

# CREDIT DEFAULT SWAPS

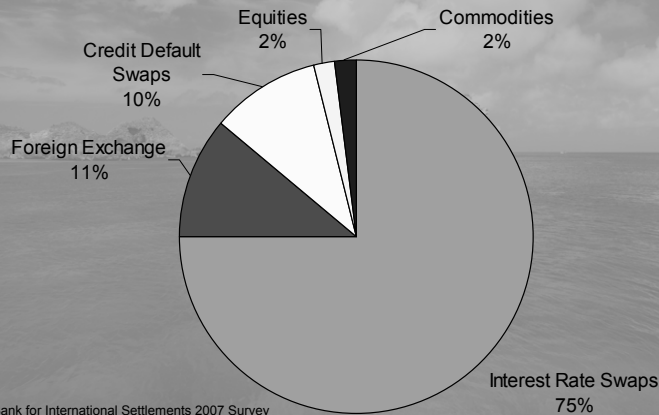
*Basic Concepts*

FINANCIAL SUMMIT  
October 2008

## WHAT IS A CREDIT DEFAULT SWAP?

- A credit default swap (CDS) designed to transfer the credit exposure of fixed income products between parties.
- The buyer of a credit swap receives credit protection, whereas the seller of the swap guarantees the creditworthiness of the product. By doing this, the risk of default is transferred from the holder of the fixed income security to the seller of the swap.
- For example, the buyer of a credit swap will be entitled to the par value of the bond by the seller of the swap, should the bond default in its coupon payments.

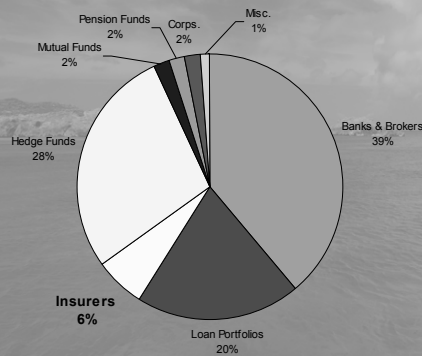
# \$517 Trillion Derivatives Market by Derivative Type, 2007



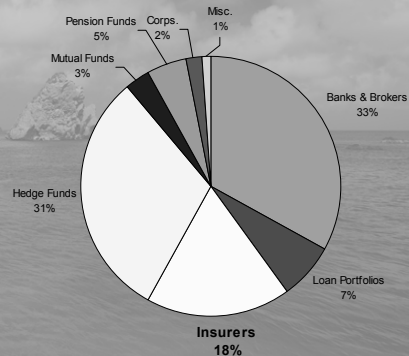
Source: Bank for International Settlements 2007 Survey

# Market Share

## CDS Protection Buyers

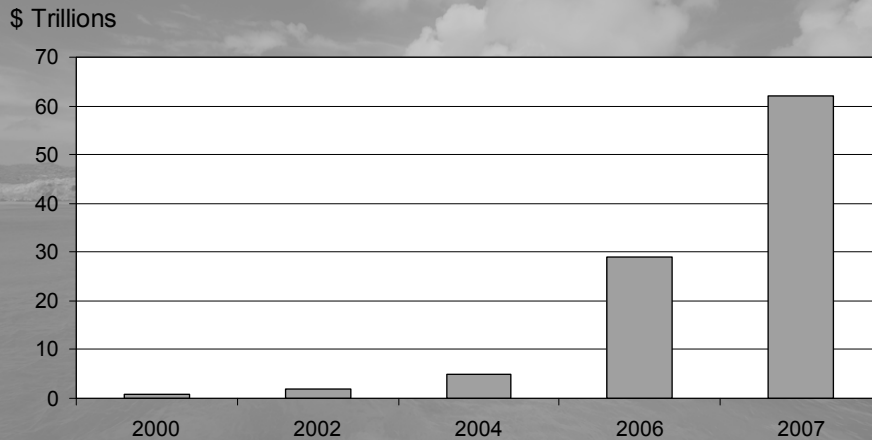


## CDS Protection Sellers



Source: British Bankers Association and Bank of America Research 2006

## Exponential Growth of CDS



Source: ISDA

## Where is Credit Default Swap exposure reported on the Annual Statement ?

- Reported on Schedule DB, Part C
  - Single Name Credit Default Swaps (CDS)
  - Basket or Index Swaps
  - CDO/CLO Related Securities
- Reported on Schedule DB, Part F
  - Replicated (Synthetic Asset) Transactions

