SPOTLIGHT ON HFT IN ASIA PACIFIC



Trading Architecture Asia is APAC's largest conference and expo dedicated to developing better electronic trading platforms and automated trading systems. It is focussed on technology topics of relevance to IT professionals. It show-cases advancements in HFT and low latency trading from across the region and provides new research insights from western markets. The event comprises 3 days with multiple streams which include a dedicated day on Exchange Technology, and two additional days on front office and back office IT processes. We anticipate 400 participants sharing insights with 100 presenters.

Brought to you by:





SPOTLIGHT ON HFT IN ASIA PACIFIC

This research paper was brought to you by





About Trading Architecture Asia



Trading Architecture Asia is APAC's largest conference and expo dedicated to developing better electronic trading platforms and automated trading systems. It is focussed on technology topics of relevance to IT professionals. It show-cases advancements in HFT and low latency trading from across the region and provides new research insights from western markets. The event comprises 3 days with multiple streams which include a dedicated day on Exchange Technology, and two additional days on front office and back office IT processes. We anticipate 400 participants sharing insights with 100 presenters.

For more information email us at wbrinfo@wbresearch.com quoting "Spotlight on HFT"

About this survey

This survey is one of the first in APAC dedicated to highlighting market sentiment related to the development of the HFT industry. The results demonstrate that the participants consider that HFT is an unstoppable force for change influencing all the key players in the trading value chain

Sydney and Tokyo are widely acknowledged as the hubs for HFT activity in Asia Pacific. This is largely related to the technology frameworks used by the traders and venues. Australia is a recent addition to the global HFT club, supported by the HFT platforms developed by the ASX and Chi-X. Traders focus on global markets with their black-boxes co-located at venues such as Chicago, Frankfurt, London and New York.

In Australia, the HFT firms mostly trade options and futures. Well known players include: Optiver, IMC, Susquehanna Investment Group, Tibra, and Kaiser Trading Group. Other players with strategies in this space include hedge funds such as Boronia and family offices like The Portland House Group. But there is also a small army of lesser known players who are new entrants in this market. Some are fairly new to the trading game using advanced IT skills from other industries. Others are more experienced traders with international HFT experience from brokerages or disbanded bank based prop trading teams.

TO PROVIDE SOME BACKGROUND ON APAC'S HFT SECTOR, WE INVITED COMMENTS ON ISSUES WHICH CONCERN HFT ACROSS APAC. SURVEY PARTICIPANTS INCLUDED:

JOB TITLE	COMPANY
CEO	ABN AMRO Clearing
Chairman	ANZ Global Markets
CIO	ASX
C00	Aviva Investors
СТО	Barclays Capital Asia Ltd.
Director	BNP Paribas CIB Asia Pacific
Director, ETT Trading Technology	Caplin Systems
Electronic Trading Architect	Chi-X Japan
Equities Trader	Citigroup
Exective Director	Continuum Capital Management Ltd
Financial Application Specialist	Corvil
Fund Manager	Deutsche Bank AG
Global Head of Carrier Services	Ernst & Young
Global Head, eCommerce Products	Flow Traders Asia Pte Ltd
Head APAC trading	HSBC
Head Dealer	HXW Trading
Head of Asian Trading	ICAP
Head of Client Connectivity IT, Asia Pac	ICICI Securities Limited
Head of Electronic Trading Ops	Instinet
Head of Execution Sales/Sales Trading	Invesco Asset Management Japan
Head of FX Sales ICAP/EBS Asia Pac	IRESS
Head of IT for Hong Kong and Japan	janus
Head of IT Intrastructure & Production	JP Morgan Asset Management
Head of Market Access	KVH Co.
Head of quant research	Merrill Lynch
Head of Sales Trading	Mirae Asset Management
IT Manager, Application	Mizuho Securities
Manager - Performance Testing and Implementation.	Morgan Stanley
Managing Director APAC	NSX
President	NYSE Euronext Liffe
Principal Architect	Orc Software
Solutions Architect	Reliance Mutual Fund
Technical Evangelist	SGX
	Shanghai Stock Exchange
	SunGard
	Sybase
	T Rowe Price
	Taiwan Futures Exchange
	Thomson Reuters
	TMF Group
	Tokyo Stock Exchange
	UBS Global AM Singapore
	Vanguard Investments Ltd

SUMMARY OF SURVEY RESULTS

This research paper was brought to you by





65% of respondents thought that HFT firms should form a lobby group to protect their interests. There is currently no formal group in APAC representing the HFT industry.

38% 35%

Not everyone believes the statements of some HFT firms who claim to be market makers with **38%** of respondents claiming they are not real market markers though there is sympathy for their position with **35%** saying they are essential to the market providing valuable liquidity under most conditions.



