

# Valuing Alternative Investment Management Companies: Private Equity & Hedge Fund Interests

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# Presentation Overview

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- ◆ Overview
  - Changing Environment
  - Private Equity Structures
  - Hedge Structures
  
- ◆ Key Considerations
  - Valuation Issues
  - Documents to Review
  
- ◆ Valuation Methods & Application
  - Discounted Cash Flow Method
  - DCF with Scenario or Monte Carlo Methods
  - Option Method
  - Comp Company/Transaction Method

# Changing Face of Asset Management Companies

- ◆ Combination of low interest rates and three year stock market decline lead investors into alternative investments
- ◆ Hedge/Private Equity funds generate higher relative returns by using leverage
- ◆ Housing debacle lead to large credit losses by banks
- ◆ Higher refinancing costs and wider credit spreads
- ◆ Changes in shadow banking system left no reliable source of short term borrowing for those with no dry powder.
- ◆ Result had a deleterious effect on fund returns and lead to redemptions

# Changing Face of Asset Management Companies

## ◆ Structure

- 70 percent of AUM controlled by a few hundred funds
- In 2008 1,471 hedge funds liquidated
- In 2009 over 1,000 hedge funds liquidated
- In 2010 over 700 hedge funds liquidated

## ◆ Performance

- Average Return in 2008 was -18.3%
- Average Return in 2009 was 24.85%
- Average Return in 2010 was 10.5%

# Changing Face of Asset Management Companies

## ◆ Hedge Fund Strategies:

- Convertible Arbitrage
- Event Driven
- Fixed Income Arbitrage
- Merger Arbitrage

## ◆ Private Equity:

- Specialization by Industry
- Specialization by Geography
- Special Situation - Venture Capital

# Changing Face of Asset Management Companies

## ◆ Hedge Funds

- Current AUM - \$1.8 Trillion
- Launches outpaced liquidation for first time since 2007
- Largest 33% of funds had highest level of asset raising in Q1 2011 at \$12 billion
- Transparency requirements putting pressure on infrastructures of smaller fund managers
- Incentive fees and management fees structure lower.

## ◆ Private Equity

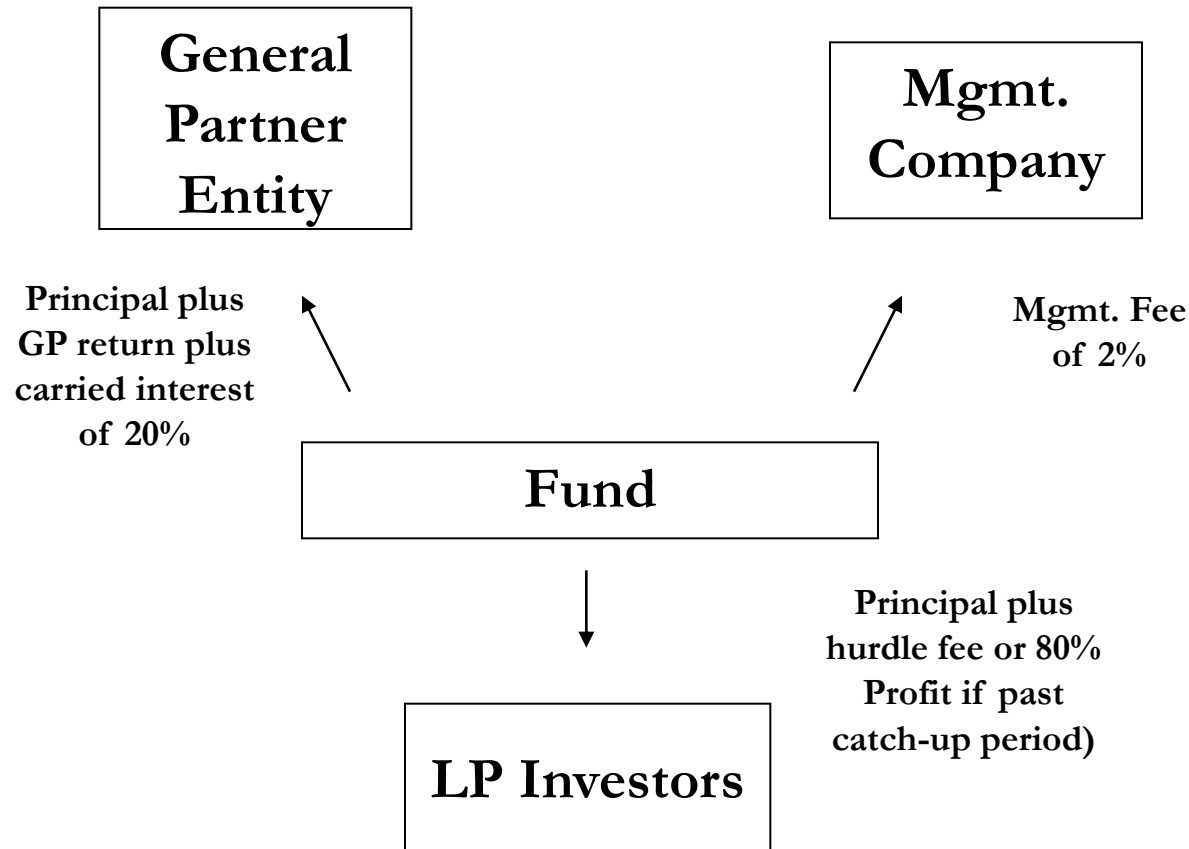
- Because of long term lesser impact than hedge funds
- Returns in 2010 over 19%
- Follow J curve and therefore near term IRR's negative
- 30 private equity funds closed in Q1 2011 up 43% from previous quarter
- Debt financing more available
- Questions about economic recovery

