Presentation to BITS-PILANI Students on Hedge Funds Investing
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# Preamble

## The Hedge Fund Industry at a Glance

Global hedge fund assets represent $1.5 trillion including:
- U.S. hedge funds: $1 trillion
- European hedge funds: $325 billion
- Asia Pacific hedge funds: $115 billion

## What are Hedge Funds?

Hedge funds are private investment funds charging a performance fee that are only open to select investors ("accredited investors").

Unlike private equity funds or venture capital funds, which invest in illiquid investments, hedge funds typically **invest in the public markets**. Sometimes hedge funds have a small portion of their assets invested in private securities, but this generally remains less than 15% of the assets they have under management.

Unlike mutual funds, hedge funds are not subject to any regulation by the SEC or other federal regulating commissions. They also have a much greater flexibility than mutual funds do in terms of **leveraging** and **shorting**. The shorting feature allows hedge fund to deliver superior returns in varied market conditions.

## Hedge Fund Strategies

There is a wide range of hedge-fund strategies including:
- Macro
- Event-driven
- Value
- Growth
- Emerging Markets

## Are Hedge Funds riskier or less risky investments?

- Hedge fund (Un)Famous Blow-Outs
    - Long Term Capital Management (1988)
    - Amaranth (2006)

# Three Key Notions in Hedge Fund Investing: "Leverage", "Shorting" and "Risk/Return Decomposition" (1/2)

## Leverage

| | No Leverage | 175% Gross Leverage | |
|---|---|---|---|
| **Divya's own capital ($)** | **100** | **100** | |
| Capital the Bank lends to Divya | | **75** | |
| **Divya's investment capacity ($)** | **100** | **175** | |
| | | | |
| Return on investment | 15% | 15% | |
| Return on investment ($) | 15 | 26 | |
| Cost of Leverage (5%) | | -4 | |
| Return on capital ($) | 15 | 22.5 | |
| **Return on capital** | **15%** | **23%** | **1.5x** |
| | | | |
| Return on investment | -15% | -15% | |
| Return on investment ($) | -15 | -26 | |
| Cost of Leverage (5%) | | -4 | |
| Return on capital ($) | -15 | -30 | |
| **Return on capital** | **-15%** | **-30%** | **2.0x** |

# Three Key Notions in Hedge Fund Investing:
# “Leverage”, “Shorting” and “Risk/Return Decomposition” (2/2)

## Shorting / Risk Decomposition

- Shorting means selling securities short in anticipation of being able to rebuy them at a future date at a lower price
- Shorting allows to “isolate” the source of investment return by hedging factors over which you have no control/view
- Shorting is not permitted or very costly in many emerging markets

## Risk/Return Decomposition

If you are long Federated (US department stores company) and make a profit, it can be for one or more of the following reasons
(1) The US markets are up
(2) The US retail sector as a whole is up
    e.g. consumer spending in the US is stronger than anticipated by the market
(3) There are company specific reasons why Federated is up
    e.g. market expectations of Federated cost cutting have increased

The key to sucessful investing is to hedge out / mitigate the risks that are not part of your bet and have long positions that outperform associated hedges over time. In the case of Federated, if you have a view that the company is not fairly valued compared to where retail valuations are in the US, you would express this by buying Federated (going Long Federated stock) and by shorting the US retail index (going short US retail index).

| | Position | Performance | |
|---|---|---|---|
| | | % | $ |
| **Up Market Environment** | | | |
| Long Federated stock | 100 | 15% | 15 |
| Short US retail index | -100 | 5% | -5 |
| | | **10%** | 10 |
| **Down Market Environement** | | | |
| Long Federated stock | 100 | -5% | -5 |
| Short US retail index | -100 | -15% | 15 |
| | | **10%** | 10 |

* Excludes Shorting Costs

# Hedge Fund Investing – Investment Process

## The Premise

A company's value is a function of the Market's expectation for its growth rate and its economic returns

Growth can be good (when the company returns are greater than the cost of achieving growth), and bad (when returns are below the cost of achieving growth)

Good hedge fund managers can successfully anticipate expectation revisions. These happen in two flavors: an increase in the financial forecasts for the company or a multiple re-rating/increase

## They Key Questions to Ask Yourself

What **expectations** are discounted in the public market price of a company?

What are your own expectations? (You may have different views than the market on sales growth, sustainable operating margins etc)

How does the difference in assumptions between the market's and yours' should impact valuation and what do you think should be the fair value of the company?

What will it take for the current price to converge towards (your) fair value? In other terms, what are the **catalysts** for value materialization?

## Critical Steps for You to be a Successful Investor

**Due Diligence** - You need to thoroughly verify your assumptions such that your assumptions can become views with some informational edge embedded. Successful investing is not about making theoretic contrarian assumptions but about empirically verifying contrarian assumptions and deriving from there your own valuation expectations.

