



Amplify your future
Practical simulations in finance

GLOBAL MARKET TRADING SINCE 2009



BRIDGING THE GAP BETWEEN THEORY & PRACTICE



- Established trading arm in City of London
- Simulation Technology development for financial training
- Practical training for the world's top banks and business schools
- Recruitment channel for top graduate jobs in finance



INVESTMENT BANK
Sales & Trading
FlowTrader Simulation

Sell-side Vs Buy-side

Sell Side

- Investment Banks
- Research Houses
- Agency Brokers
- Interdealer Brokers (IDBs)

Buy Side

- Hedge Funds
- Pension Funds (Long Only)
- Private Equity
- Insurance Companies (Long Only)
- Asset Managers (Long Only)

Roles on the Sell-side



Research Analyst

Analyse companies, economies and asset classes to distribute their conclusions to the market.

Sales

Sell the company's views to generate trading activity.

Sales Trader

Similar to a Sales person but more of an execution based role. The Sales Trader will have a day to day relationship with institutional centralised dealing desks.

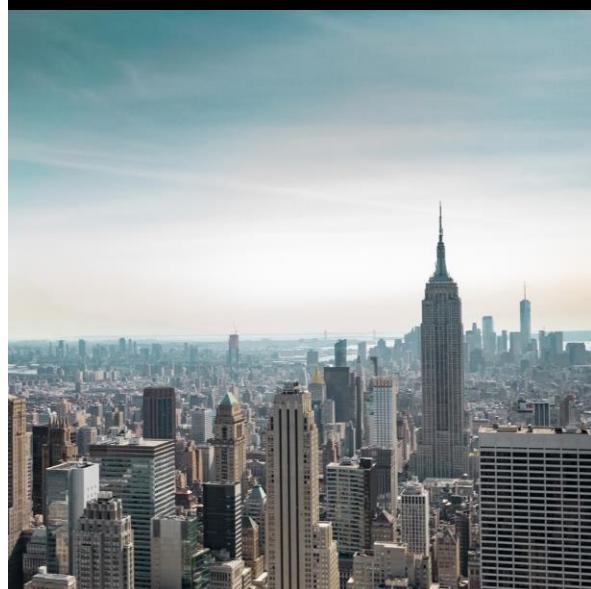
Structurer

Finding tailored client solutions for a more complicated position, often combining multiple products and asset classes.

Trader/Market Maker

Quote risk prices to Sales Traders for their clients and manages the risk by unwinding positions. This role also incorporates quantitative finance, using mathematical models to help make financial decisions.

Morgan Stanley Case-Study

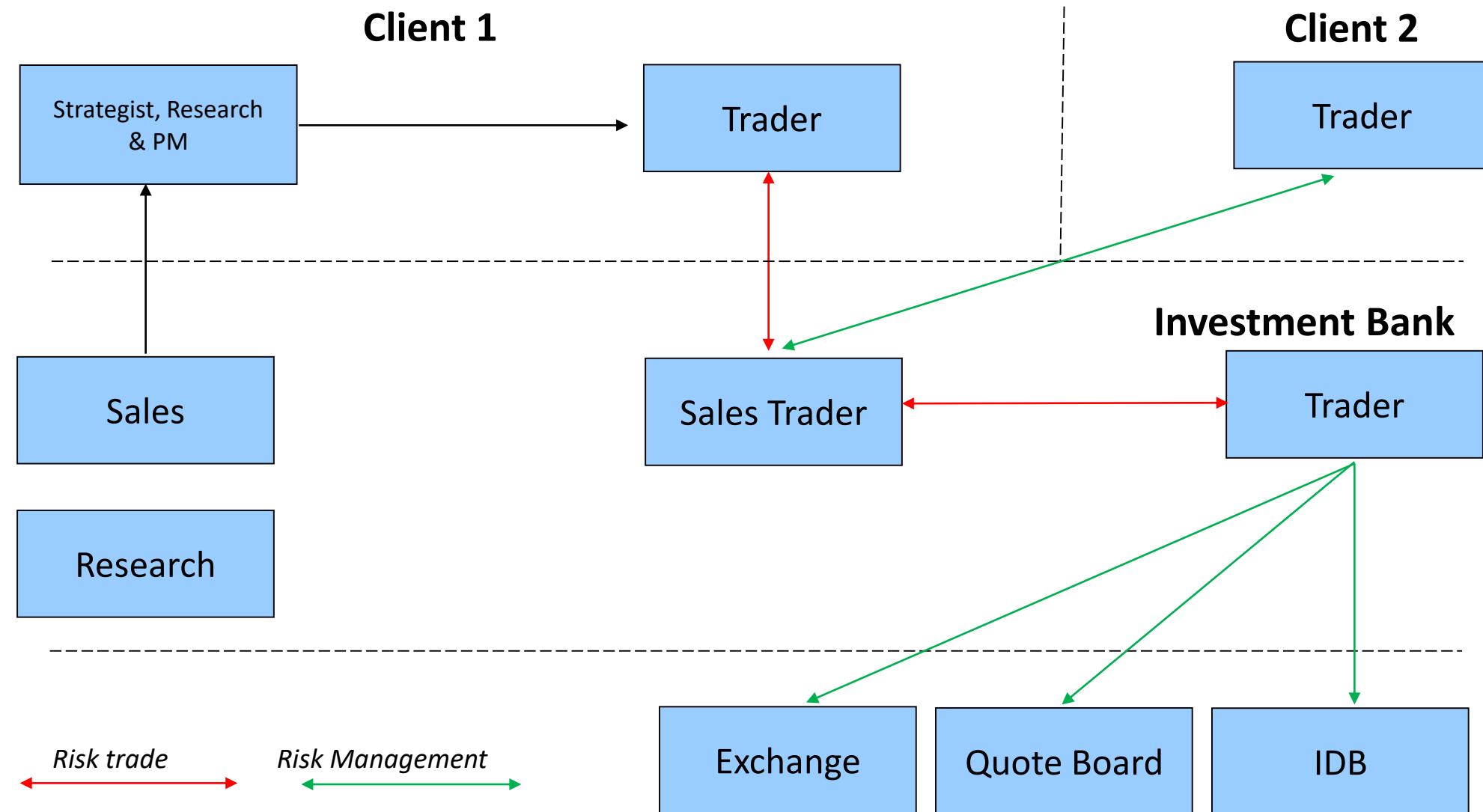


Today's experience will enable you to bridge the gap between theory and practice. The aim of which is to support you in making an informed choice about the best career path and role for your future. Our partner **Morgan Stanley** takes this one step further.