# Fund Overview – Private Equity

- ◆ Typically make control level equity investments in companies – private or public
- ◆ LP and GP investors locked in for duration of fund
- ◆ Fund Flows
  - “Committed Capital” raised
  - Investment period - first 4 to 6 years – capital called as needed
  - Holding period - 4 to 6 years
  - Harvest period - remaining period
- ◆ Fund management structure (simple version)
  - General Partnership – oversight of fund and investments
    - ▶ Paid “carried interest” profits only
  - Management Company – operations of fund
    - ▶ Paid management fees to cover expenses

# Fund Overview – Private Equity

Typical PE Structure (ignores on/offshore feeders & other complexities)





# Fund Overview – Private Equity

## ◆ Fees Structure

- Management earns 2% management fee
  - ▶ First on “committed capital” and then on net “invested capital”
  - ▶ Expenses typically reside here
- Limited partners in fund earn “hurdle rate” before GPs earn carried interest – typically 8-10%
- GPs earn “carry payments” after LPs earn hurdle
  - ▶ typically 15% to 20% of profit above hurdle returns
  - ▶ paid upon realization

## ◆ Additional variations may complicate modeling:

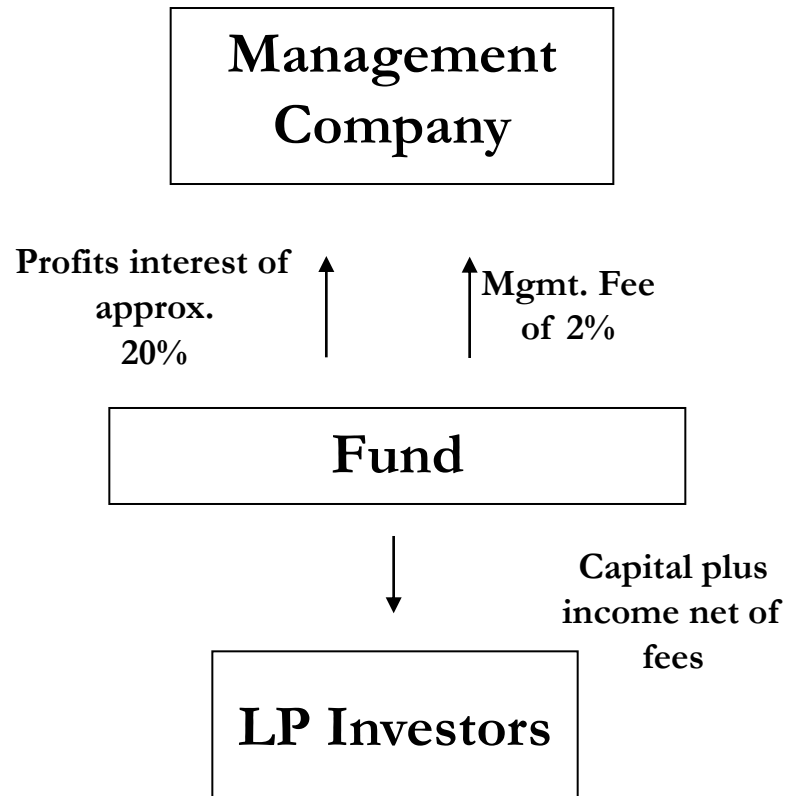
- The fund may utilize a master-feeder structure;
- Multiple GP entities may exist;
- Fund of funds

