

Morgan Stanley

European & US Leveraged LCDs: Impact on the High Yield Market EHYA & LMA Panel Discussion May 31, 2006

Moderator & Panelists

Moderator

- **Robert Lepone** – Executive Director, Head of European Loan Trading, Morgan Stanley

Panelists

- **Richard Kennaugh** – Managing Director, Head of Trading, Loan Exposure Management Group, Europe, Deutsche Bank Credit Portfolio Management
- **Richard Bateson** – CEO, Man Galileo Investment Management
- **Mark Benson** – Head of Fixed Income, CQS
- **Stephen Byrne** – Executive Director, Head of European Par Loan Trading, Goldman Sachs
- **David Gillmor** – Director, European Leveraged Finance Ratings, Standard & Poors

Leveraged LCDS: Introduction

European Leveraged LCDS

Benefits to Buyers

Benefits to Sellers

Basis Risk

- Buyer avoids basis risk by LCDS contract terminating at zero cost on full refinancing of underlying loan
- Buyer pays premium on running basis, thus not required to monetize up front loss

- Seller avoids prepayment risk on LCDS as premium is received on spread basis and accrues up to termination date at full repayment

Private Loans

- Buyer able to hedge private loans

Anonymity and Control

- Buyer mitigates risk without alerting borrower/financial sponsor
- Buyer retains all voting control of loan up to NOPS delivery

- Seller obtains voting rights at delivery of NOPS

Capital Efficiency

- Buyer able to obtain reduced Regulatory Capital
- Basel II will create greater Regulatory Capital burden on leveraged loans

- Seller able to significantly leverage returns
- Seller does not incur financing charges

European Leveraged LCDS

Benefits to Buyers

Benefits to Sellers

Settlement

- Buyer can participate if consent not received

- Only Seller has cash settlement option

Liquidity

- Ultimately greater liquidity should develop from this product given the synthetic nature of the product

- Seller able to access private credits that may not be actively traded in cash market or less liquid public loans
- CLO managers can access new credit in vintage vehicles

Margin Ratchet and Trade Size

- Seller is not impacted by margin ratchets or amortizations/partial prepayments
- Premium and notional size remain constant over life of LCDS trade

Currency Diversity

- Seller can sell in currency that differs than underlying asset

European Leveraged LCDS

Benefits to Buyers & Sellers

Accrual Date

- T+1, unlike loan settlement, which can take T+10 or more

Tenor

- Buyer or Seller can select tenor of exposure at inception of trade (1-10 yrs)

Tax Efficient

- Unlikely to attract withholding tax payments at source

Consent

- No borrower / agent consent issues

Fees

- Avoid agency and / or security transfer fees

Differences Between: European & US LCDS and Euro Bond CDS

	European Bond CDS	European LCDS	US LCDS
Reference Entity	<ul style="list-style-type: none"> • ABC plc and any Successor 	<ul style="list-style-type: none"> • Any borrower/guarantor/obligor or surety under the credit agreement • Successor provisions do not apply 	<ul style="list-style-type: none"> • ABC plc and any Successor
Reference Obligation	<ul style="list-style-type: none"> • Typically a Bond 	<ul style="list-style-type: none"> • All tranches or facilities under the credit agreement (including new tranches) 	<ul style="list-style-type: none"> • Loan of the Designated Priority specified on the Reference Obligation Secured List
Obligation	<ul style="list-style-type: none"> • Borrowed Money 	<ul style="list-style-type: none"> • Reference Obligation Only 	<ul style="list-style-type: none"> • Borrowed Money
Credit Event	<ul style="list-style-type: none"> • Bankruptcy • Failure to Pay • Modified Modified Restructuring 	<ul style="list-style-type: none"> • Bankruptcy • Failure to Pay • Modified Modified Restructuring 	<ul style="list-style-type: none"> • Bankruptcy • Failure to Pay

