

OTC Derivatives

1st International Seminar on Fixed Income Over-the-Counter Market

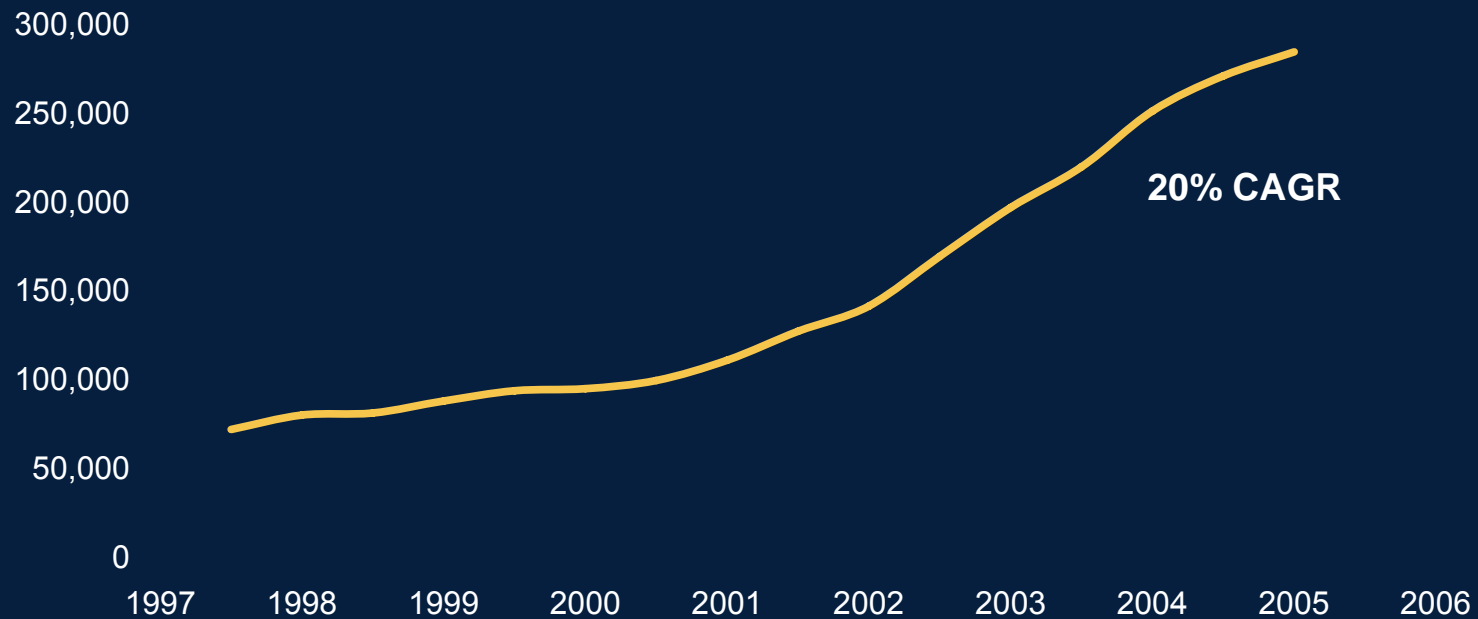
September 29, 2006

This material has been prepared for information purposes to support the promotion or marketing of the transaction or matters addressed herein. It is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument or to participate in any trading strategy. This is not a research report and was not prepared by the Morgan Stanley research department. It was prepared by Morgan Stanley sales, trading, banking or other non-research personnel. This material was not intended or written to be used, and it cannot be used by any taxpayer, for the purpose of avoiding penalties that may be imposed on the taxpayer under U.S. federal tax laws. Each taxpayer should seek advice based on the taxpayer's particular circumstances from an independent tax advisor. Past performance is not necessarily a guide to future performance. Please see additional important information and qualifications at the end of this material.