# Fund Overview – Hedge Funds

- ◆ Invest in almost any security or strategy
  - Private or public
- ◆ Investors can withdraw periodically per documents
- ◆ Fund Flows
  - Investment period – invest as dollars come in/raised/called
  - Holding period – short-term typically – depends on strategy
  - Profits generated currently
- ◆ Fund management structure (simple version)
  - Management Company – operations of fund
    - ▶ Paid management fees to cover expenses
    - ▶ Paid “incentive fees or profits interests” on income

# Fund Overview – Hedge Funds

## Typical Hedge Structure (ignores on/offshore feeders, etc.)



Note: Some funds have separate GPs for receiving profits interests

# Fund Overview – Hedge Funds

## ◆ Fee Structure

- Management earns management fee (2% typical)
- Management earns profits interest typically of 20% but varies by fund and clients in funds
- Fees typically paid only above prior “high water marks”
- Profit interests paid on more current basis

## ◆ Additional variations may complicate modeling:

- The fund may utilize a master-feeder structure;
- Separate managed accounts for clients with different terms
  - ▶ Fees different
  - ▶ Investment criteria different – returns different
- Fund of funds – much different fee levels

Turn to Valuation Considerations

# Key Value Considerations – PE & Hedge

- ◆ Managers of a fund are often the primary driver
  - Track record and reputation – raise \$30MM vs \$6B
  - Client relationships and investment capabilities
  - Introduces issue of personal goodwill vs corporate goodwill
- ◆ If new, have principals run money before? Is there a track record established in other firms – together or apart?
- ◆ AUM/Committed Capital – existing or new/expected
  - Is there a key institutional investor providing support?
- ◆ Expected returns on investment classes/strategies
- ◆ Vintage year considerations
  - Outlook for types of investments expected to be made
  - Funding availability for strategies
  - Risk of strategies and management's expected returns

# Key Value Considerations - Terms

- ◆ Economic terms of documents
  - Fees, hurdles, allocations, expenses, etc.
- ◆ Volatility of investment strategy and existence of high water mark (primarily hedge funds) or hurdle rate
  - Risk to profits interest and carried interest
- ◆ Withdrawal provisions, if any (primarily hedge funds)
  - Historical inflows/outflows of cash in subject fund
  - Inflows/outflows of similar funds
  - Correlation to returns

# Key Value Considerations - Terms

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- ◆ Capital commitments of GPs and timing of calls (PE)
- ◆ Fee waivers if any related to interest valued
- ◆ To tax or not to tax & pass through premiums
- ◆ Other issues impacting returns to interest being valued

# Key Documents to Review

- ◆ Fund Private Placement Memorandum/Offering Memo
  - Investment objectives & fund strategy
  - Background on principals
  - Management track record from prior funds
  - Economic terms of the fund
  - Summary of fund governing documents
  
- ◆ Other Information
  - Form ADV for SEC Registered Firms
  - Subscriptions and Redemptions by Year
  - Communications with Investors
  - Deferred Offshore Incentive Fees
  - Fund Performance Data
  - AUM by Quarter by Fund



# Key Documents to Review

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- ◆ Fund governing documents (generally LP agreement)
- ◆ Management Advisory Agreements
- ◆ Investor/management presentations
- ◆ Website information if available
- ◆ Fund or company history (for existing fund companies)
  - Investments and their expectations
  - Financial history and expectations
  - Returns to date and expected all-in
- ◆ Industry & economic outlooks for fund category and investment types
- ◆ Lots more...