Differences Between: European & US LCDS and Euro Bond CDS

	European Bond CDS	European LCDS	US LCDS
Deliverable Obligation	<ul style="list-style-type: none"> • Bond or Loan • Not Subordinated • Specified Currency • Not Contingent • Assignable Loan • Consent Required Loan • Transferable • Maximum Maturity: 30 yrs • Not Bearer 	<ul style="list-style-type: none"> • Reference Obligation or any obligation of the Reference Entity that is senior to the Reference Obligation and secured on same assets 	<ul style="list-style-type: none"> • Loan • Not Subordinated • Specified Currency • Not Contingent • Assignable Loan • Consent Required Loan • Participation Loan • Maximum Maturity: 30 yrs • Syndicated Secured
Early Termination	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Trade terminates if all of Reference Obligations are redeemed/repaid 	<ul style="list-style-type: none"> • Trade terminates if no Substitute Reference Obligation is identified
Excluded Deliverable Obligations	<ul style="list-style-type: none"> • None. Usually the Reference Obligation is a Deliverable Obligation 	<ul style="list-style-type: none"> • The Reference Obligation if security is released and materially diminished following a Restructuring credit event exercised by the Buyer 	<ul style="list-style-type: none"> • Reference Obligation if it fails the Syndicated Secured or Specified Currency characteristic

Differences Between: European & US LCDS and Euro Bond CDS

European Bond CDS

European LCDS

US LCDS

Physical Settlement

- Buyer delivers Deliverable Obligations with an outstanding principal balance equal to the Physical Settlement Amount

- Buyer delivers Deliverable Obligations with an outstanding principal balance equal to the Physical Settlement Amount
- Seller can elect for Cash Settlement to apply in relation to all/part of the Deliverable Obligations

- Buyer delivers DO with an outstanding principal balance equal to the Physical Settlement Amount
- Seller can elect for Cash Settlement to apply if assignment/participation not completed within the required time period
- Buyer/Seller may elect settlement at any time in a form which reflects the economics of the trade

Delivery Timeline

- Notice of Physical Settlement (“NOPS”) must be sent within 30 calendar days of Event Determination Date (credit event notice and notice of publicly available information)