Their Sales & Trading Summer Internship and Industrial Placement programmes are designed around allowing their interns to have:

- **Flexibility** to experience a variety of roles: Sales, Trading, Structuring and Research
- **Mobility** to rotate across divisions: Institutional Equities, Fixed Income and Fixed Income Research
- **Access to desks** prior to joining to enable them to make informed decisions
- **Choice** to tailor their internship experience around their preferences
- **Support** from a Buddy, Mentor and HR to achieve their development and career goals

Morgan Stanley incorporate Amplify Trading into their Intern and Full-Time Analyst training programmes.



Trading Objectives



Sell-side / Flow Trading:

- Maximise commission
- Limit risk exposure
- Maintain a good relationship with the client

Buy-side / Prop trading:

- Maximise return on investment
- Best execution when dealing with the broker

MiFID II

Internal and External Controls

- ▷ Defined target markets for investment products
- ▷ Monitored distribution of investment products



Market Structure

- ▷ Pre- and post-trade transparency



Fee Transparency

- ▷ Clearer costs and charges for investment products
- ▷ Forthright fees for advice



Investor Protection

- ▷ Delivery of suitable advice
- ▷ Suitable product lineups
- ▷ Unbundled research costs
- ▷ Ban on adviser commissions



Source: Morningstar 2017

Order-driven Markets

1	9,661	1746.0 - 1747.0	62,482	3
14:45	9,661	1746.0	1747.0	40,000 14:45
14:45	25,000	1745.0	1747.0	1,600 14:45
14:45	54,300	1743.0	1747.0	20,882 14:45
14:43	5,621	1742.0	1748.0	4,336 14:44
14:44	2,000	1742.0	1748.0	8,300 14:44
14:45	5,000	1742.0	1750.0	15,000 12:27
14:44	30,000	1741.0	1750.0	40,000 13:23
14:42	25,000	1740.0	1750.0	137 13:54
14:27	15,000	1736.0	1750.0	4,000 14:44
14:43	1,000	1736.0	1752.0	15,000 09:34
14:31	12,500	1735.0	1755.0	20,000 09:29

Sizes For Prices

c	3500	101.5	-	102	2500	c
1,000	1,000	101.5		102	2,500	2,500
3,500	2,500	101.5		103	3,500	6,000
5,500	2,000	101		103	1,000	7,000
8,500	3,000	99		104	5,000	12,000
9,000	500	97		104	2,100	14,100
9,500	500	97		108	1,000	15,100
11,000	1,500	95		110	1,500	16,600

a. Client asks for a price to sell 50 shares

b. Client asks for a price to sell 50,000 shares

A price should always have a size attached, traders will always quote a price and a size. **Why?** Use the previous example to see why...

There is a trade off between a sensible **risk efficient price** and a **commercial price**.

Real 'FAT fingers'

Large trades with low liquidity

Japanese broker makes £380bln fat finger

HSBC shares spike 10% on fat finger

Dealer mistakenly ordered 2.5mln shares in the bank instead of \$2.5mln worth of shares, compounding the error with orders all trying to buy the shares.

Raw-sugar

Saw the biggest intra-day drop in two-years on 3rd August 2017, due to an apparent fat finger. Futures collapsed 4% within one minute before quickly recovering.

Fat-Finger Collapse Prices drop about 4% within one minute



Why Trade With An IB?



Direct Market Access (DMA)

- Most clients have DMA. This means they can post their orders into a centralised order book.
- If a client wants to buy or sell an order driven security, why the need to deal with a bank?

Risk Management

What methods can a market maker employ to unwind risk positions in order driven markets?

“Find the other side”

- Using a Sales Trader or Sales person to make calls to other clients to find the other side to the trade.
- This can be called *marketing the flow*

Trade out of position In the exchange

Hedging

- The Trader can reduce certain exposures by hedging the position with similar, perhaps more liquid securities.

Quote Markets

Unlike exchanges, quote driven market can be less transparent.

1. Trade directly with a Market Maker (Investment Bank) via phone or chat.
2. Trade electronically with a Market Maker (Investment Bank) against a quote they have posted.

		BUY	SELL		
75K	NMRA	37.00	42.00	MS	75K
75K	MS	36.00	42.00	BAML	75K
75K	ML	36.00	43.00	CS	75K
75K	GS	36.00	43.00	GS	75K
75K	BAML	36.00	44.00	ML	75K
75K	UBS	35.00	47.00	UBS	75K
75K	CS	34.00	48.00	NMRA	75K

Order driven vs quote driven overview

		Order-Driven	Quote-Driven
Instruments	Equities, Inv. Trusts, ETFs, some Commodities, Futures, some Options, etc.	FX, Small Cap Equities, Bonds, Credit Instruments, Structured Products, etc.	
Advantages	Transparency, ease of trade	Constant liquidity	
Prices	Individuals post limit orders	Dedicated market makers	
Anonymity	Anonymous orders	Always know who you have traded with	
Matching	Automatic execution	OTC trade with MM	

Pre-positioning

Sometimes it is beneficial for a trader to preposition their book in anticipation of client flows or on the back of research.

Can you think about why holding a position of risk a client may want can benefit the bank, the client, and the industry?



NEWS HEADLINES

An announcement is made intra day that a company will be bid for.