Turn to Valuation Methods

# Valuation Methods

- ◆ Discounted Cash Flow
  - Applies to hedge fund or PE fund interests
  - Modeling based on economic structure of fund
  - Flexible in modifying assumptions over time
  - Only a “best estimate” projection
  
- ◆ DCF with Scenario or Monte Carlo Analysis
  - Scenario method incorporates wider range of outcomes
    - ▶ Subjective as to probability assignment and other factors
  - Monte Carlo simulations - various software packages
    - ▶ More difficult to explain/defend
    - ▶ Subjective in less obvious ways
  
- ◆ Note: Allows for calculation of IRRs for different investor groups as reasonableness check

# Valuation Methods (cont'd)

- ◆ Option Method
  - Primarily for PE funds where defined investment horizons exist
  - Generally difficult to apply for hedge funds
  
- ◆ Capitalization of Cash Flow Method
  - Can be used for hedge funds with history to work with
  - Make adjustments to normalize income
  - Projected growth can be tricky without discreet assumptions
  
- ◆ Guideline Company Method
  - For valuing entire hedge and diversified alternative asset firms
  - Comparables in US and Europe, some only recently public
  - Not directly useful for carried interests or profits interests alone

Turn to the DCF method

# DCF Analysis – The Devil is in the Details

- ◆ Review documents - then review your understanding of economics with fund management!
- ◆ Develop model - then review in detail with fund management!
- ◆ Potential Issues:
  - Different parties may interpret documents in different ways – need to be sure all parties are on the same page.
  - Quote from Management: “I know what the documents say, but we don’t really do it that way.....”

# DCF Analysis – Key Compensation Issues

## ◆ Reasonable Replacement Compensation

- Non Owner/Employees can be highly compensated
- Usually some combination of salary/bonus and percentage of incentive fees known often as points
- Points can be allocated by management, some type of phantom stock by agreement, totally discretionary and other combinations.
- Need to look at structure of the firm and employee/owners responsibilities and duties

# DCF Analysis – Key Compensation Issues

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## ◆ Sources of Information:

- Highest paid non owner employee
- IPO filings with pro forma compensation expense data
- Survey Data
- Proxies

# DCF Analysis – Key Compensation Issues

## ◆ Survey data:

- Grahall Partners, LLC publishers of Holt Compensation Data
- Options Group
- McLagan

Note: Last two sources are proprietary and difficult to obtain

# Private Equity DCF Considerations

- ◆ “Closed form” analysis due to the defined fund term
  - Total Amount Contributed
  - + Net Investment Returns
  - - Net Management Fees
    - > Can get tricky with transaction income
  - - Net Fund Expenses
  - = Total Amount Distributed
- ◆ Typically limited term – 10-years plus extensions
- ◆ In addition to modeling cash flows at the fund level, cash flows to all investor classes can be modeled to:
  - Derive cash flows for valuation of carried interest; and
  - Provide other information to check the reasonableness of underlying model assumptions.



# Pvt. Equity DCF – Key Inputs

- ◆ Amount of total committed capital
- ◆ % of committed capital expected to be called
- ◆ % of called capital expected to be invested
- ◆ Management fee %, structure & timing:
  - Are there different management fee percentages for different investor groups?
  - Can a weighted average fee % be calculated?
  - Are fees payable quarterly or annually, in advance or in arrears?
- ◆ Estimated net expenses paid by the fund, and timing

# Pvt. Equity DCF – Key Inputs (cont.)

- ◆ Estimated timing and \$ amounts of capital calls
  - For initial investments
  - For follow-on investments in existing portfolio companies
- ◆ Estimated average gross exit multiple on portfolio investments
  - Likely differs for initial and follow-on investments
  - Weighted average multiple should be supportable
- ◆ Once fund cash flows are modeled, need to allocate cash flows to different investor classes
  - LPs
  - Special LPs (if applicable)
  - GP capital account interest
  - GP carried interest

# Pvt. Equity DCF – Reasonableness of Inputs

- ◆ Historical track record from prior funds can be used to assess reasonableness of expense assumptions and gross exit multiples
- ◆ Implied IRR for Portfolio Investments:
  - Given exit multiples and time to harvest, is implied IRR reasonable relative to available market data?
- ◆ Implied IRR for LPs – Are they reasonable?
  - Prior fund performance
  - Available private equity data (general and strategy specific, if available)
  - Standard equity market benchmarks
  - 8% hurdle rate in model
  - If not, revisit assumptions!