OTC Market - Explosive Growth

Notional Amount Outstanding

US\$Bn

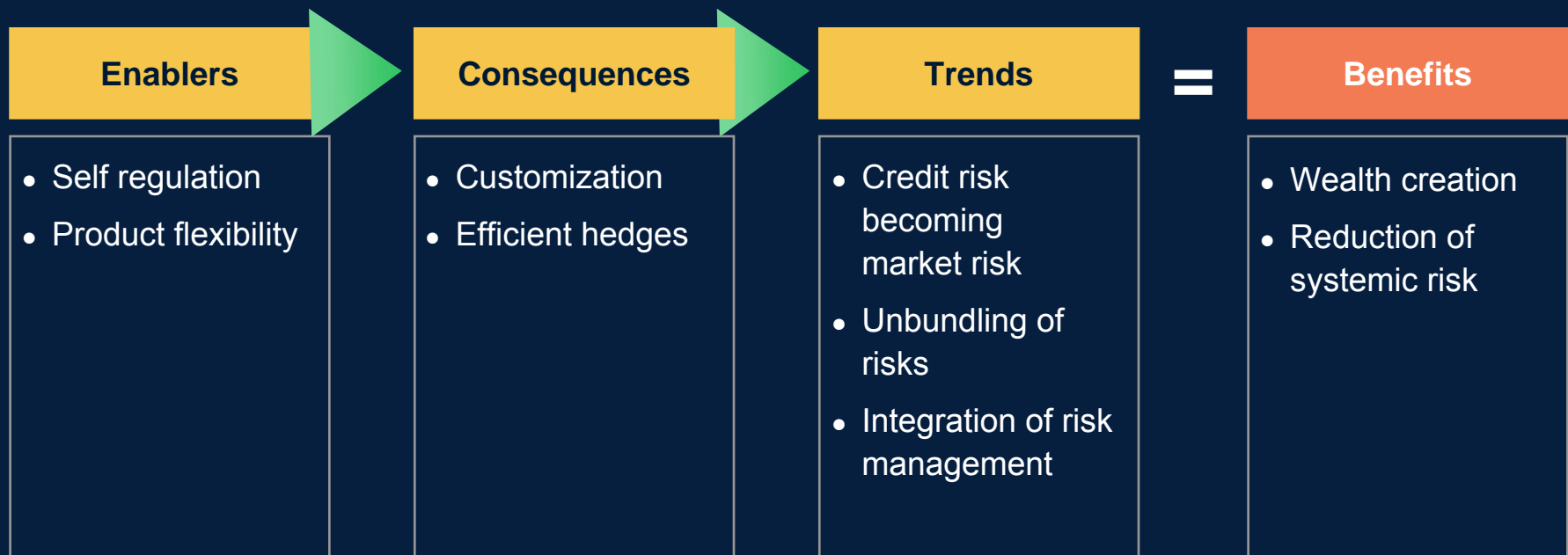


Source: Bank of International Settlements

OTC Market - Overview

Explosive Growth

- US\$285 trillion in notional amount outstanding by December 2005
- Used by 90% of the world's top 500 companies

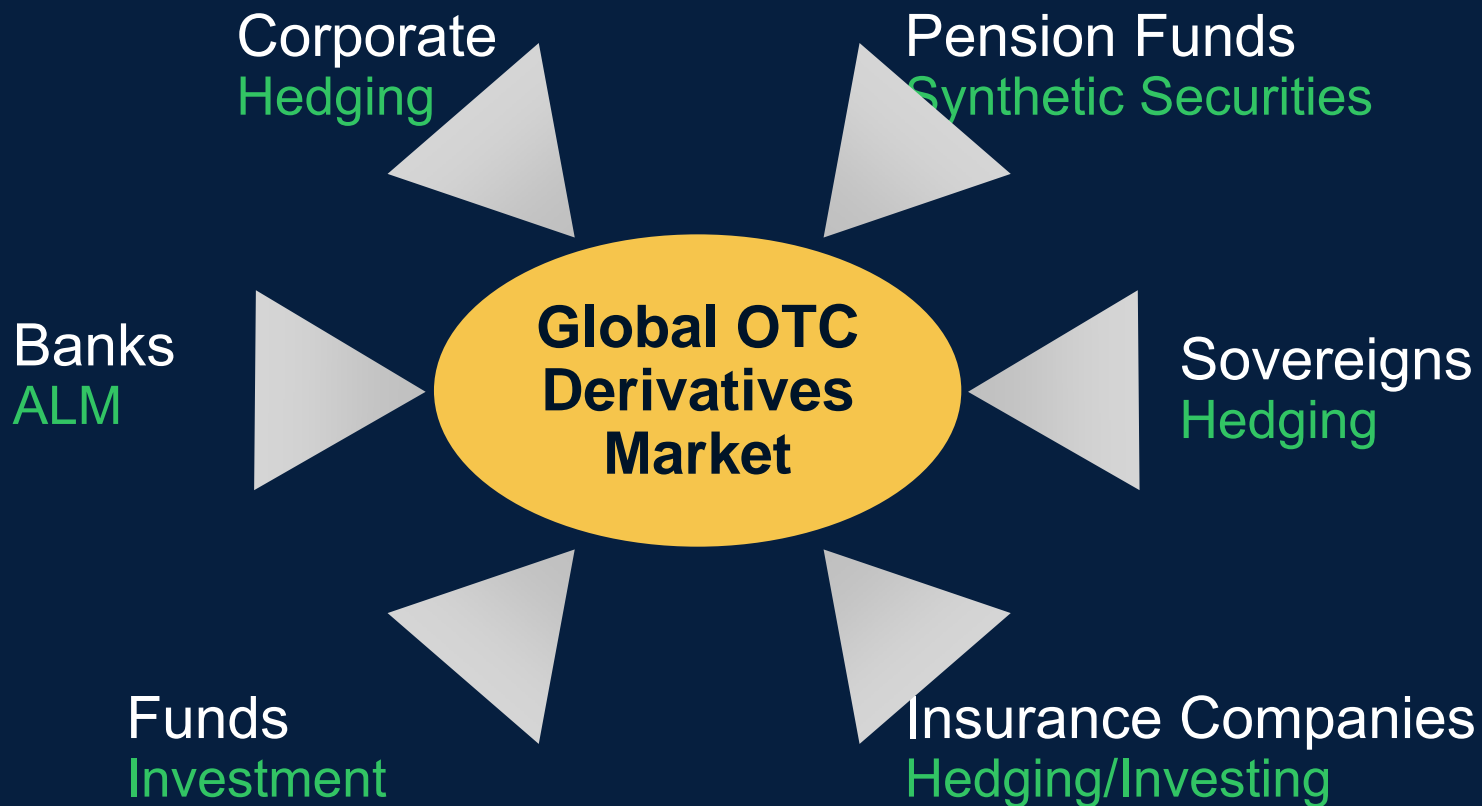


OTC Market - Supply Meets Demand

- Self regulation of international OTC enables product development
 - Products are not regulated
 - Entities are regulated
- Market grows at the speed of risk management needs – supply vs. demand equilibrium
- Customization
- Hedge efficiency