- NOPS must be sent within 30 calendar days of the Event Determination Date

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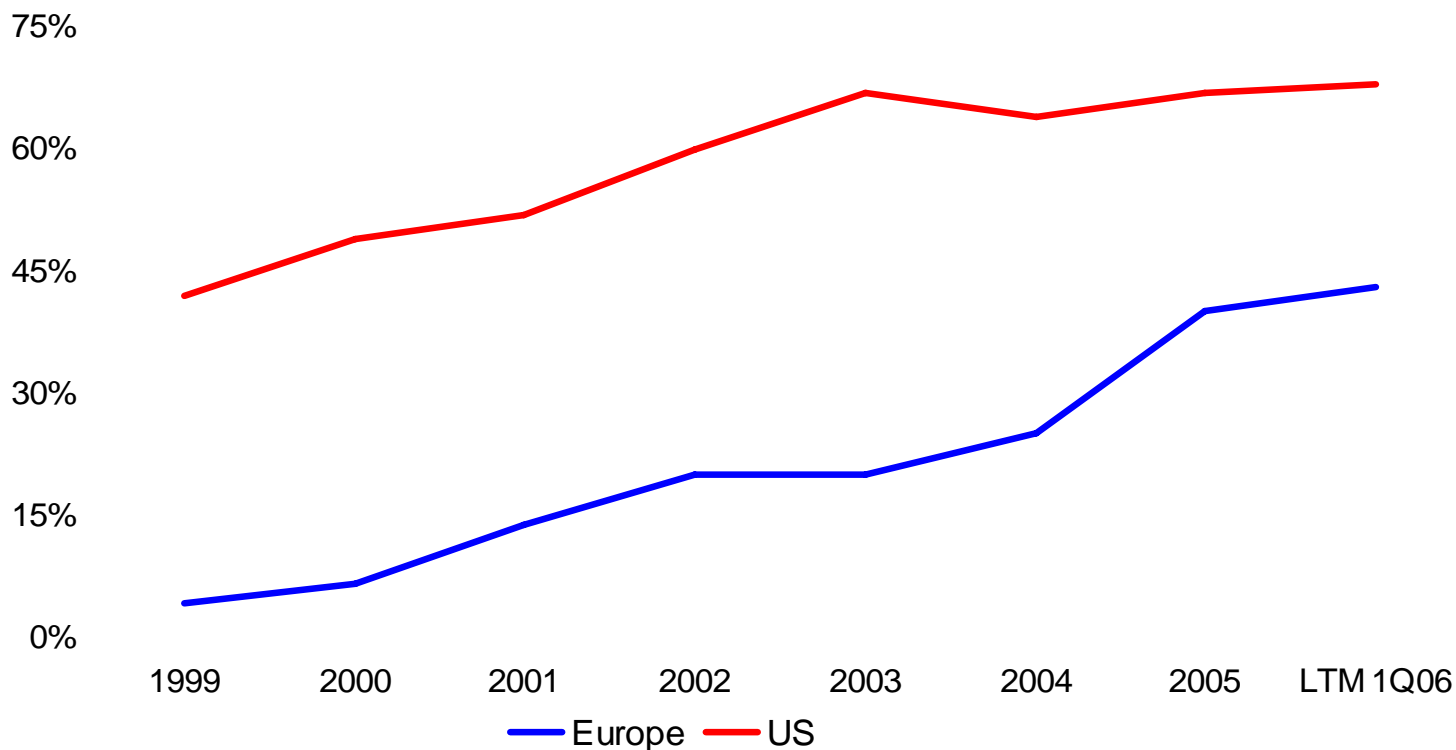
Differences Between: European & US LCDS and Euro Bond CDS

	European Bond CDS	European LCDS	US LCDS
Delivery Timeline (continued)	<ul style="list-style-type: none">• Deliverable Obligations must be delivered within 30 business days of satisfaction of Conditions to Settlement (i.e., delivery of NOPS)	<ul style="list-style-type: none">• Deliverable Obligations must be delivered within 30 business days of the day that is 30 calendar days after the Event Determination Date	<ul style="list-style-type: none">• Deliverable Obligations must be delivered within 30 business days of satisfaction of Conditions to Settlement

Panel Discussion

Convergence of US & European Markets?

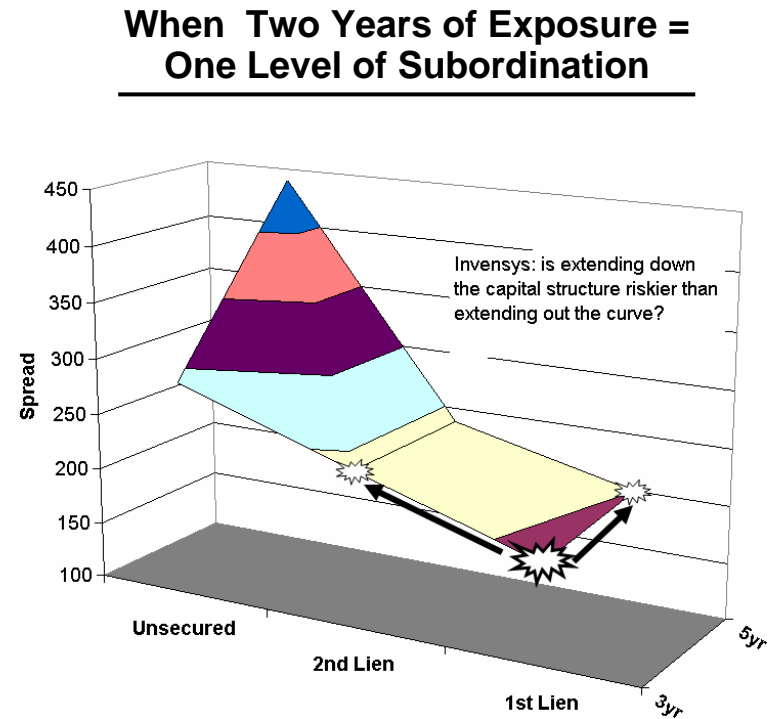
Institutional Investors' Share of the Primary Market for Leveraged Loans