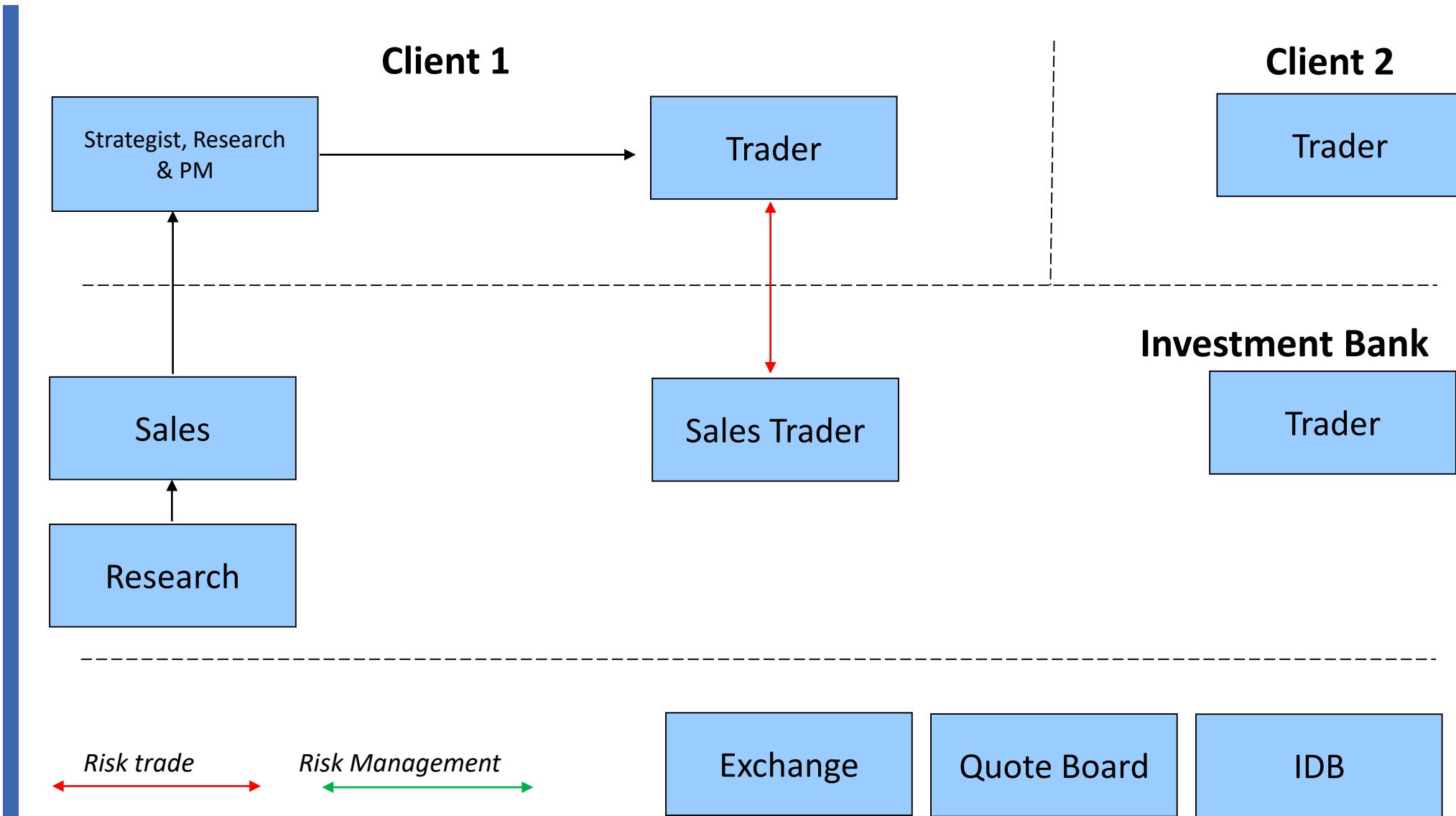
Typically, a trader would try to get long the stock after the event in anticipation of seeing Hedge Fund buyers, so that they are



FIRM RESEARCH

The Research Analyst at your bank publishes recommendation on Vodafone stock.

The Vodafone trader could build some inventory and is now positioned to offer stock to the expected



1. EQUITY 2. CMDTY 3. BONDS 4. FX

TICKER	REFPRICE	% CHG	TYPE
ESTX	\$ 2,837.2↑	0.17%	Equity O
SPX	\$ 1,336↓	4.78%	Equity O
NKY	\$ 9,930.1↑	-4.26%	Equity O

Search keywords

TICKER	DATE	HEADLINE
	23-Jan 08:54	7th Jul - ECB raises interest rates
	23-Jan 08:39	9th Jun - ECB signals rate hike
	23-Jan 08:30	16th May - Portugal reach bailout agreement
	23-Jan 08:22	2nd May - Bin Laden reported dead
	23-Jan 08:10	7th Apr - ECB raises interest rates
	23-Jan 07:58	11th Mar - A magnitude 9 earthquake reported in Japan
	23-Jan 07:54	4th Mar - ECB signals rate hike
	23-Jan 07:47	21st Feb - Libyan civil war breaks out
	23-Jan 07:42	10th Feb - European Debt Crisis threatens Portugal
	23-Jan 07:36	28th Jan - Egypt crisis escalates

POSITIONS TRADE BLOTER

SECURITY	NET POS	AVG. PRICE	POS. VALUE(\$)	UNREALISED P/L	REALISED P/L	NET P/L

Search name or team

IB1-1 - 123 4567 89 00
IBSTR

NAME	TEAM
Deal Room	
IB Room	
hf1test1	HF 1

Input your message

SEND MESSAGE

step 1 of 6

Note, you can use "Ctrl +" or "Ctrl -" to zoom in or out to make the interface fit perfectly on your monitor.

Close **Next step →**

Search name or team

NAME TEAM 

HF1-1 -123 4567 89 00
HFRD

- Deal Room
- IB Room
- hf1test1 HF 1
- StJohnsWood\$TJ HF

you some prices.
[1/22/2018, 22:08:53]
HF1-1: Yes - make me a price for 10k BTP ASAP
[1/22/2018, 22:09:19]
HF1-1: .
[08:59:30] You: Just checking in - ECB have signalled rate hike. Next meeting will be on 7th July. Let me know if we can help with any EUR exposure
[09:02:29] You: Analysts saying another hike likely to weigh on EU equities.