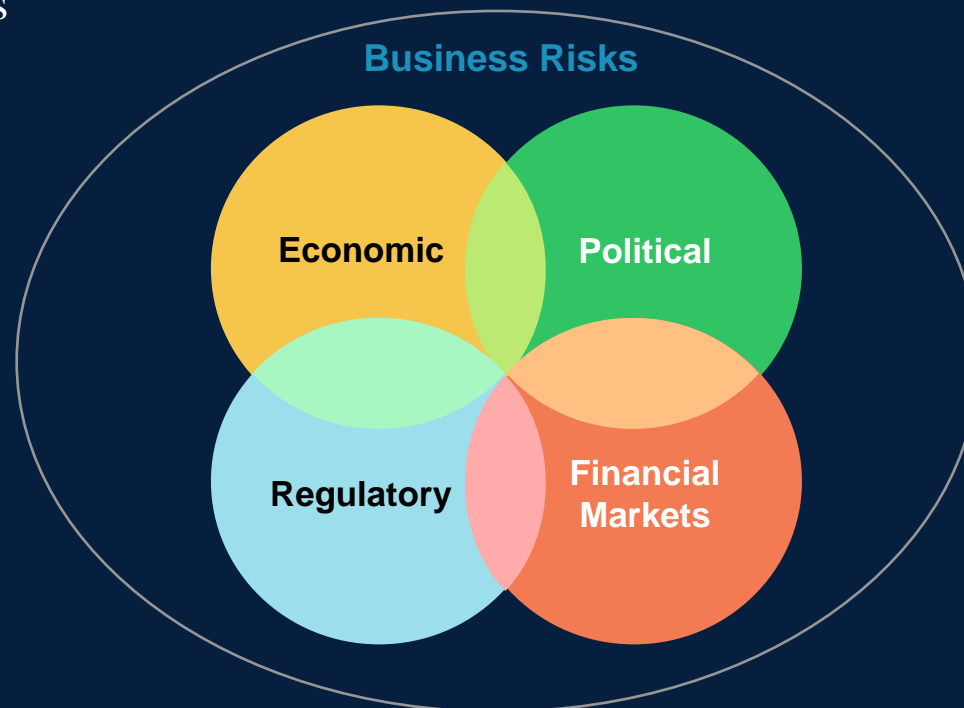


OTC Market - Complementary Needs



Trend: Integrated Risk Management

- Risk management is most effective when it defines risk comprehensively and adopts an integrated approach
 - An attempt to control one dimension of risk often leads to an increase in another dimension. Therefore, compartmentalized approaches will be less effective in managing risks



Risk Management Framework

Risk Identification – Financial Statements

- An integrated risk management approach incorporates how all risks impact the balance sheet and income statement

1) Interest Rates

Cash and Equivalents (1, 4)

Short Term Borrowing (1, 4)

2) Credit

Accounts Receivable (2, 4)

Accounts Payable (4, 5)

3) Commodities

Inventories (4, 5, 6)

Long Term Debt (1, 4)

4) Currencies

Investments (3, 4, 6)

Long Term Labor Contracts (4, 5)

5) Inflation

Plant & Equipment (4, 5)

6) GDP

Equity in Affiliates (3, 4)

Income Statement

Revenue Line (4, 6)

Revenues From Foreign Subsidiaries (4)

Cost of Goods Sold (3, 4, 5)

Interest Expense (1, 4)

Loss Due to Default on Receivables (2, 4)

Net Income (1, 2, 3, 4, 5, 6)

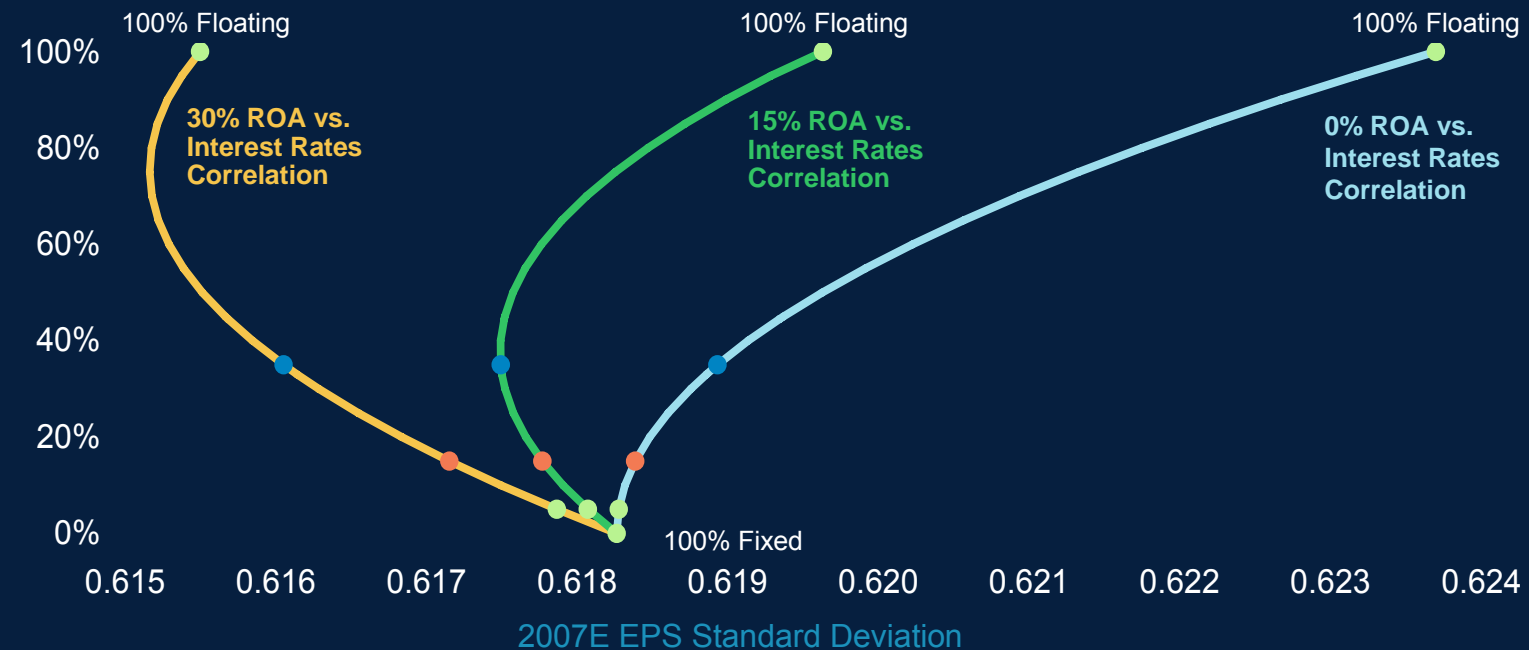
Note to Reader:
This slide has been modified to accommodate for the lack animation capabilities in the PDF format.

