Overview:
Fixed Income Derivatives

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Agenda

- Swaps
- Options
- Index Swaps
- Credit Default Swaps
- Issues to Consider

Swaps

Definition: In its simplest form, a transaction done at zero upfront cost where one party pays a fixed rate of interest in exchange for a floating interest rate.

Swaps (continued)

Uses of Swaps:

- Duration Management

  Deep liquid market allows large duration plays.

  Ability to manage duration versus benchmark.

- Spread Management

  Credit spreads more correlated to swap rates than treasury rates.

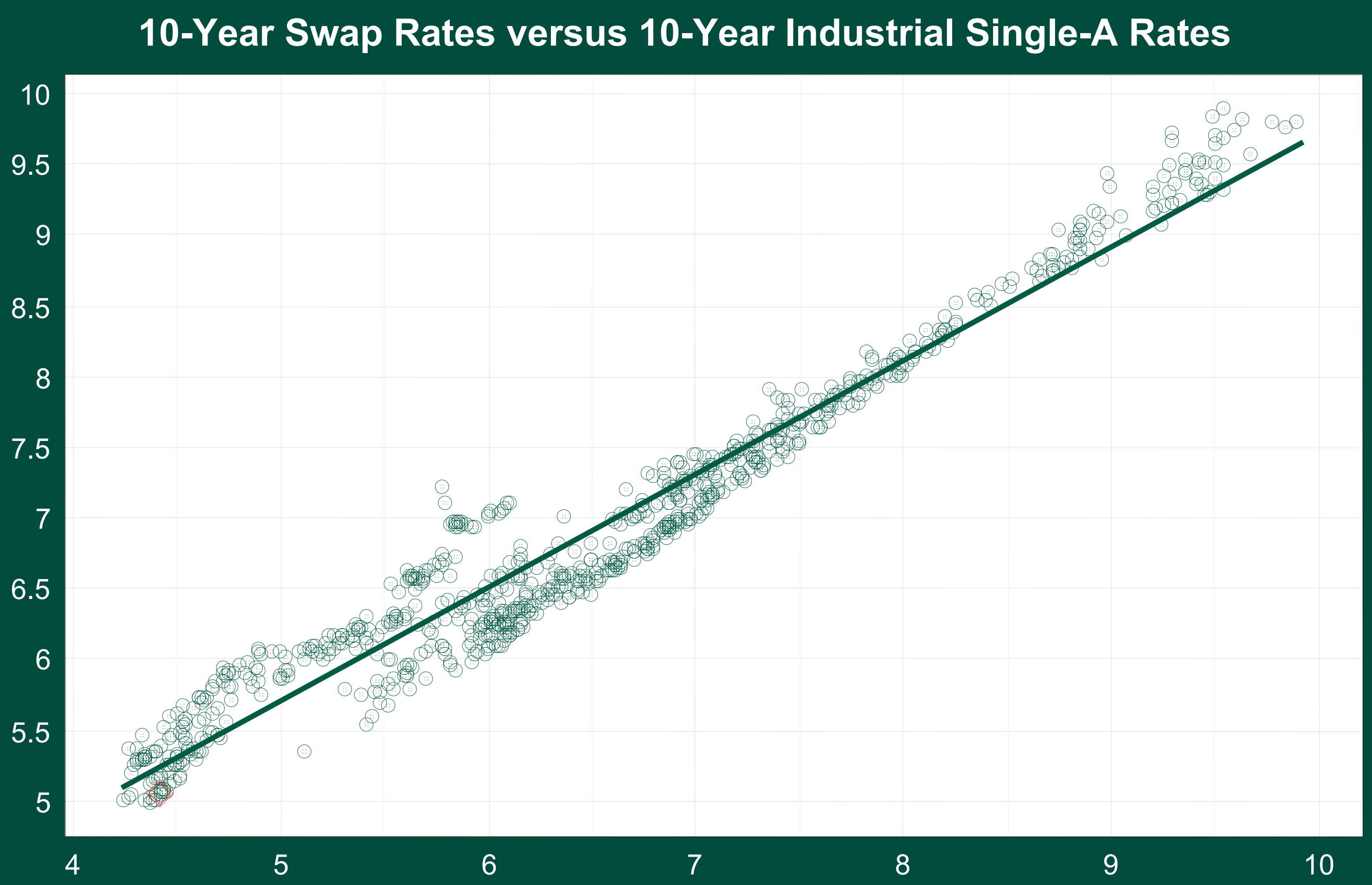
  R^2 10yr Swap Rates vs. 10yr Single-A Rates = 95.5 (1/1/90 – Present).