## CDS Reported on Annual Statement - Schedule DB -

- Part A: Options, Caps & Floor Owned
- Part B: Options, Caps & Floor Written
- *Part C: Collars, Swaps & Forwards*
- Part D: Futures Contracts Open
- Part E: Each Counterparty Exposure
- *Part F: Replicated (Synthetic Assets)*

## Number of U.S. Insurers with Derivative Exposures 12/31/07

Insurer Type	Options, Caps & Floors Owned DB Pt. A1	Options, Caps & Floors Written DB Pt. B1	Collars, Swaps & Forwards DB Pt. C1	Futures DB Pt. D1	Industry Total
Life	104	26	99	29	912
P&C	15	18	35	2	2,817
Health	5	2	7	-	868

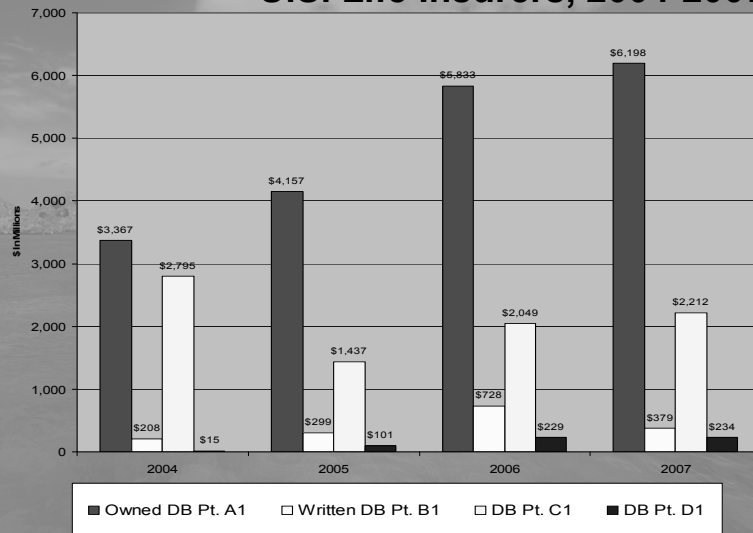
Source: 2007 Annual Statements

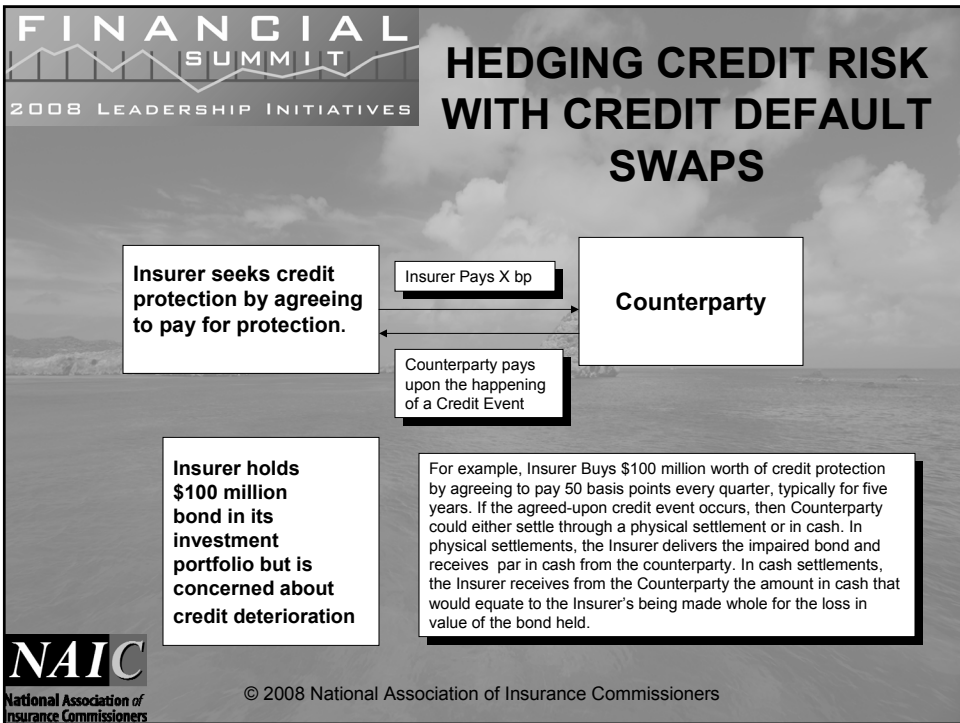
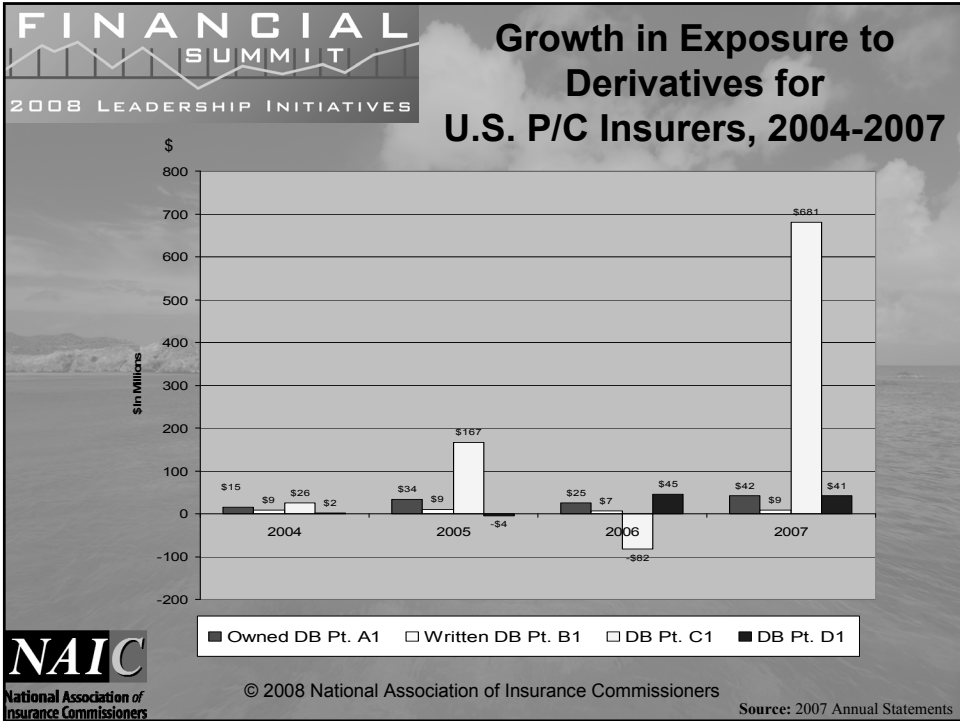
### Net Statement Value of U.S. Insurer Derivative Exposures 12/31/07

Insurer Type	Options, Caps & Floors Owned DB Pt. A1	Options, Caps & Floors Written DB Pt. B1	Collars, Swaps & Forwards DB Pt. C1	Futures DB Pt. D1
Life	\$6,198,356,513	\$379,215,069	\$2,211,903,838	\$234,293,151
P&C	41,669,924	9,000,307	681,186,645	41,201,781
Health	9,148,496	6,094,964	(174,571)	16,823

Source: 2007 Annual Statements

### Growth in Exposure to Derivatives for U.S. Life Insurers, 2004-2007





## HEDGING CREDIT RISK WITH CREDIT DEFAULT SWAPS

- **Typical terms used:**
  - *Protection Buyer* – In our example, the Insurer
  - *Protection Seller* – In our example, the Counterparty
  - *Credit Event* – Pre-negotiated event
  - *Reference Credit* – In our example, the bond that the Insurer would deliver upon the happening of a Credit Event
  - *Contingent Payment* – The payment made by the Counterparty when a credit event occurs