Source: S&P LCD

Implications for Relative Value Trading?

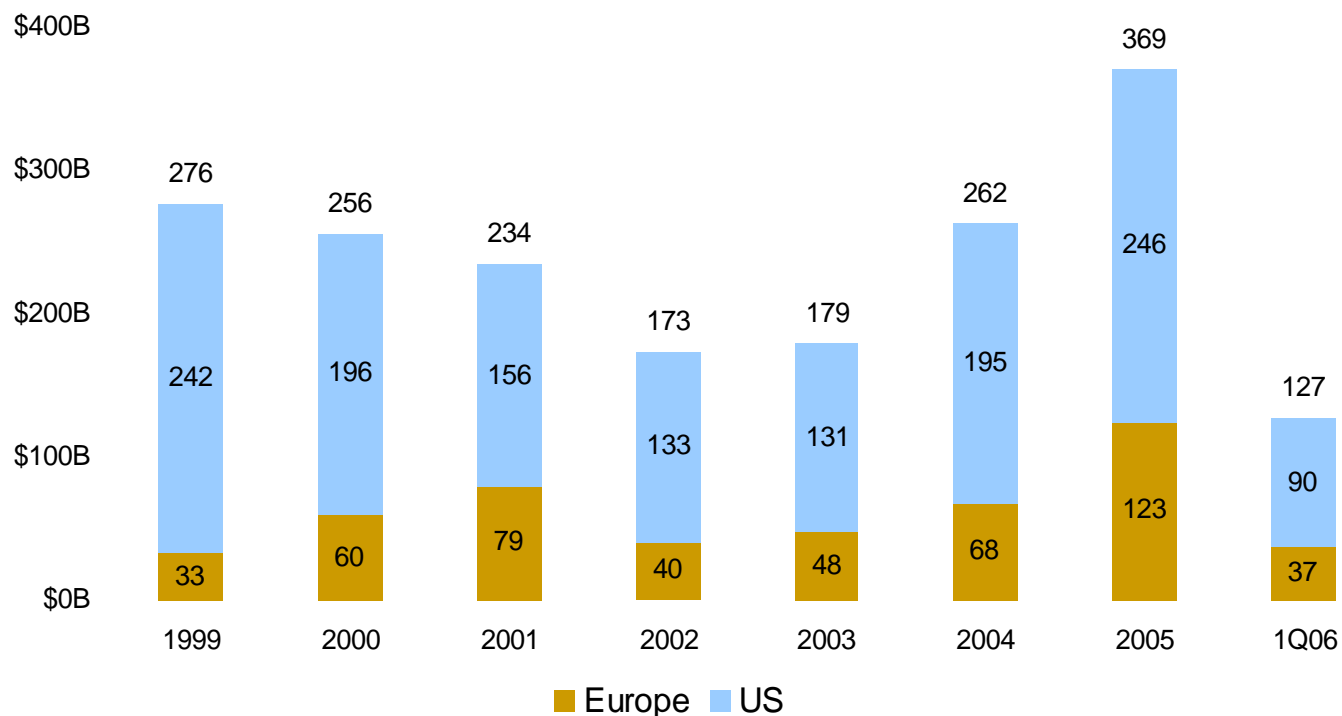
- A CDS contract on leveraged loans has an extensive number of 'natural users', particularly in the interplay between banks (CDS buyers) and Hedge Funds (CDS sellers)
- It should facilitate relative value trading in high yield markets:
 - Capital structure relative value, i.e., view on loss severity given default.
 - Credit curve relative value, i.e., view on timing of risk.
- Example: **Invensys**
 - Spread difference from 3-year 1st Lien: Two years of risk almost equivalent to one level of subordination.



