



**HILLSDALE**  
INVESTMENT MANAGEMENT INC.

***“Hedge Fund and Algorithmic Trading -  
Impact on Market Structure”***

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*Confidential*

## **Different types of Hedge Funds**

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### **Short term trading and quantitative strategies**

- **Arbitrage, corporate actions**
- **Portfolio rebalancing**
- **Portfolio trading**
- **Algorithmic trading**



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2

## A little history...

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### Sell side liability desks – original 'hedge funds'

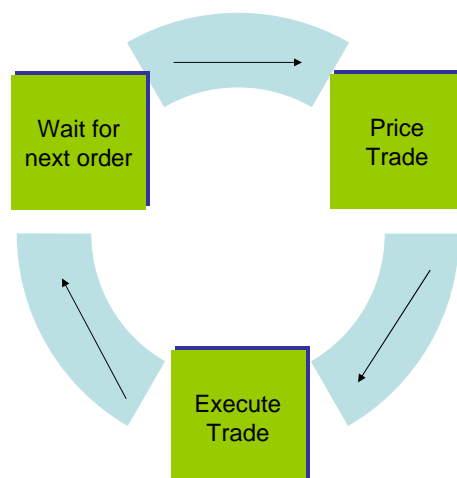
- Analyze risk of position
- Price the risk premium (establish bid or offer price)
- Take on the position
- Get off the position

Advantage was their ability to trade quickly



## Sell Side Trading Schematic

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## ...history

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### Traditional Buy side trading desk

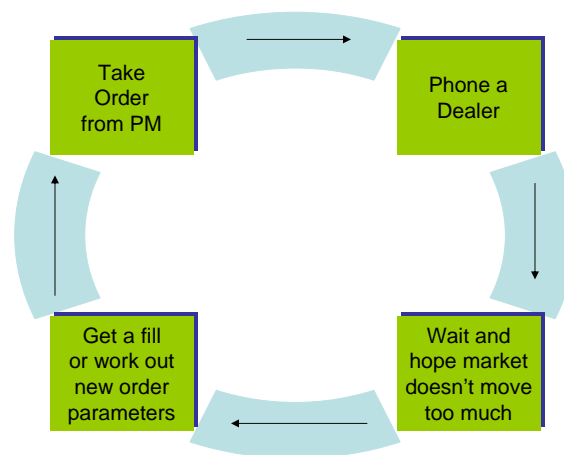
#### PM and Trader interaction often suboptimal

- PM lacked understanding of trading and market structure
- Trader lacked information on PM's objectives
- Lack of technological expertise and product



## Buy Side Trading Schematic

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## Direct Market Access (DMA)

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- Gave Buy side ability to trade as quickly as anyone on Sell side
- Provided means to integrate analytics with execution (pre and post trade)
- Presented ability to trade portfolio-wise rather than name-wise
- Offered better risk control options



## ... DMA

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- Required some degree of technological expertise and infrastructure
- Could reduce overhead in portfolio management and trading functions
- Offered medium for improved PM/Trader communications



## ... DMA

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- Many hedge funds had advantage in starting from scratch
- No legacy systems to impede execution of vision
- Limited capital meant lean shops
- Leveraged technology
- Were more familiar with technology
- Grew up with computers



## Buy side adaptation

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- Less reliance on Dealer capital
- Basket or Portfolio bids less risky
- Single names traded 'electronically'
- Algorithmic piece-wise trading vs large blocks
- New strategies available



## Trading Focus and Methods changed

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- **Event driven or reactionary**
  - **Wait for desired situation to appear and react**
    - **bid/offer spread on pair > 'X'**
    - **at least 'Y' shares offered within \$0.05 of your price**
- **Proactive**
  - **Re-evaluate strategies as events occur**
    - **'X' not sufficient – increase it**
    - **buy 'Y' shares at up to \$0.15 of old target**
  - **Build new tactic and wait for events**



## New Opportunities

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### Intermarket 'connectivity'

- **interlisted arbitrage**
- **additional liquidity**
- **new risk management opportunities**
- **expanded capacity**



## **Sell side adaptation to Buy side 'going techno'**

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New 'profit centres' at dealers:

- **Electronic Trading Department**
- **Hedge Fund Strategies Department**
- **Quantitative Systems Department**
- **Portfolio Trading Department**



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13

## **Exchanges**

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- **TSX proponent of revolution and evolution**
  - **Technology**
  - **Order types**
  - **Execution methods**



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14

## Orders to Fills Ratios

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Sept. 03	Sept. 04
40.13	71.60
18.98	15.80
18.90	11.50
11.72	9.60
9.93	9.40
8.42	7.80
7.91	6.90
6.96	5.90
4.27	3.90
3.93	3.30
2.90	1.70
2.82	1.60
1.80	1.50
1.59	1.30
1.38	1.20
1.31	1.20
1.31	1.00
1.27	0.70
0.91	0.70
0.86	0.50



## Can TSX be better?

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- **RT privileges – what/who benefits?**
- **Zero ticks and penny pricing**
- **Anonymous trading**





## RT's

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- Do they really provide market stability?
- Do they really provide additional liquidity?



## Zero Ticks & Penny Pricing

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- Hedge funds rely on Short Selling
- Market structure often not conducive, e.g.
  - Last trade: \$5.00
  - Current bid \$5.00 for 5,000 shares
  - Suddenly bid \$5.01 for 100 shares
    - May I please trade 5,100 shares at \$5.00?
    - NO!
    - Pretty please!!!



# Anonymous Trading

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- Who's hiding what?
- Are you ashamed of what you're buying or selling?
- If you have some flow, it's already obvious
  - I'll participate anyway
  - I may be on the other side, I'll call you and we'll both be happier



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19



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