Input your message or @quc

SEND MESSAGE

Search name or team

NAME TEAM 

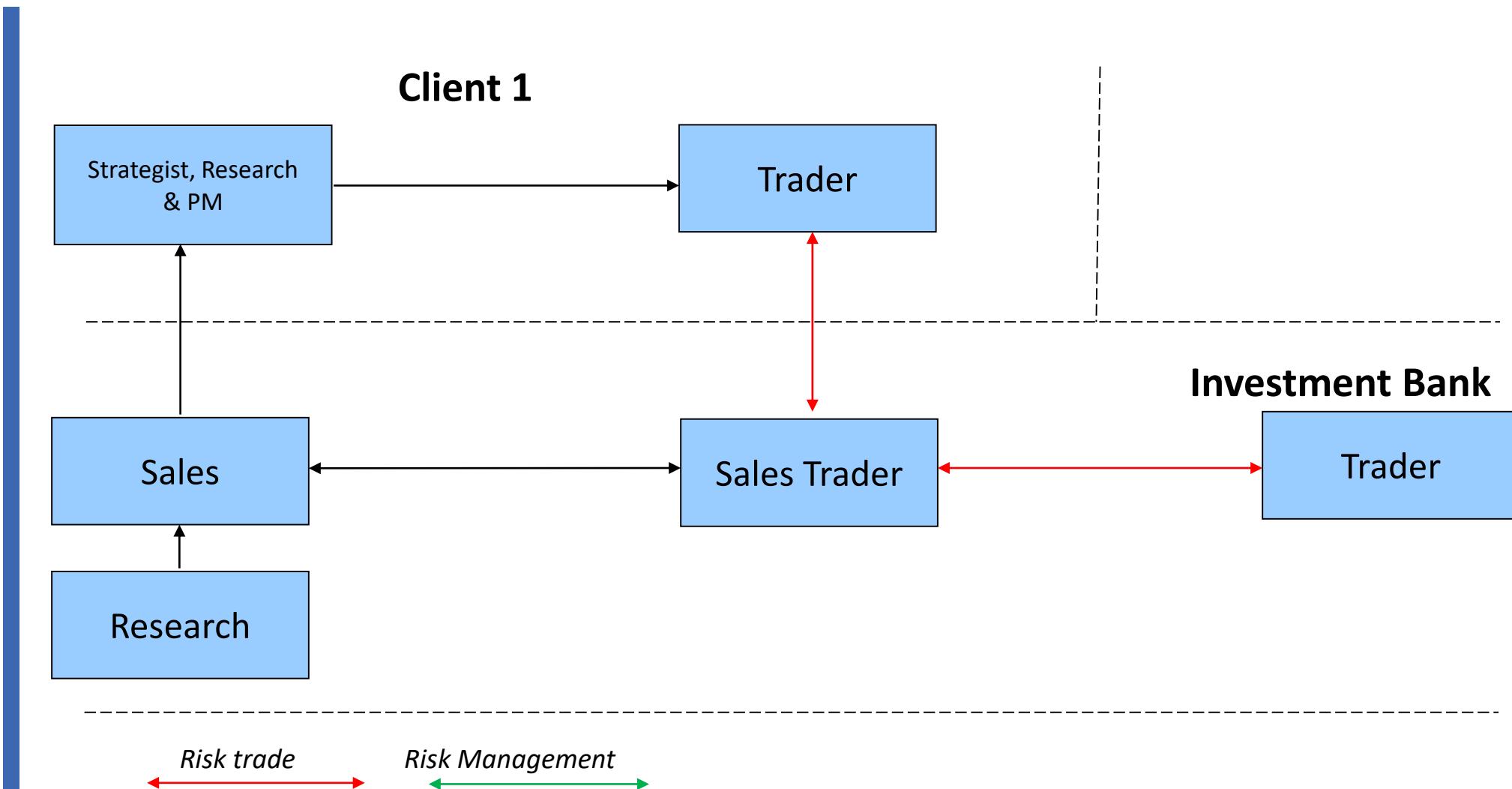
HF1-1 -123 4567 89 00
HFRD

- Deal Room
- IB Room
- hf1test1 HF 1
- StJohnsWood\$TJ HF

price for 10k BTP ASAP
[1/22/2018, 22:09:19]
HF1-1: .
[08:59:30] You: Just checking in - ECB have signalled rate hike. Next meeting will be on 7th July. Let me know if we can help with any EUR exposure
[09:02:29] You: Analysts saying another hike likely to weigh on EU equities.
[09:04:24] HF1-1: OK - make me a price for 500 ESTX

Input your message or @quc

SEND MESSAGE



1. EQUITY 2. CMDTY 3. BONDS 4. FX

TICKER	REFPRICE	% CHG	TYPE
ESTX	\$ 2,876.7 ↑	1.57 %	Equity O
SPX	\$ 1,344.2 ↑	5.42 %	Equity O
NKY	\$ 9,948.6 ↓	-4.08 %	Equity O

 Search keywords

TICKER	DATE	HEADLINE
	23-Jan 08:55	9th Jun - ECB signals rate hike
	23-Jan 08:46	16th May - Portugal reach bailout agreement
	23-Jan 08:39	2nd May - Bin Laden reported dead
	23-Jan 08:26	7th Apr - ECB raises interest rates
	23-Jan 08:15	11th Mar - A magnitude 9 earthquake reported in Japan
	23-Jan 08:10	4th Mar - ECB signals rate hike
	23-Jan 08:03	21st Feb - Libyan civil war breaks out
	23-Jan 07:58	10th Feb - European Debt Crisis threatens Portugal
	23-Jan 07:53	28th Jan - Egypt crisis escalates

POSITIONS TRADE BLOTTER

SECURITY	NET POS	AVG. PRICE	POS. VALUE(\$)	UNREALISED P/L	REALISED P/L	NET P/L
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Ref price \$2,876

Exchange Spread \$2,445 – \$3,308

TICKER ↴	BID ↴	OFFER ↴	YOUR BID	YOUR OFFER	BID VOL	OFFER VOL	REF PRICE
	OFFSET	OFFSET					
GOLD	-15.04	15.04	1,481.6	1,511.7	750	750	1,496.6
OIL	-1.0025	1.0025	99.525	101.53	10,000	10,000	100.53
USDJPY	-0.8119	0.8119	80.714	82.338	10,000	10,000	81.526
EURUSD	-0.0145	0.0145	1.4393	1.4683	750.00	750.00	1.4538

EXCHANGE | DB

ESTX	500	
	VALUE	IB COMMISSION
	\$1,437,835.00	\$7,189.18
BID	2,445.2	OFFER
	3,308.3	

ESTY



Trader gives price

\$2,676 - \$3,076 (\$200 from ref price)

1. EQUITY	2. CMDTY	3. BONDS	4. FX
TICKER ▼	REFPRICE ▼	% CHG ▼	TYPE ▼
ESTX	\$ 2,876.7 ↑	1.57 %	Equity 0
SPX	\$ 1,344.2 ↑	5.42 %	Equity 0

Ref price **\$2,876**

Search keywords

Short 500 contracts

POSITIONS	TRADE BLOTER
SECURITY ▼	NET ▼
POS	AVG. ▼
PRICE	POS. VALUE(\$)
	UNREALISED ▼
	REALISED ▼
ESTX	NET ▼
-500	P/L
2,175	UNREALISED P/L
	REALISED P/L
	NET P/L
	140,144

TICKER DATE HEADLINE

23-Jan 08:55 9th Jun - ECB signals rate hike
 23-Jan 08:46 16th May - Portugal reach bailout agreement
 23-Jan 08:39 2nd May - Bin Laden reported dead
 23-Jan 08:26 7th Apr - ECB raises interest rates
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 23-Jan 07:58 10th Feb - European Debt Crisis threatens Portugal
 23-Jan 07:53 28th Jan - Egypt crisis escalates

Exchange Spread
\$2,445 – \$3,308

MY QUOTES

TICKER ▼	BID ▼	OFFER ▼	YOUR ▼	YOUR ▼	BID ▼	OFFER ▼	REF ▼
OFFSET	OFFSET	BID	OFFER	VOL	VOL	PRICE	
GOLD	-15.04	15.04	1,481.6	1,511.7	750	750	1,496.6
OIL	-1.0025	1.0025	99.525	101.53	10,000	10,000	100.53
USDJPY	-0.8119	0.8119	80.714	82.338	10,000	10,000	81.526
EURUSD	-0.0145	0.0145	1.4393	1.4683	750.00	750.00	1.4538