Source: Morgan Stanley

Leveraged Loan Market

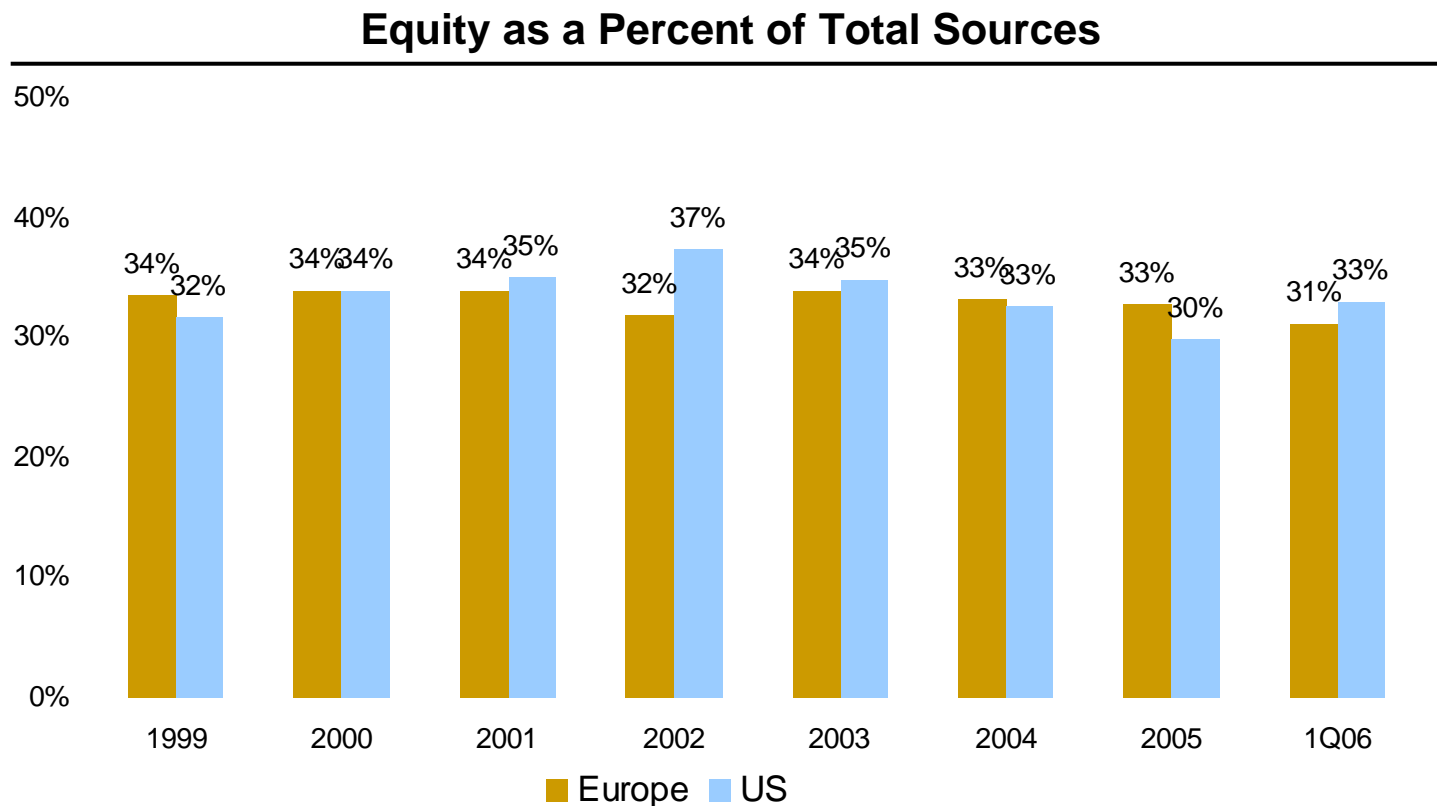
Overall New-Issue Leveraged Loan Volume