OTC Market - Integrated Solutions

Optimizing Fixed/Floating Mix Allows Companies to Achieve More Efficient Portfolios

Take Advantage of Company Cyclicity

% of Floating Rate



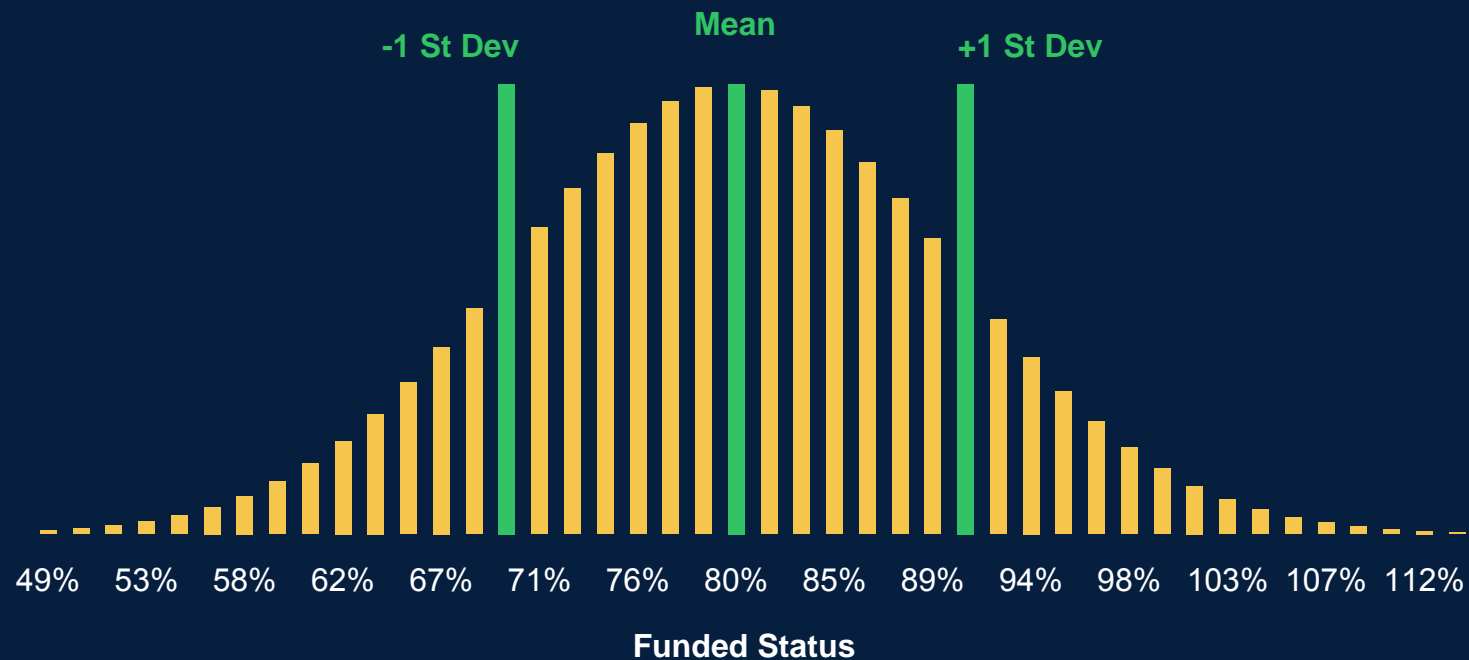
Source: Morgan Stanley

OTC Market - Integrated Solutions

Pension Plans: Bringing Assets and Liabilities Together

Strategy 1: 65% Equity / 35% Fixed

Mean: \$200MM Deficit
St Dev: \$177MM



Source: Morgan Stanley

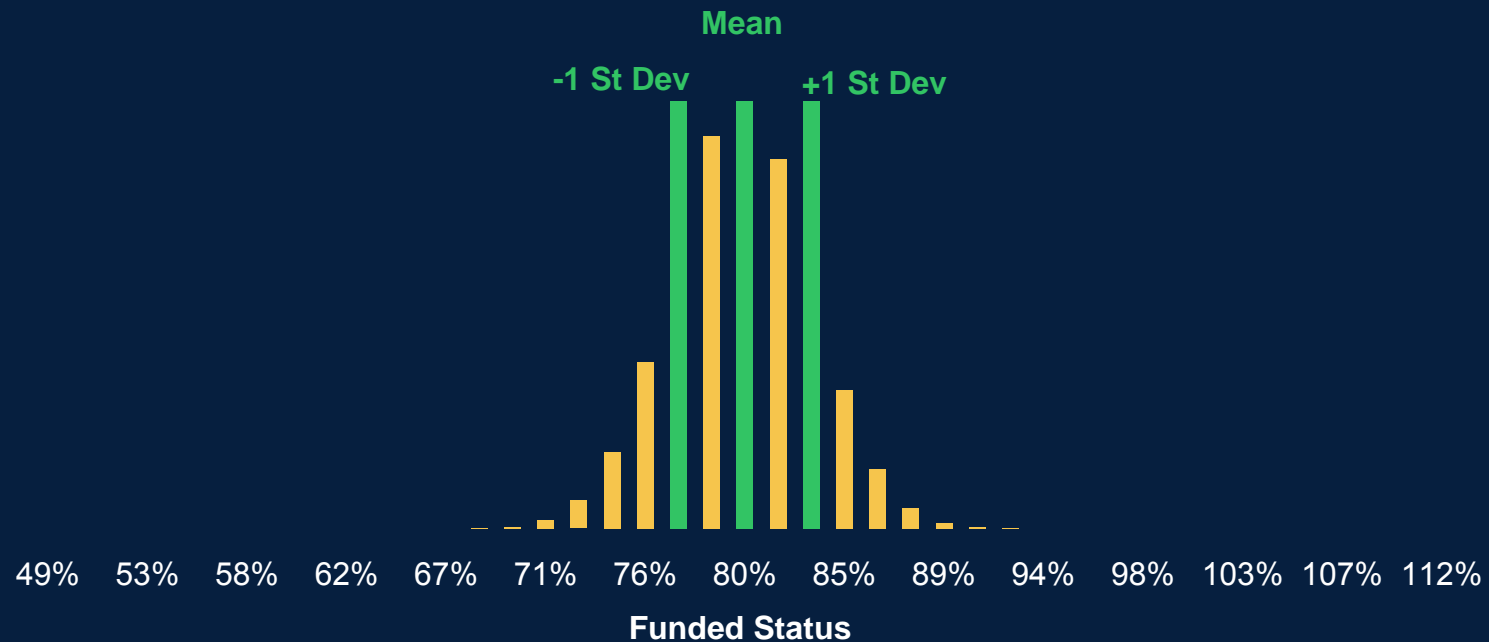
- The portfolio is composed of 65% equity and 35% fixed with fixed duration 5

OTC Market - Integrated Solutions

Pension Plans: Bringing Assets and Liabilities Together (cont'd)

Strategy 2: 20% Equity / 80% Fixed

Mean: \$200MM Deficit
St Dev: \$37MM



Source: Morgan Stanley

- The portfolio is composed of 20% equity and 80% fixed with fixed duration 15
- This strategy can be obtained with derivatives