EXCHANGE IDB

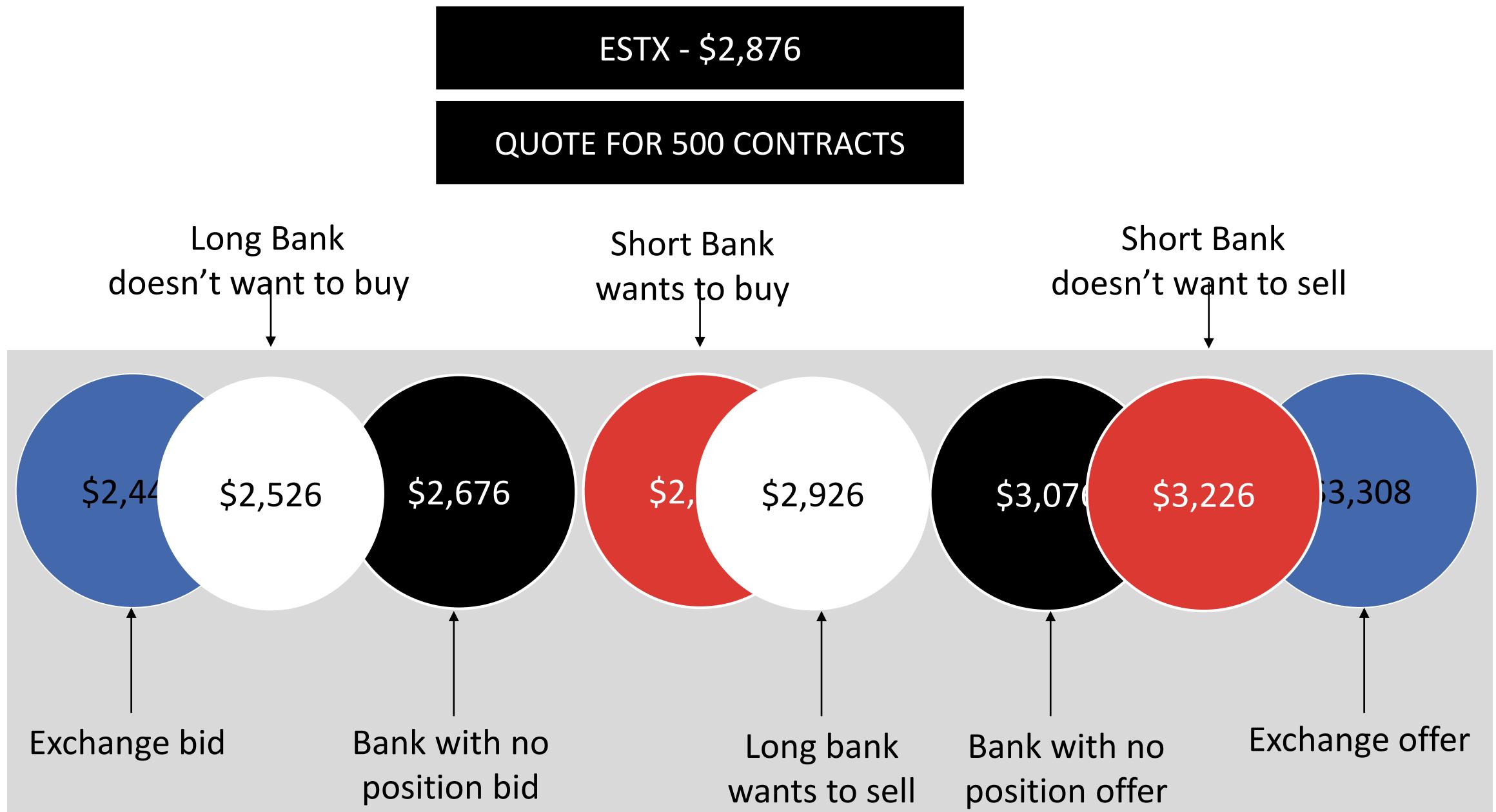
ESTX

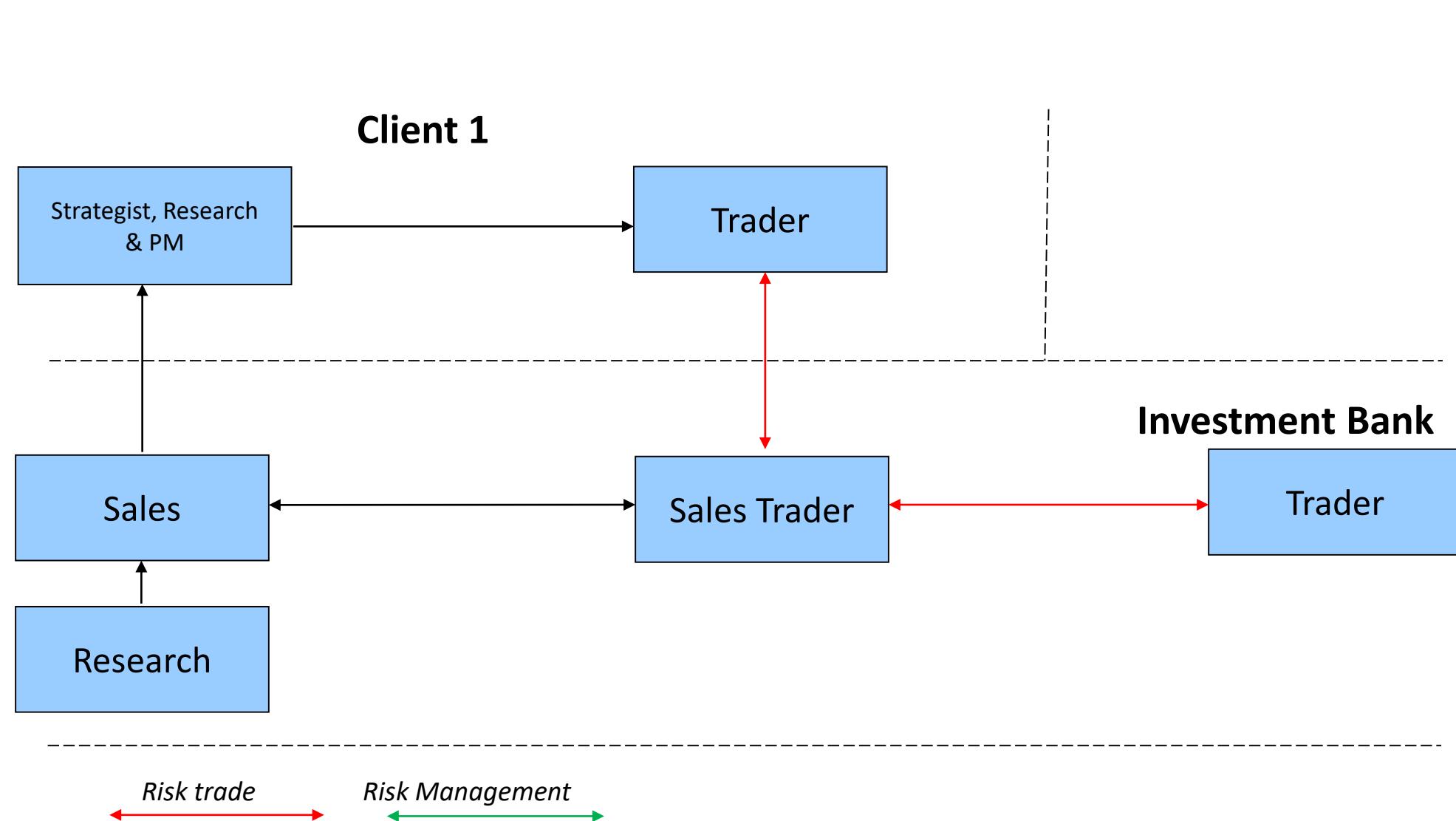
500

VALUE: \$1,437,835.00 IB COMMISSION: \$7,189.18

BID: 2,445.2 OFFER: 3,308.3

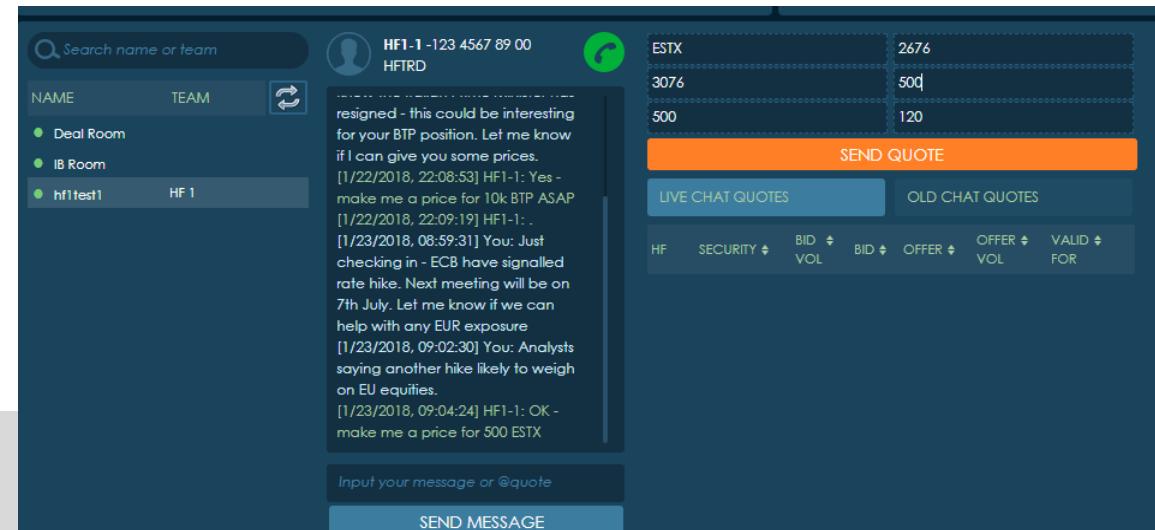






Sales Trader Sends Price

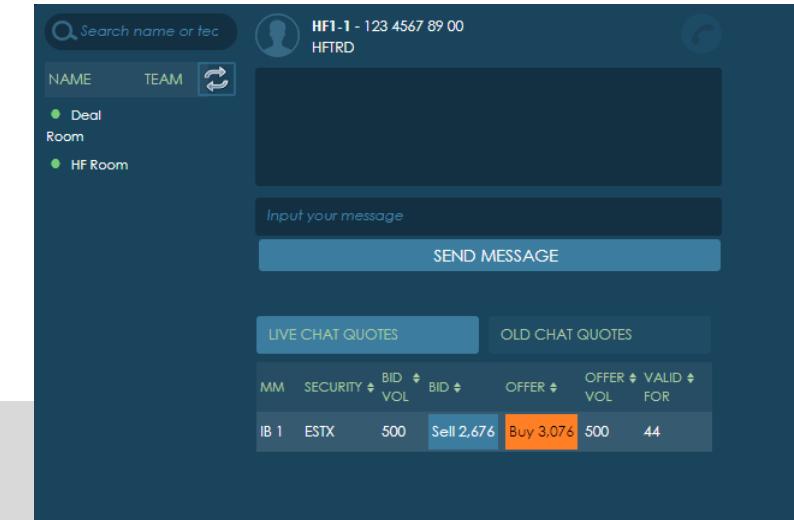
Sales trader enters Bid, Offer and size



The interface shows a search bar and a list of users. A message from 'HF1-1 - 123 4567 89 00' (HFTRD) is displayed: 