Source: S&P LCD

Leveraged Loan Market

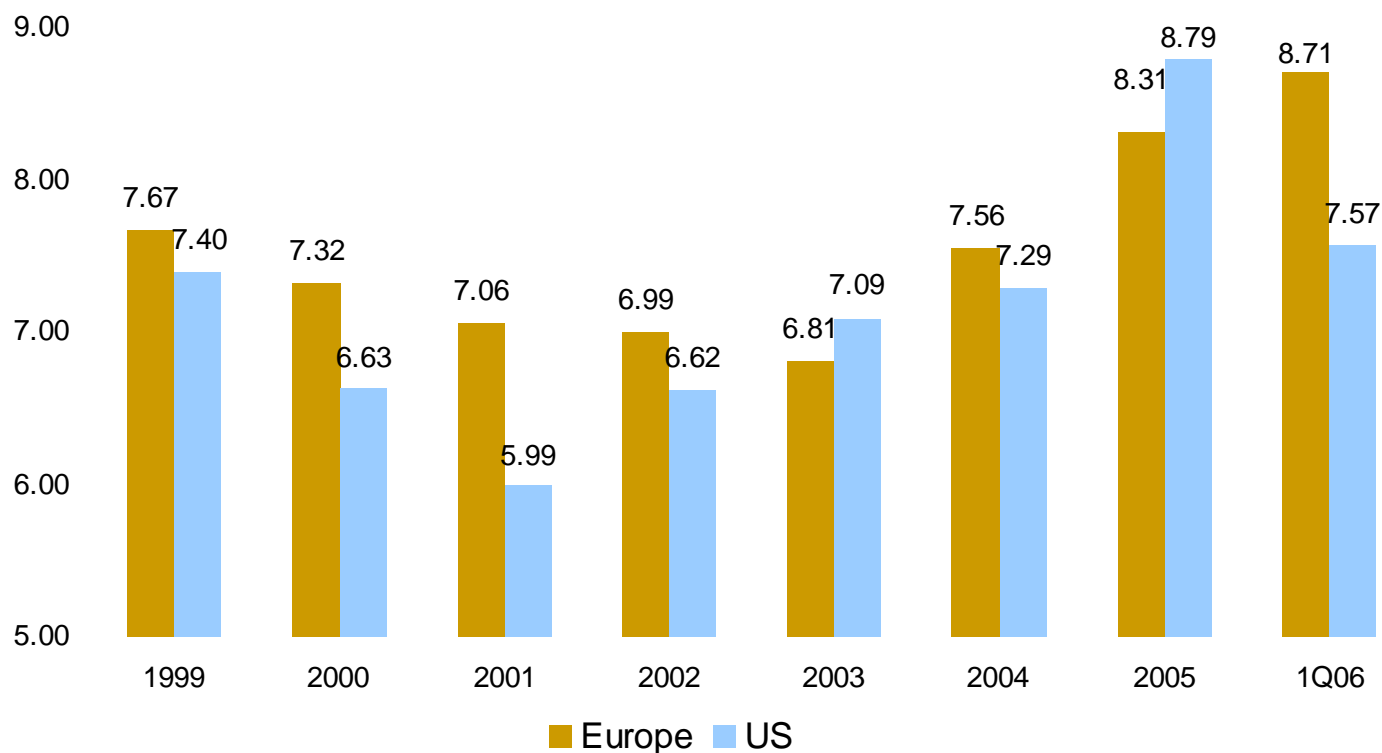
Average Contributed Equity to Leveraged Buyouts