  R^2 10yr Treasury Rates vs. 10yr Single-A Rates = 90.4 (1/1/90 – Present).

- Asset Swap

  Ability to buy/sell assets as a spread to LIBOR.

Swaps (continued)



Source: LehmanLive.com

Fixed Income Options

Interest Rate Options

- Swaptions
  - Hedge mortgages.
  - Play the range – straddles & strangles.
- Caps/Floors
  - Insurance companies use CMS caps to hedge interest rate risk.
  - Banks use LIBOR caps to hedge against floating rate liability exposure.

Fixed Income Options (continued)

Bond Options

Example:

Lehman Brothers sells (offers) a European CALL on a DCX (DaimlerChrysler) 6.4% May 2006 Bond (Cusip 233835AS6)

- Bond Trading at: 107.9199
- Premium: 0.56% (5% Implied Volatility)
- Strike: ATM
- Expiry: 3 months

Index Swaps

Uses of Index Swaps:

- Benchmark Hedge

  Example:

  Money Manager is benchmarked to Lehman Brothers Aggregate index. CMBS composes 6.13% of Aggregate Index which may equate to only $25mm of the Money Manager's total portfolio. Rather than taking bond specific risk, the Money Manager could receive on index and hedge completely.

- Outperformance by Paying on Index

Index Swaps (continued)

Example Indicative Level –

- Lehman BBB Index: *Lehman Pays (Receives) total return on LEHM BBB Index vs. Receiving (Paying) 1-month LIBOR plus 85 (plus 45) basis points (for 1 year on $25,000,000 notional).*

Note: Primary disadvantage of participating in the the index swap market is the general lack of liquidity. Degree of liquidity is dependent upon the particular index under consideration (ie, Agg, HY, BBB), notional, tenor, start date.

Credit Default Swaps

Uses of Default Swaps:

- Synthetic Credit Exposure

  Selling default protection is equivalent to going long credit exposure. Seller takes in premium quarterly. Buyer has right to deliver a bond in default and receive par for it.

  Pricing is equivalent to LIBOR spread.

- Positive Basis

  The difference between selling protection and buying the bond on asset swap.

  Example: Sell MO at 147 BPS for 5 years. 5-year MO bonds trade at 5-year Treasurys *plus* 165 bps. With 5-year swap spreads at 40 bps, cash security is trading at LIBOR *plus* 125 bps. Therefore, the investor could be better off selling protection versus buying the cash bond.

Credit Default Swaps (continued)

Indicative Levels (Market Standard is 5-year Tenor) –

Retail & Tobacco Credit Default Swaps:

MO	Lehman Receives 153 bps (Pays 147 bps).
S	Lehman Receives 420 bps (Pays 400 bps).

Aerospace / Defense Credit Default Swaps:

BA	Lehman Receives 89 bps (Pays 81 bps).
GR	Lehman Receives 225 bps (Pays 215 bps).

Paper / Metals Credit Default Swaps:

GP	Lehman Receives 685 bps (Pays 635 bps).
IP	Lehman Receives 84 bps (Pays 76 bps).

Other Industries: Telecom/Cable, Media, Transportation, Auto (Parts), Energy, Technology, Chemicals, Healthcare, Other Industrials, Banks, Brokerage, Finance, Utilities, Insurance, Japanese Credits, Asian Credits.

Considerations

- ISDA
- Collateral
- Counterparty Exposure
- Accounting / Regulatory

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