'resigned - this could be interesting for your BTP position. Let me know if I can give you some prices.' Below is a quote entry form for 'ESTX' with fields for Bid, Offer, and Volume. The quote is 500 at 2676. A 'SEND QUOTE' button is visible. Below the quote form are tabs for 'LIVE CHAT QUOTES' and 'OLD CHAT QUOTES'.

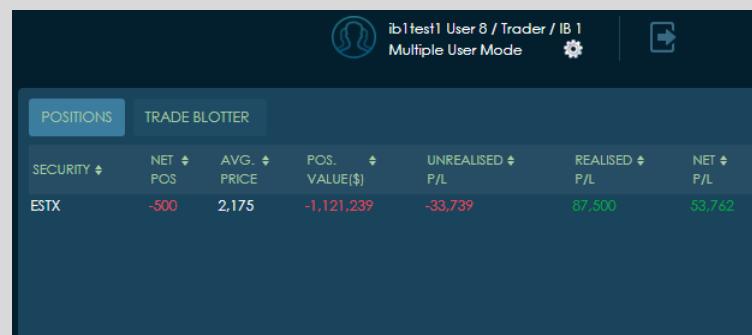
HF	SECURITY	BID VOL	BID VOL	OFFER VOL	VALID FOR
IB 1	ESTX	500	Sell 2,676	Buy 3,076	500 44