**Monitor over time the Range of "Outcomes"** - There is no 'right' fair value for any stock. What you can do though is compute what should be the fair value of a particular stock under a particular set of assumptions. In general it is helpful to think in terms of a base case, an upside case and a downside case. You can then assign probabilities to each scenario based on your due diligence results and your judgment. Over time, your (and the market's ) expectations will evolve. You will need to monitor this including any drift from your initial investment thesis and react appropriately.

# Hedge Fund Investing – Risk Management

| | |
|---|---|
| **Risk Mitigation versus Risk Taking** | Successful investing is about risk mitigation and hedging, not about risk taking |
| **Hedgeability** | Sometimes, one cannot hedge risks in an appropriate manner due to regulations around short-selling, lack of availability, and/or costs |
| **Hedging Investment versus Hedging Cost** | A lot of investors think about hedging as a cost when they should be thinking about it as an investment that allows them to deliver returns. If you think of it as a cost, you will tend to 'spend' more sparingly which is not the right way for you to go about delivering high quality superior returns. Slightly lower return with a full (appropriate) hedge on are better than slightly higher non-hedged returns because they are sustainable in varied market conditions |
| **Isolating the "Alpha"** | This consists in hedging out 'systematic' invested risks (e.g. global and local markets, sector, currency, commodities) in the most appropriate manner by a variety of single stock, sector, and market index, commodity and currency hedges |
| **Dynamic Re-hedging** | Risks need to be managed on regular basis and on a mark-to-market basis (not on a cost basis) |
| **Disaster Avoidance / Black swans** | Individuals tend to underestimate the impact that these can have on their portfolio returns. Deep out of the money options are a worthwhile portfolio hedge overlay |
| **Diversification** | You should always be mindful of net exposures you have in specific sectors. If you are not hedged, at least you should try to be diversified from a sector perspective. |

# Hedge Fund Investing – Portfolio Management

**Capital Allocation/Liquidity**

Positions in your portfolio should be large enough to be meaningful but small enough such that the impact remains limited if your investment thesis turned out to be flawed. 'Core' positions typically represent 6-8% of a portfolio and it is not wise to have positions that exceed 10% of a portfolio.

There is no rule of thumb but it is good to try to never represent more than 2/3 days average trailing volume in your longs, and have shorts which you can cover in less than 4 days working of trailing daily volume.

Sizing smaller as a % of your portfolio when a position's risk cannot be hedged well is a way to manage risk.

**Current Risk-Adjusted Returns Expectations**

Always know current risk-reward of the ideas you have in portfolio: You need to have a system of ongoing reset of your assumptions to reflect in the macro-environment (e.g. change in interest rates, inflation), in the sector/industry dynamics (e.g. industry pricing under pressure leading to margins compression or the opposite) or at the company level (e.g. announcement of new cost-cutting program, increased share buy-back)

**Opportunity Costs**

You should reevaluate and adjust sizing of each strategy over time to reflect the evolution of risk adjusted return attractiveness compared with other investment strategies in your portfolio or not yet in your portfolio. Always replace good ideas with better ideas

Appreciation for timing is king and a difficult exercise. Often time investors will enter a trade too early when they could have waited and have made a better use of their capital in the meantime. it is always good to have more capital where you have good reasons to believe that your risk return expectations will materialize sooner.

# Investors' Psychology

## Common Pitfalls to be Aware of:

Commitment and Consistency

Loss Aversion

Social Validation / Herd Behaviors (Crowded Trades)

Pattern Recognition (when there are no patterns)

Extrapolation

## Common Traits of Good Investors:

Thoughtfulness / Devil's Advocate Attitude

Relentlessness in Re-evaluating Your Own Thoughts and Intellectual Honesty

Contrarian Attitude with a High Degree of Empathy for Mr. Market

Seeing the Whole Picture

No Emotional Attachment to Stocks

**if you pay attention over time to what influences your own investing behavior, you will become a better investor**

# Profile

From 2004 to 2007, Ms Pichot de Cayeux served as an Investment Principal at TPG Axon, largest global hedge fund launch in 2005. She earned privilege of being TPG Axon first hire and was a key contributor in starting-up and growing the business from $3.5B to over $6.5B of assets under management, and a team of 25 investment professionals

Prior to this, Ms Pichot worked with Taconic in New York, Goldman Sachs Investment Banking in London and Paribas Equity Capital Markets in Hong Kong.

Ms Pichot de Cayeux received 1st prize of the Global Information Infrastructure Junior Summit by a committee established following the G7 summit on information technology; incubated first Internet clubs in French schools; was official representative for GII Tokyo Summit (95), G7 South Africa (96), and European Youth Parliament (98).

Ms Pichot de Cayeux holds an MBA from ESSEC (France) and an MBA from Harvard Business School where she was on a team of 4 which won the Dubilier Prize (first prize of Harvard Business School business plan competition) and was also the first woman elected the President of the School Hedge Fund.