OTC Market - Customized and Efficient Hedges

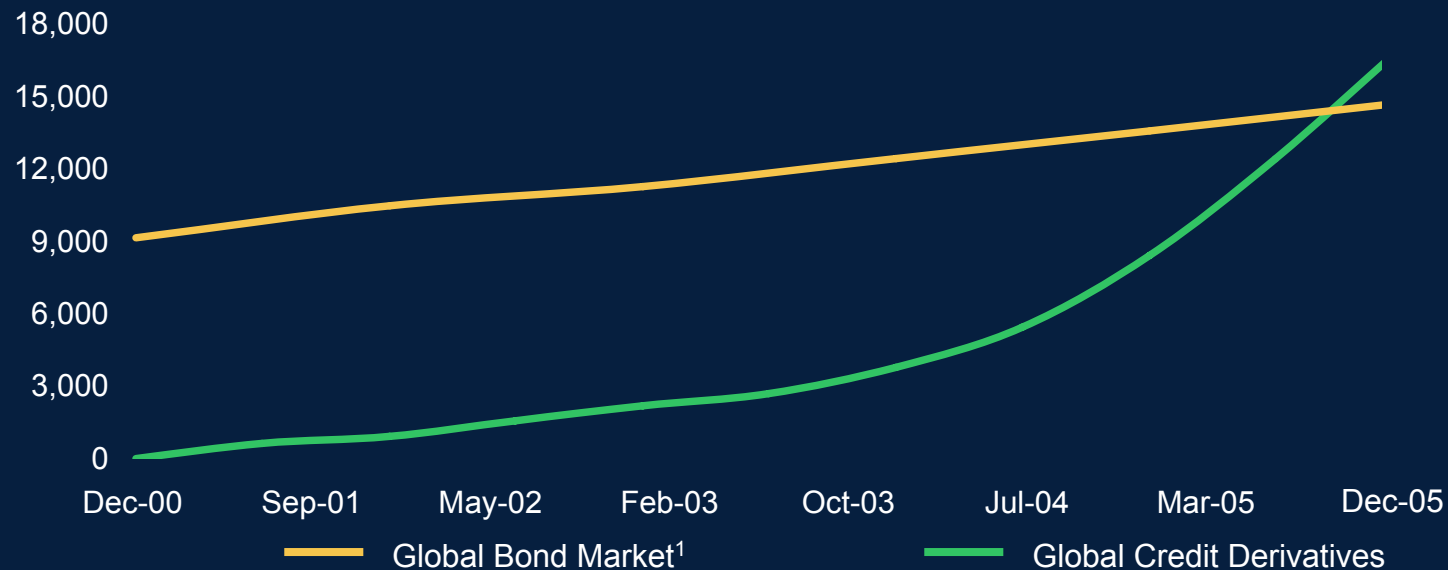


OTC Market - Credit Risk Becomes Hedgeable

The OTC Market Has Enabled Credit Risk to Be Hedged

Notional Outstanding

US\$Bn



Sources: ISDA Market Survey & SDC™ (Thomson Financial)

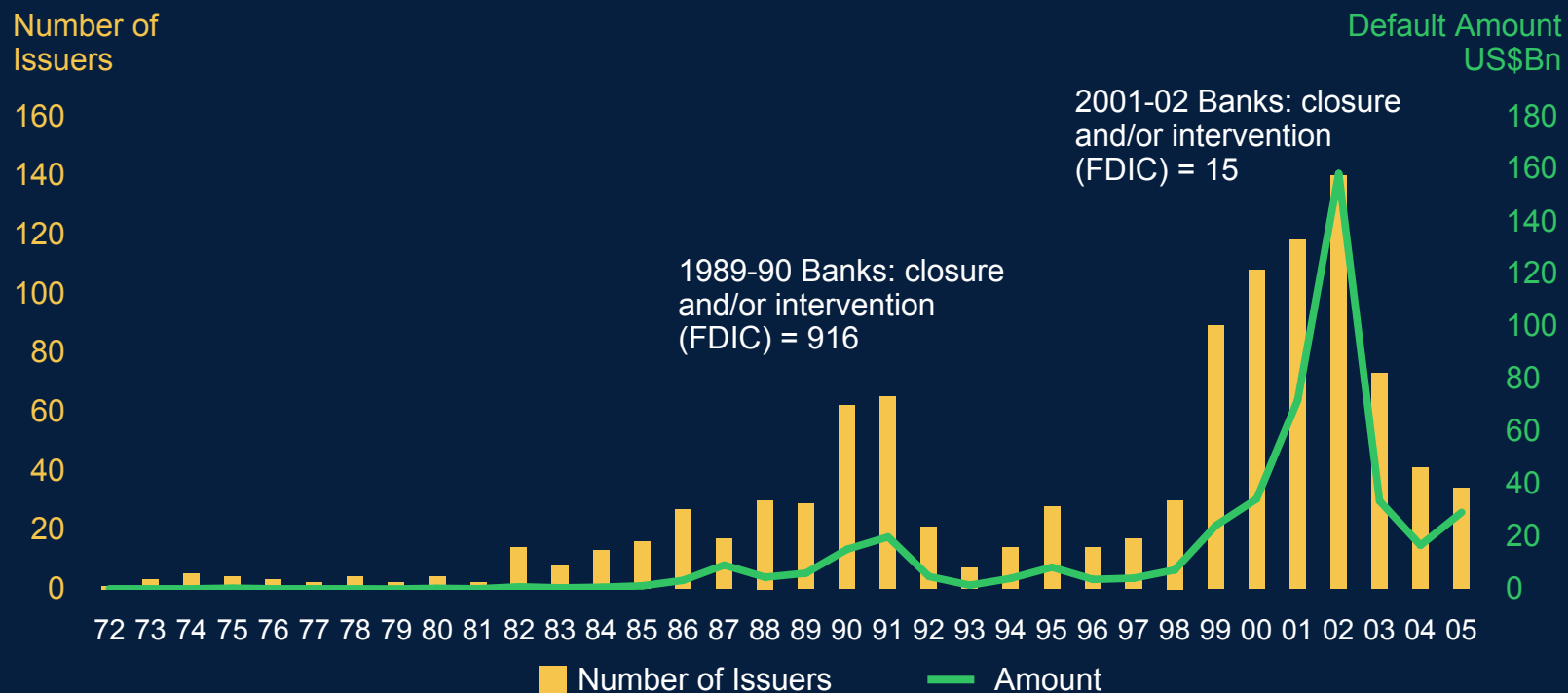
(1) Bond Market totals include global debt for sovereigns (with the exception of US Treasuries), governmental agencies, federal credit agencies, super nationals, emerging markets corporates, high-yield corporates, and investment grade corporates. Securities with maturities of less than 18 months, callable /putable in less than 1 year and/or those without a book runner are NOT included. Other excluded securities are: ABS, MBS, US Tax Munis and Convertibles

- Credit Derivatives – Average annual global growth rate of 110 % over the last 5 years
- Amounts globally to US\$17.1 trillion in notional outstanding
- As a comparison, in 2005 the bond market size was US \$14.8 trillion

OTC Market - Reducing Systemic Risk

Credit Hedging Prevented Serious Problems in 2001-02

Rated Corporate Bonds Defaulting



Source: Standard & Poor's Global Fixed Income Research & Moody's

“...The use of a growing array of derivatives and the related application of more-sophisticated approaches to measuring and managing risk are key factors underpinning the greater resilience of our largest financial institutions, which was so evident during the credit cycle of 2001–02.”