Client hits Buy and confirms size



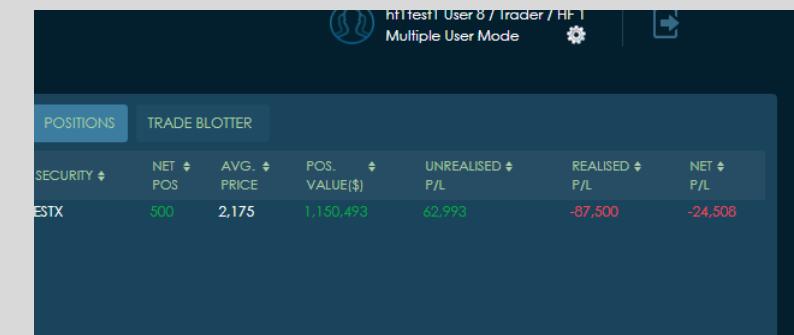
The interface shows a search bar and a list of users. A message input field is shown with the placeholder 'Input your message'. Below is a quote entry form for 'IB 1' with fields for Bid, Offer, and Volume. The quote is 500 at 2,676. A 'SEND MESSAGE' button is visible. Below the quote form are tabs for 'LIVE CHAT QUOTES' and 'OLD CHAT QUOTES'.

MM	SECURITY	BID VOL	BID VOL	OFFER VOL	VALID FOR
IB 1	ESTX	500	Sell 2,676	Buy 3,076	500 44



The interface shows a 'TRADE BLOTTER' tab. A table displays positions for 'ESTX' with a net position of -500, average price of 2,175, and unrealised value of -1,121,239.

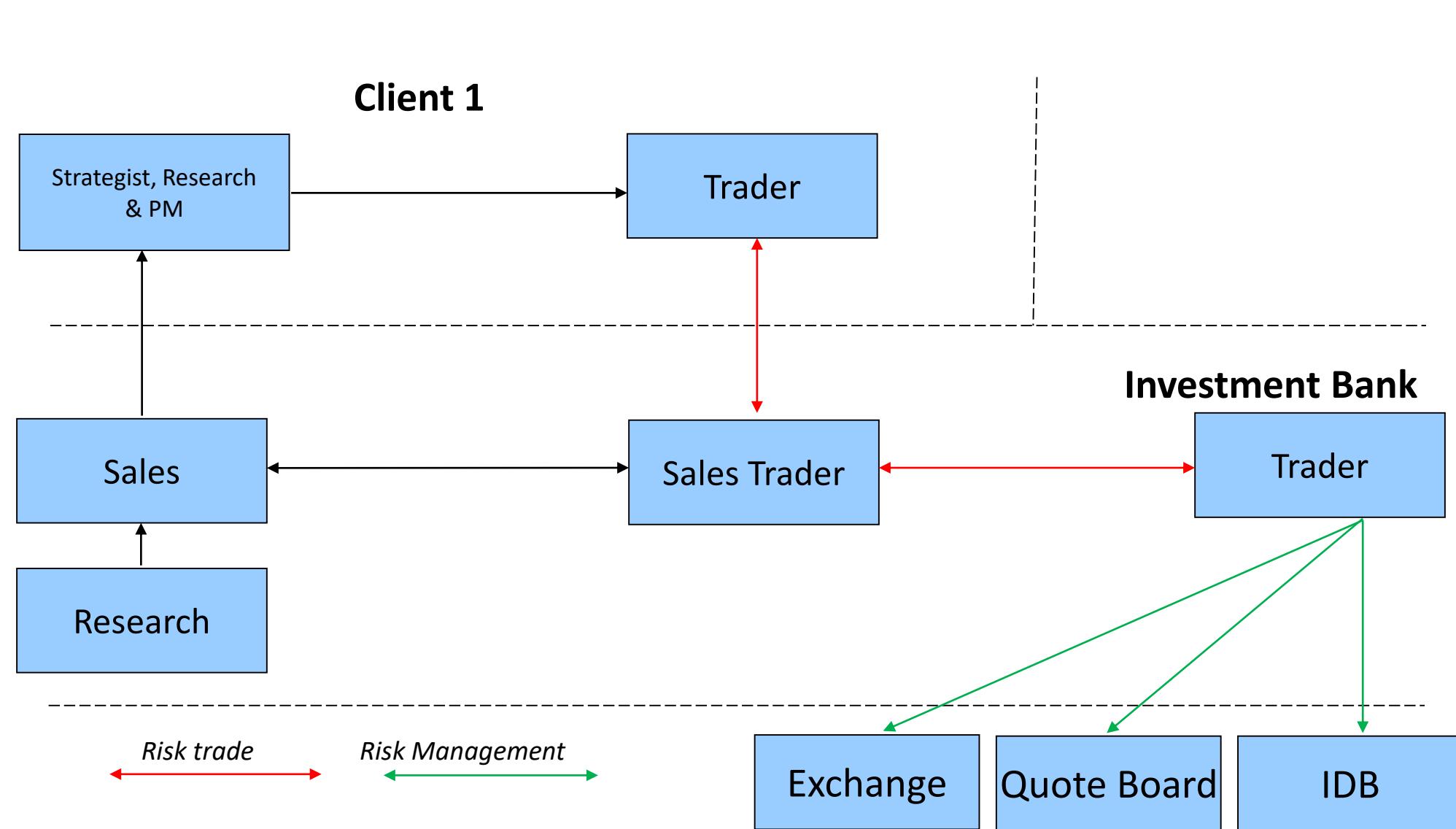
SECURITY	NET POS	AVG. PRICE	POS. VALUE(\$)	UNREALISED P/L	REALISED P/L	NET P/L
ESTX	-500	2,175	-1,121,239	-33,739	87,500	53,762



The interface shows a 'TRADE BLOTTER' tab. A table displays positions for 'ESTX' with a net position of 500, average price of 2,175, and unrealised value of 1,150,493.

SECURITY	NET POS	AVG. PRICE	POS. VALUE(\$)	UNREALISED P/L	REALISED P/L	NET P/L
ESTX	500	2,175	1,150,493	62,993	-87,500	-24,508

- The bank is now **SHORT 500** and the client is **LONG 500** contracts



EXCHANGE IDB

ESTX

500

VALUE \$1,354,570.00

IB COMMISSION \$6,772.85

BID 2,297

OFFER 3,107.7 Buy

Unwind in the exchange

- For **ORDER DRIVEN** products only.
- Be careful and try and break up the size of the order, so you don't suffer from the same spreads your client was trying to avoid.