Source: S&P LCD

Leveraged Loan Market

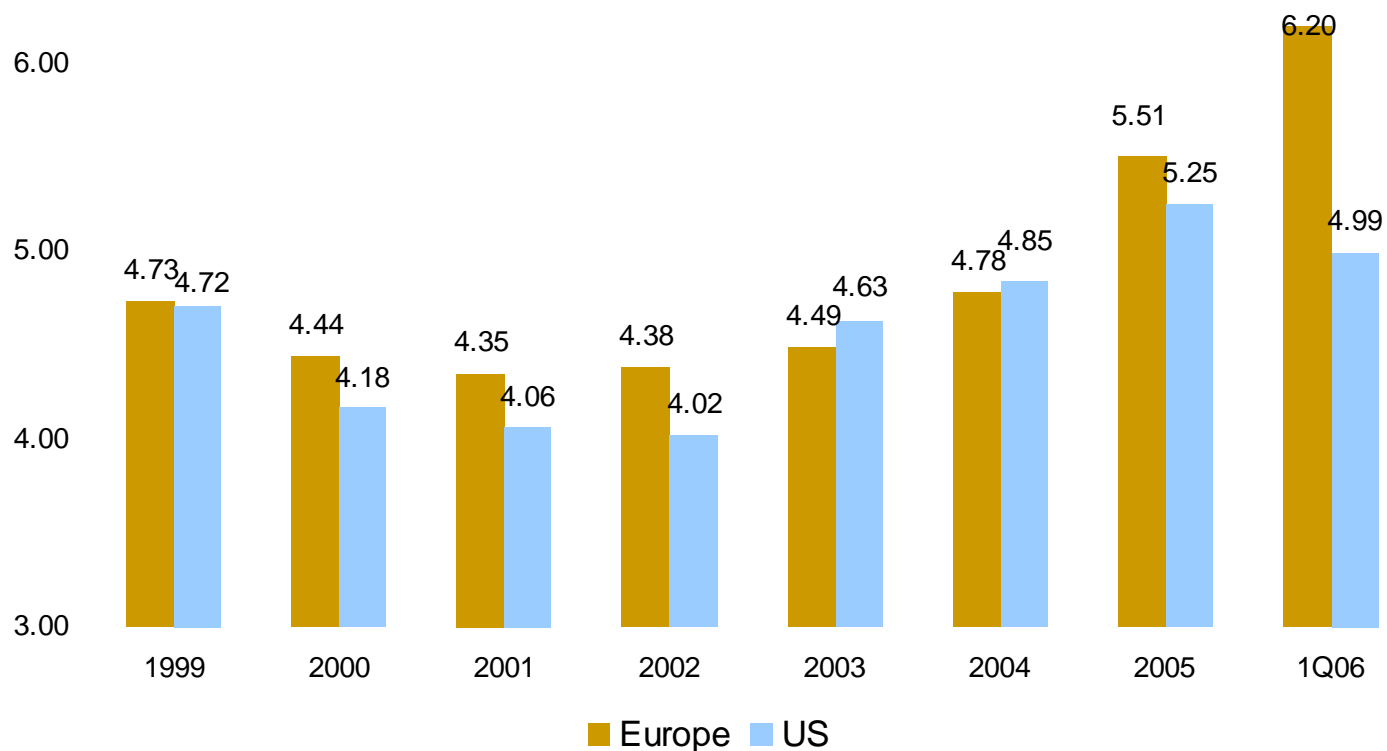
Average Leveraged Buyout Purchase Price Multiple