# Pvt. Equity DCF – Discount Rates

- ◆ No specifically comparable benchmarks exist for carried interests
- ◆ Generally must make a subjective determination relative to available data, including:
  - Required returns for LP interests in private equity funds;
  - Average required returns associated with underlying portfolio investments based on
    - ▶ Available survey data
    - ▶ VC/private equity rates appropriate to stage of development associated with underlying portfolio companies

# Hedge Fund DCF Considerations

- ◆ What's being valued:
  - Profits interest, management company, holding co. interest
- ◆ Term of fund is open - consider terminal value
  - Management fee income
  - Profits interest income
- ◆ “High water mark” level and associated risk
- ◆ LPs/investors can withdraw at least annually after initial lock-up period, given required prior written notice
- ◆ Management fee structure may differ for investors
  - Investor agreeing to a longer lock-up period may benefit from lower applicable management fees
  - Sponsoring investors – entirely different structures

# Hedge Fund DCF – Key Inputs

- ◆ AUM at the Valuation Date
- ◆ Annual growth in AUM due to new money/investors
- ◆ Annual redemptions as a % of AUM
- ◆ Annual distribution of income if any
- ◆ Annual gross returns on average AUM
- ◆ Existence of high water mark

# Hedge Fund DCF – Key Inputs (cont.)

- ◆ Management's fee percentages, structure & timing
- ◆ Hurdle rate %, if applicable:
  - Does manager get a % of all profits, or only profits above a certain minimum annual return?
- ◆ Estimated annual fund expenses
- ◆ Other...

# Hedge Fund DCF – Reasonableness of Inputs

- ◆ Estimated annual returns relative to history or strategy-specific hedge fund indices
- ◆ Estimated returns relative to equity market benchmarks
- ◆ Estimated new money, withdrawal and expense assumptions relative to history (when available)



# Hedge Fund DCF – Discount Rates

- ◆ Profits interests - comparable benchmarks don't exist for these interests
- ◆ Management company interests
  - Alternative asset investment companies now traded publicly
  - Comparability may be suspect
  - Rates of return may be derived
- ◆ Generally must make a subjective determination relative to available data, including:
  - Hedge Fund Indices
    - ▶ Providers include HFRI, CSFB-Tremont
    - ▶ Returns are for LP interests
    - ▶ Strategy-specific information is available
    - ▶ Debate continues concerning biases that are embedded in the indices, which include: (1) survivorship bias; (2) reporting bias; (3) “back-fill” bias
  - Historical returns data for the fund, if available
    - ▶ Provides framework for LP investor expectations, despite standard warnings that “past performance is not indicative of future results”

# DCF Scenario & Monte Carlo Methods

- ◆ Useful, particularly when no history or prior funds exist or when management has not run money before
- ◆ Basic scenario analysis - three to five scenarios
- ◆ Monte Carlo analysis is arguably more robust, but
  - “Black box” to most
  - Hard to defend/explain
  - Easily lead to over-valuation of asset
- ◆ Monte Carlo work typically more expensive/time consuming
- ◆ **CRITICAL** to understand the inputs and relationships that are driving your Monte Carlo model

# DCF Scenario/Monte Carlo Method – Inputs

## ◆ For Pvt. Equity Funds:

1. Estimated exit multiples
2. Investment holding period
3. % of total capital called
4. Level of partnership expenses
5. Other inputs to DCF model

## ◆ For Hedge Funds:

1. New money assumptions
2. Gross return assumptions
3. Fund Expenses
4. Annual redemptions
5. Terminal value
6. Other inputs to DCF model

# Scenario/Monte Carlo Method – Considerations

- ◆ In both cases, it is important to be sure that correlations between various inputs make sense.
  - For a start-up hedge fund manager, higher estimated gross returns are generally consistent with relatively higher levels of new money and may also lead to lower year-end redemptions.
  - Therefore, relative to your base case scenario, a scenario with higher estimated gross returns ***probably shouldn't also include lower amounts of net new money.***

- ◆ Turn to Option Models

# Option Method - Considerations

- ◆ Evolving Approach
- ◆ Can be useful as reasonableness test on carried interest
- ◆ Inputs – Volatility in particular, hard to benchmark
- ◆ Model is VERY sensitive to the volatility assumption
- ◆ Does option model accurately capture risk associated with carried interest cash flows?
- ◆ Difficult to correlate to DCF
  - Taxes
  - Expenses against GP
  - Etc.
- ◆ Not applicable in hedge fund situation (at this point)

# Market Data Methods – Reasonableness?

- ◆ Market data is available on very large, typically diversified managers, most of which has drawbacks
- ◆ Market comparables and transaction data can be useful as primary methods or more likely, reasonableness tests, depending on subject company being valued
- ◆ Note: Traditional asset managers have a different fee structure (no performance fees) and are generally subject to a different set of rules re: underlying investments...so not appropriate
- ◆ Fortress (FIG), Blackstone (BX), Och Ziff Capital Management (OZM), Apollo Management (APO) and others provide some data points, but value is questionable given their size and diversity relative to the typical fund being valued