MY QUOTES

TICKER ▾ BID ▾ OFFER ▾ YOUR ▾ YOUR ▾ BID ▾ OFFER ▾ VOL ▾ VOL ▾ REF ▾

Amend quote to: -1.0158 △ 1.6 △ 101.69 104.31 10,000 10,000 Amend

EURUSD -0.0142 0.0142 1.4221 1.4505 750,00 750,00 1.4363

IRON -1.7122 1.7122 171.59 175.01 10,000 10,000 173.3

Amend your quote

- For **QUOTE DRIVEN** products only.
- Click on the quote and adjust your bid and offer to attract a client trade.

EXCHANGE IDB

OIL

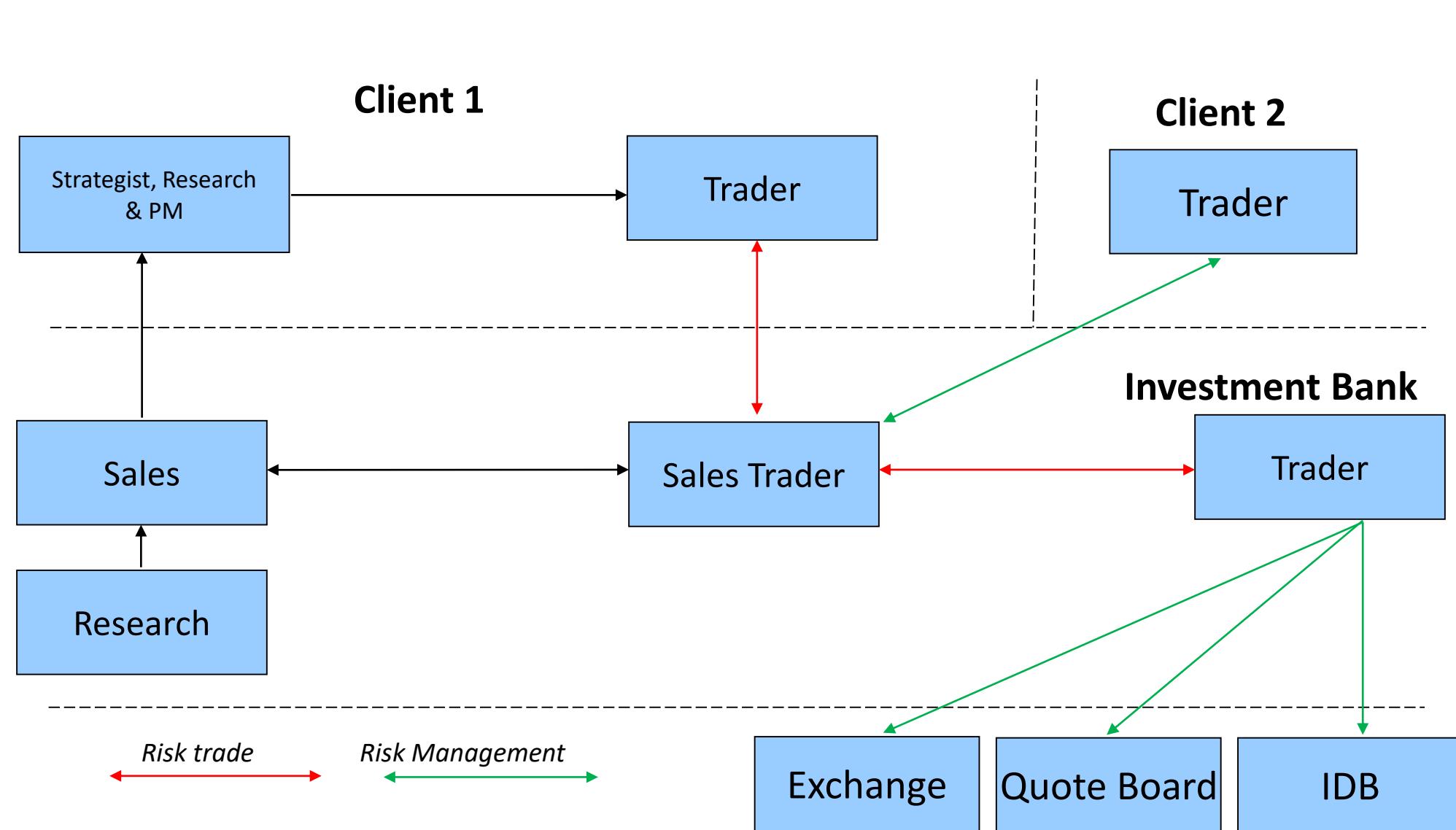
5000

VALUE \$511,834.31

NAME	BIDS	OFFERS	
Tullett	101.86	102.88	Buy
BGC	99.38	104.04	
ICAP	99.271	103.02	

Use inter-dealer brokers

- For **QUOTE DRIVEN** products only.
- You can click on the IDB button to reach a broker who can find party who may be interested in the other side of your trade.



Variables To Consider

Liquidity

How much volume the stock trades in a day?

Example - Stock trades on average 10,000 shares in a day and price being asked in 7,500 shares – the unwind of this trade will take a long time and hence leave trader exposure to market for a longer period.

Volatility

How much the security moves on average in a day

Example - Price asked in 250,000 of a stock trading at \$4.66 per share. The nominal value at risk here is \$1.17mil. If that stock has an average daily move of 2% there is a potential profit or loss of \$23,400.

\$ Value

Need to assess the \$ value of risk

Example - Price asked in 10,000 of a stock that is trading at \$1,000 , would give a trade size of \$10mil. A 1% move in the share price against the trader would then result in a \$100k loss.

Commission

The risk taken in a trade should consider the potential commission received from taking that trade on.

Key Rules

For Hedge-Funds:

- Starting funds of \$20 million
- Can only trade with their funds available, if poor PnL causes funds available to go below 0, you will only be able to trade out of open positions, to free up capital
- You need to put up 100% of the position value as initial margin
- 100% of all further PnL is given or taken as variation margin
- Pay 0.5% commission for all block trades of order driven securities.

For Investment Banks

- Inventory risk limit of \$1 million position value – make sure not to break this limit!
- No limits for trades with clients via chat quotes or electronic quotes
- Receive 0.5% commission for all client block trades of order driven securities.

Behavioural Considerations

Conduct and Compliance

- See a mistake on the QuoteBoard, or is someone giving you a really good deal?
- What is your response?

Communication

- Utilise both methods of calling: voice calls and electronic messaging
- Try to generate at least 5 calls... The more the better!
- Multi-tasking

Hedge Funds

- Be at least 70% invested!
- Enable flow generation

Team Work & Perception

- When you are on the sell-side, you will be asked to rate yourself (0-100) and your partner (0-100).