Source: S&P LCD

Leveraged Loan Market

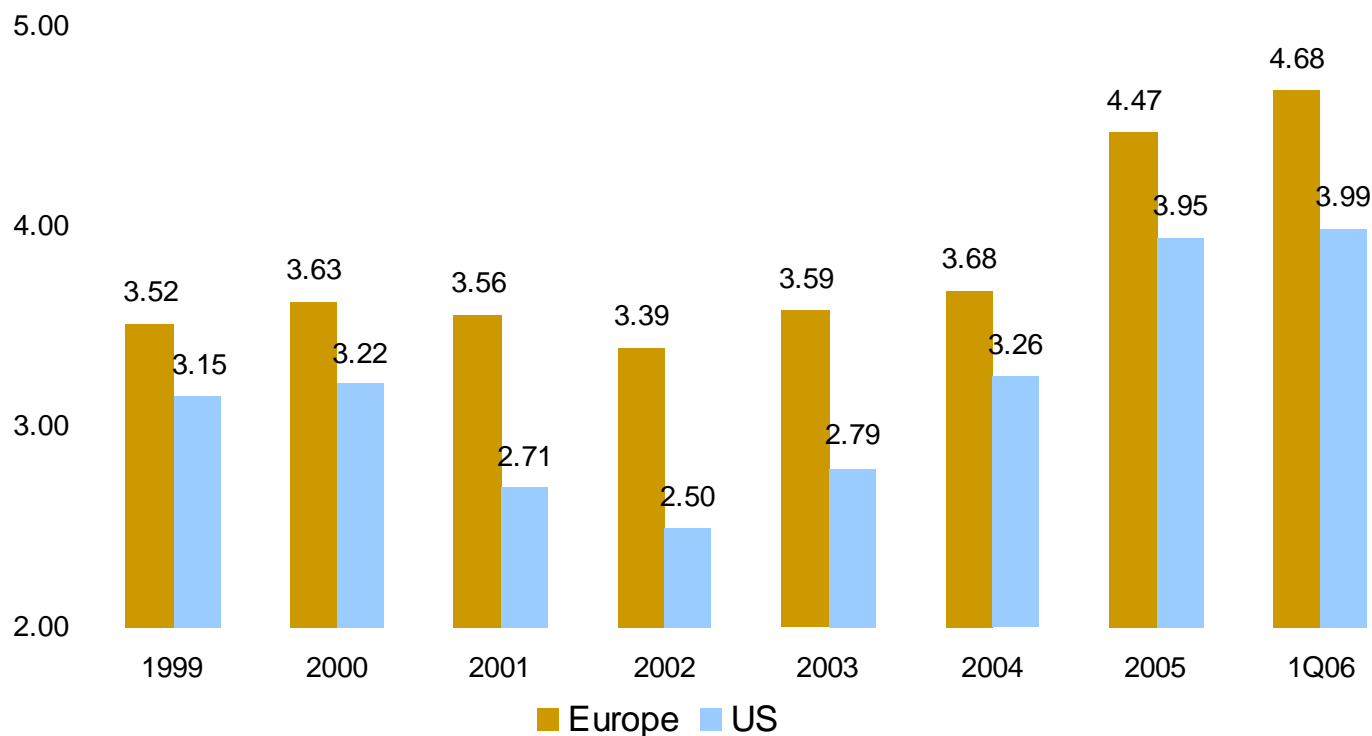
Average Total Leverage Ratio of Leveraged Buyouts



Source: S&P LCD
Population data includes LBOs with EBITDA of > €/\$50 MM

Leveraged Loan Market

Average Senior Leverage Ratio of Leveraged Buyouts



Source: S&P LCD
Population data includes LBOs with EBITDA of > €/\$50 MM

European Leveraged Loan CDS Market

LevX Indexes

1) **Lev X – Senior**

- 35 1st lien credits only

2) **Lev X – Subordinated**

- 35 2nd and 3rd lien credits only
- Weighting of 2nd and 3rd lien between 40% and 60%

- June 2011 maturity
- Traded on price with fixed coupon – only premium or discount exchanged
- Zero factor applied to credits refinanced or credits defaulted; coupon paid on remaining
- Physical settlement

Q&A

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