## Example of CDS reported on Schedule DB Part C (a typical large life insurance company)

2007 SCHEDULE DB PART C SECTION 1 - E19

Description	Notional Amount	Date of Maturity, Expiry, or Strike Price; Rate or Settlement Index Rec (Pay)	Date of Opening Position or Agreement Exchange or Counterparty	Cost or Consideration Received
CDS: KMI PAY 0.49%	10,000,000	6/20/09 0.0000%(0.4900%)	3/3/2004 JP MORGAN CHASE BANK	-
CDS: CHEVRONTXACO CORP PAY 0.20	20,000,000	6/20/09 0.0000%(0.1950%)	4/6/2004 JP MORGAN CHASE BANK	-
CDS: FTD_05-02 REC 0.81%	25,000,000	12/20/10 0.8050%(0.0000%)	9/7/2005 MORGAN STANLEY CAP	-
CDS: FTD_05-05 REC 0.72%	25,000,000	12/20/10 0.7200%(0.0000%)	10/25/2005 MERRILL LYNCH INTL	-
CSWP:USD 6ML(EUR 6ML) 02/26/21	3,665,663	2/26/21 USD US6MLIB0.55(EI)	2/8/2006 DEUTSCHE BANK; AG	-
CDS: ABN AMRO BANK NV PAY 0.06%	15,000,000	6/20/09 0.0000%(0.0550%)	3/29/2006 HSBC BANK USA	-
CDS: ICI WILMINGTON INC PAY 0.49%	10,000,000	12/20/13 0.0000%(0.4900%)	4/28/2006 GOLDMAN SACHS CAPITA	-
CDS: (HIMCO.1 .IG. 0-3%) REC 5.00%	15,000,000	6/20/13 5.0000%(0.0000%)	5/16/2006 UNION BANK OF SWITZE	(6,915,000)
CDS: RYLAND GROUP INC PAY 1.35%	20,000,000	6/20/13 0.0000%(1.3500%)	6/28/2006 LEHMAN BROS SPEC FIN	-
CDS: GATX FINANCIAL CORP PAY 0.24%	10,000,000	12/20/08 0.0000%(0.2400%)	7/10/2006 CITIBANK; N.A.	-
CDS: CENTEX CORP PAY 0.97%	10,000,000	9/20/13 0.0000%(0.9700%)	7/17/2006 LEHMAN BROS SPEC FIN	-
CDS: DAIMLERCHRYSLER PAY 0.53%	5,000,000	3/20/11 0.0000%(0.5300%)	8/1/2006 GOLDMAN SACHS CAPITA	-
CDS: MARRIOTT INTERNL PAY 0.37%	11,200,000	6/20/12 0.0000%(0.3700%)	8/1/2006 MERRILL LYNCH INTL	-
CDS: CENTEX CORPORATION PAY 0.48%	15,000,000	9/20/10 0.0000%(0.4800%)	8/2/2006 LEHMAN BROS SPEC FIN	-
CDS: CYTEC INDUSTRIES PAY 0.88%	20,000,000	9/20/15 0.0000%(0.8800%)	8/3/2006 DEUTSCHE BANK; AG	-
CDS: PEPCO HOLDINGS INC PAY 0.47%	15,000,000	9/20/12 0.0000%(0.4700%)	8/11/2006 BANK OF AMERICA; NA	-
CDS: JOHNSON CONTROLS PAY 0.22%	20,000,000	12/20/10 0.0000%(0.2200%)	8/16/2006 BEAR STEARNS INTL LD	-
CDS: MARRIOTT INTERNL PAY 0.57%	10,000,000	6/20/16 0.0000%(0.5700%)	8/24/2006 BANK OF AMERICA; NA	-
CDS: SARA LEE CORP PAY 0.48%	25,000,000	9/20/11 0.0000%(0.4800%)	8/25/2006 UNION BANK OF SWITZE	-

## Schedule DB Part F – Replicated Synthetic Assets

- Writing a CDS provides credit exposure to hard-to-acquire assets.
  - Such exposures are reported on Schedule DB, Part F
  - Approximately 90% of all RSATs filed have involved Credit Default Swaps

## Derivatives Accounting

### *Basic transactions recognized by SSAP 86*

- Hedging Transactions
- Income Generation Transactions
- Replication Transactions

## Key components of a highly effective hedge

- Hedge should be highly effective at inception and on an ongoing basis
- Change in value of the derivative is within 80%-125% of the change in value of the underlying
- Proper documentation required at inception
- Ongoing assessment of effectiveness required

## Derivatives Accounting *Basics*

- Hedges that do not meet the criteria of being highly effective or cease to be highly effective shall be accounted and reported at fair value
- However, hedges with a maturity of less than a year may be carried at cost

## Income Generation Transactions

- Derivatives written or sold to generate additional income or return, for example, covered options, caps and floors.
- Accounting of income generation derivatives shall be on the same basis as the accounting of the covering asset or underlying interest (i.e., both at amortized value or both at fair value)

## Replication (Synthetic Asset) Transactions

- Derivative transaction entered into in conjunction with other investment (cash instrument) in order to replicate the investment characteristics of an otherwise permissible investment.
- Premium paid or received on the replication (synthetic asset) derivative shall be recognized as asset or liability, and amortized into investment income or expense until the termination/maturity of the derivative.

## **CONTACT INFORMATION**

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