— A. Greenspan
May 5, 2005

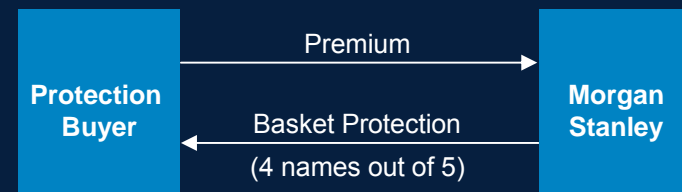
OTC Market - Customized Efficient Solutions

- Customization
- Lower cost

Reference Portfolio Designation

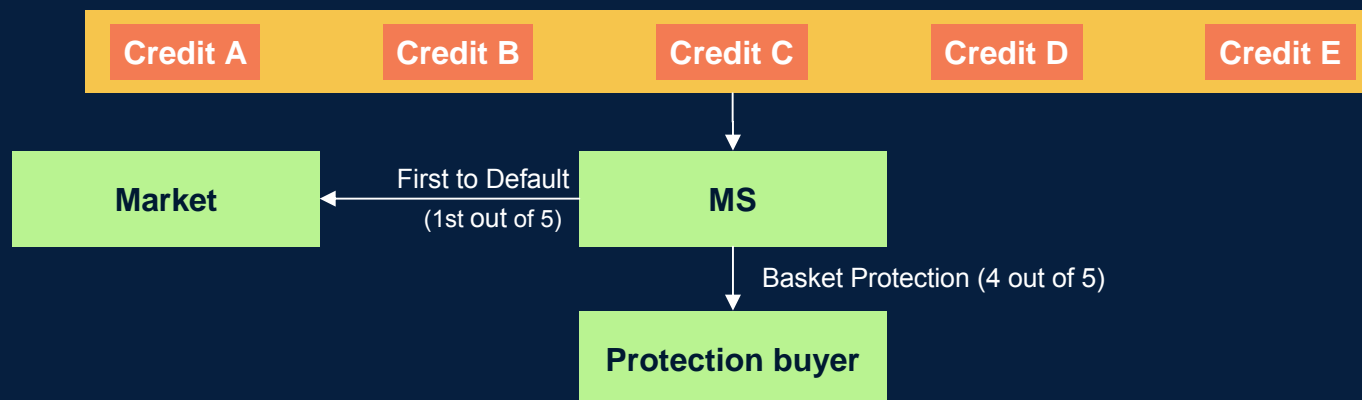


At the Time of the Contract



Distribution of Risk at the Time of Contract:

[x] bps per annum on Notional for 5 years



Hedge Concentration Risk

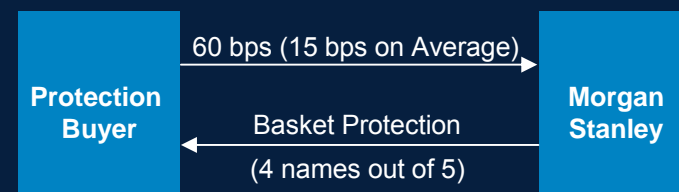
- Cost drops from 44 bps on average to 15 bps on average

Reference Portfolio Designation

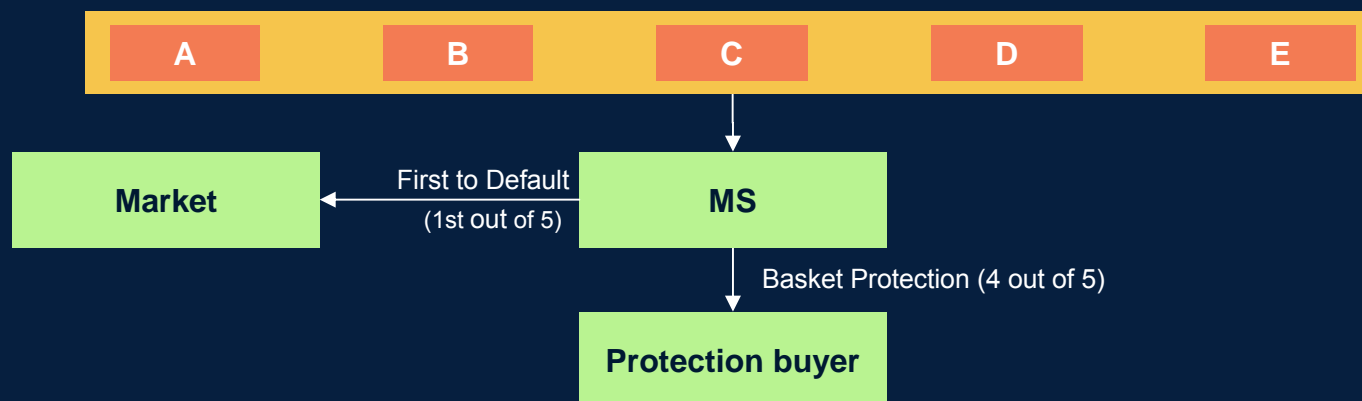
| | |
|--------------|----------|
| Industrial A | → 24 bps |
| Industrial B | → 12 bps |
| Industrial C | → 52 bps |
| Industrial D | → 67 bps |
| Industrial E | → 67 bps |

Total/Average Cost 222/44 bps

At the Time of the Contract



Company Is Protected in 2nd – 5th TD



Summary

- International OTC market has grown at a speed dictated by market needs
- Risk management is evolving into an integrated process – risks are unbundled and hedged
- Credit risk is becoming hedgeable and looked at as another market risk
- Customization is leading to more efficient hedging
- Systemic market risk is decreasing as a result

This material was prepared by sales, trading, banking or other non-research personnel of one of the following: Morgan Stanley & Co. Incorporated, Morgan Stanley & Co. International Limited, Morgan Stanley Japan Limited, Morgan Stanley Capital Group Inc. and/or Morgan Stanley Dean Witter Asia Limited (together with their affiliates, hereinafter "Morgan Stanley"). Unless otherwise indicated, these views (if any) are the author's and may differ from those of the Morgan Stanley fixed income or equity research department or others in the firm.