# Publicly Traded PE/Hedge Fund Managers

## ◆ Fortress Investment Group

- IPO in February 2007
- Private Equity and Credit Funds
- \$43.1 Billion in AUM

## ◆ Blackstone Group LP

- IPO in June 2007
- Mostly known as LBO fund managers
- \$124 Billion in AUM

## ◆ Och Ziff Capital Mgmt. Group

- IPO in November 2007
- Hedge Fund: Merger Arbitrage, Convertible Arbitrage, Restructuring
- \$27.8 Billion in AUM

## ◆ Apollo Global Mgmt. LLC

- Private Equity: LBO and Distressed Securities
- Class A Shares
- \$80 Billion in AUM

# Publicly Traded PE/Hedge Fund Managers

- ◆ KKR & Co. LP
  - IPO in March 2010
  - Global Private Equity specializing in LBO
  - Traded on Euronet in Amsterdam Exchange in October 2009
  - \$61 Billion in AUM
  
- ◆ Others exist internationally but primarily hedge funds:
  - Man Group – EMG.L (\$69b)
  - RAB Capital – RAB (\$1.9b)



# Market Approaches – Comps and Transactions

- ◆ Comp Company/Transaction Valuation Metrics
  - Multiples of EBITDA
    - ▶ Most direct profit measure
    - ▶ Compensation for subject company can distort
  - Price to Revenue
    - ▶ Affords comparability for differing fee structures
  - Percentage of AUM
    - ▶ Least reliable except where regressed to profitability measures
  - Note: Many transactions may have earn outs which can make up a sizable portion of deal...distorting publicly reported data

# Market Approaches – Comps and Transactions

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## ◆ Sources of Information

- SNL Financial-Financial Services
- Capital IQ
- Berkshire Capital Securities

# Reasonableness of Conclusions

- ◆ Comparable companies (if even so) only apply to much more significant sized entities with diversification across asset types
  - Not usable with carried or profits interest only valuations
- ◆ The greater percentage of subject company's cash flows are derived by management fees on vary large P/E funds, the more relevant available public company data becomes
- ◆ Ultimately, your value must make economic sense in a “willing seller, willing buyer” marketplace

# Questions & Contact Information

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# Scott A. Nammacher, ASA, CFA

Scott has over 20 years of experience in financial consulting and business valuations. He spent six years doing acquisitions, divestitures and special financings for PepsiCo and Marigold Enterprises, a boutique consulting & leveraged buyout firm. His background includes experience with Arthur Andersen & Co., where he managed equity, debt, warrant/option, NOL and intangible asset valuations, along with general financial consulting engagements.

He is an Accredited Senior Appraiser (ASA) with the American Society of Appraisers; and a Chartered Financial Analyst (CFA). He has been and remains active in the American Society of Appraisers and has chaired/co-chaired an annual valuation conference in NYC for over 19 years.

Scott has valued a wide variety of publicly and privately-held companies for acquisitions, share repurchases, financial reporting, estate and gift tax reporting, recapitalizations, and general corporate planning and litigation purposes. He has extensive experience in valuing P/E and hedge fund company interests.

He coauthored a book, *Investing in Junk Bonds; Inside the High Yield Debt Market*, John Wiley & Sons, New York, New York, 1987 (including a Japanese translation published in 1988) and several articles on “junk” bonds.

He has testified in US Tax Court, Bankruptcy Court, Delaware Chancery Court, State Supreme Courts, and arbitration venues in the Northeast, South and Western states.

Scott holds a bachelors degree in Business from the University of Minnesota and an MBA in finance from New York University’s Stern School.

# Jay E. Fishman, FASA

Jay is a Managing Director of Financial Research Associates and has been actively engaged in the appraisal profession since 1974. He specializes in the valuations of business enterprises and their intangible assets. Mr. Fishman has co-authored several books, including the highly acclaimed *Guide to Business Valuations* (with Shannon Pratt), and *Standards of Value* (with Shannon Pratt and William Morrison). He has also written numerous articles on business valuations as well as qualifying as an expert witness and providing testimony in twelve states. He has taught courses on business valuation to the Internal Revenue Service, the National Judicial College, the Hong Kong Society of Accountants and on behalf of the World Bank in St. Petersburg, Russia. He recently taught courses in Moscow, Russia for Kwinto Management.

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