GMxB: FAS 157

- Fair Value Measurement
- Applicable to:
 - Assets
 - Liabilities
- Not widespread application to insurance liabilities



Asset Valuation

- Trend from
 - Book Value
 - To
 - Market Value



Assets: FAS 60

- Asset values
 - Market: Stock
 - Book (Amortized): Bonds, Mortgage
- Realized Capital Gains
 - Separate Line
 - After Operating Gain



Assets: FAS 97

- Realized Capital Gains
 - Included in Operating Income



Assets: FAS 115

- 1993
- 3 asset classes for Bonds, Mortgages
 - Trading: Fair value income statement
 - Available for sale:
 - ◆ Fair value balance sheet
 - ◆ book value income statement
 - Held to maturity: Book value



Assets: FAS 156

- Fair Value
- Building Blocks



Current Accounting Conflict

- Accrual Accounting
 - versus
- Fair Value Accounting



Accrual Accounting

- Matching Principle
 - Revenue and expenses matched by accounting period
 - Accomplished using Reserves (liability) and Capitalization (asset)
- 2 Primary Approaches
 - Sales/Service: pro rata recognition
 - Release from Risk



Fair Value Accounting

- Fair Value
 - The amount that a willing buyer and a willing seller would agree to



Conflict example

- Home Mortgages
 - Amortized value – if held by originating bank
 - Fair Value – if held by another buyer