This material has been prepared for information purposes only and is not a solicitation of any offer to buy or sell any security, commodity or instrument or related derivative (hereinafter "instrument") or to participate in any trading strategy. Any such offer would be made only after a prospective participant had completed its own independent investigation of the instrument or trading strategy and received all information it required to make its own investment decision, including, where applicable, a review of any prospectus, prospectus supplement, offering circular or memorandum describing such instrument or trading strategy. That information would supersede this material and contain information not contained herein and to which prospective participants are referred. If this material is being distributed in connection with or in advance of the issuance of asset backed securities, information herein regarding any assets backing any such securities supersedes all prior information regarding such assets. We have no obligation to tell you when information herein is stale or may change. We make no representation or warranty with respect to the accuracy or completeness of this material, nor are we obligated to provide updated information on the instruments mentioned herein.

This material may have been prepared by or in conjunction with Morgan Stanley trading desks that may deal as principal in or own or act as market maker or liquidity provider for the instruments mentioned herein. Where you provide us with information relating to your order or proposed transaction ("Information"), we may use that Information to facilitate the execution of your orders or transactions, in managing our market making, other counterparty facilitation activities or otherwise in carrying out our legitimate business (which may include, but is not limited to, hedging a risk or otherwise limiting the risks to which we are exposed). Counterparty facilitation activities may include, without limitation, us taking a principal position in relation to providing counterparties with quotes or as part of the ongoing management of inventories used to facilitate counterparties. Trading desk materials are not independent of the proprietary interests of Morgan Stanley, which may conflict with your interests. Morgan Stanley may also perform or seek to perform investment banking services for the issuers of instruments mentioned herein.

Any securities referred to in this material may not have been registered under the U.S. Securities Act of 1933, as amended, and, if not, may not be offered or sold absent an exemption therefrom. In relation to any member state of the European Economic Area, a prospectus may not have been published pursuant to measures implementing the Prospectus Directive (2003/71/EC) and any securities referred to herein may not be offered in circumstances that would require such publication. Recipients are required to comply with any legal or contractual restrictions on their purchase, holding, sale, exercise of rights or performance of obligations under any instrument or otherwise applicable to any transaction.

The securities, commodities or other instruments (or related derivatives) discussed in this material may not be suitable for all investors. This material has been prepared and issued by Morgan Stanley for distribution to market professionals and institutional investor clients only. Other recipients should seek independent investment advice prior to making any investment decision based on this material. This material does not provide individually tailored investment advice or offer tax, regulatory, accounting or legal advice. Prior to entering into any proposed transaction, recipients should determine, in consultation with their own investment, legal, tax, regulatory and accounting advisors, the economic risks and merits, as well as the legal, tax, regulatory and accounting characteristics and consequences, of the transaction. You should consider this material as only a single factor in making an investment decision.

Options are not for everyone. Before purchasing or writing options, investors should understand the nature and extent of their rights and obligations and be aware of the risks involved, including the risks pertaining to the business and financial condition of the issuer and the underlying instrument. A secondary market may not exist for certain of these instruments. For Morgan Stanley customers who are purchasing or writing exchange-traded options, please review the publication 'Characteristics and Risks of Standardized Options,' which is available from your account representative.

The value of and income from investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities, prices of instruments, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in instruments (or related derivatives) transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes only to simplify the presentation and/or calculation of any projections or estimates, and Morgan Stanley does not represent that any such assumptions will reflect actual future events. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein. Some of the information contained in this document may be aggregated data of transactions executed by Morgan Stanley that has been compiled so as not to identify the underlying transactions of any particular customer.

Notwithstanding anything herein to the contrary, Morgan Stanley and each recipient hereof agree that they (and their employees, representatives, and other agents) may disclose to any and all persons, without limitation of any kind from the commencement of discussions, the U.S. federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including opinions or other tax analyses) that are provided to it relating to the tax treatment and tax structure. For this purpose, "tax structure" is limited to facts relevant to the U.S. federal and state income tax treatment of the transaction and does not include information relating to the identity of the parties, their affiliates, agents or advisors.

In the UK, this communication is directed in the UK to those persons who are market counterparties or intermediate customers (as defined in the UK Financial Services Authority's rules). In Japan, this communication is directed to the Qualified Institutional Investors as defined under the Securities Exchange Law of Japan and its ordinances thereunder. For additional information, research reports and important disclosures see <https://secure.ms.com/servlet/cls>. The trademarks and service marks contained herein are the property of their respective owners. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data.

This material may not be sold or redistributed without the prior written consent of Morgan Stanley.

© 2006 Morgan Stanley

Morgan Stanley

Alexandre Maia • 1 212 761 1765 • alex.maia@morganstanley.com