Regarding HFT activity in the equities trading space, respondents rated Australia and Japan as being the largest trading hubs with up to **30%** of trading volume followed by Hong Kong, Singapore and Korea. The other regions in APAC were considered to have **5%** or less.



Most respondents considered that in **5 years** time, HFT would be more common across all the main asset classes but especially equities, futures, and FX.

ADOPTION OF THE LOW LATENCY TECHNOLOGY SERVICE SECTOR

The adoption of the low latency technology service sector was considered by most respondents to be more common in the years ahead with these services spreading across nearly all key trading areas including more low latency brokers, more low latency monitoring and more clearing firms catering to HFT needs.



35% thought that HFT could bring about a big market system failure but this was countered by **50%** who thought that our technologists would work to mitigate the risks so that any future problems caused by HFT would be small and easily managed.



49% considering regulators to be behind the technology curve with a need to upgrade their technology systems.**11%** wanted tougher rules against HFT rule breakers who they considered to be public interest criminals.



Regarding the influence of HFT firms on key market structures such as brokers, data centers and exchanges, around **50%** of respondents thought it likely or very likely that that HFT firms would encourage more automation, rules and structures for their own benefit.

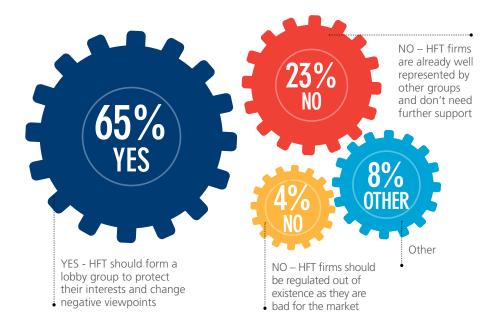




SURVEY DETAILS

QUESTION 1

HFTs are sometimes perplexed by the negative insinuations that are made against their form of market making behavior. It may be due to the fact that HFT firms in APAC are currently largely under represented in policy debate, at conferences and other public forums. This means that it is difficult to find information on their activities. Do you consider that HFT firms in APAC should form a lobby group to help manage their mutual interests, to properly inform the market on what they do, and to suggest reforms that help prevent abuse of technology strategies?



HFTs, like any other group should have a forum to explain how their behaviour adds liquidity and is an overall benefit to the markets. Such a forum, I believe would be well attended by both buy and sell side firms.

I'm generally against all forms of lobbying and collusion between business and government.

As far as I know, there are not many purely APAC based firms, but if they feel under-represented, they should certainly group together and speak up. However, as with many Hedge Funds, they may prefer to lay low.

There are substantial existing forums that Market Makers do and can participate in. The bigger issue in the market is the segregation of Market Makers vs other potentially more predatory HFT - which are just as prevalent in the investment banks as by Hedge Funds or other associations.

Not sure they need a lobby group per-se but wouldn't hurt for them to be given the opportunity to join the debate more often, as opposed to just being demonized.

HFTs are not interested lobbying themselves, otherwise they would have done it already.

YES, but should include regulators on the boundaries (if it did not exist in that particular market)

> Should be better regulated, higher capital requirements

> > Changing mrket perception of HFTs is important as they may have been wrongly accused of creating much

> > > market volatility.

A lobby group is a good idea to educate regulatory agencies.

HFTs holding forums for the

probably even a better idea.

and press.

financial community/public is

Ensure that it is better

understood. Collaborate

with regulators, exchanges

and less leverage

We do not take a political position.



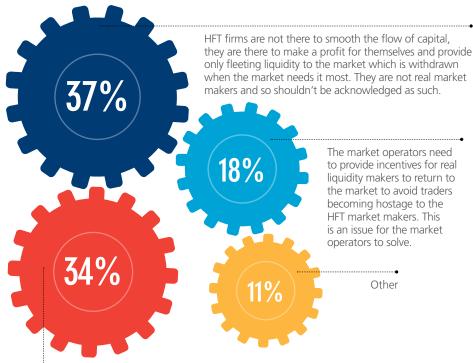
0

SURVEY DETAILS

QUESTION 2

2

One of the key benefits that the big High Frequency Traders claim to offer is that they provide liquidity and by so doing, they perform market making functions. Leading wholesalers like GETCO, Citadel and Knight fall in this category. Speed is said to be an essential tool for market makers to manage risk by controlling the amount of time that their quotes are placed on an exchange. However the flipside is that HFT liquidity is said to be a fast disappearing act when the market is stressed. Some people claim that this means that HFT firms are not real market makers because they are not operating when the market most needs them. What do you think?



HFT firms have stepped in to fill the role of traditional market makers and are now essential to market operation providing valuable liquidity under most conditions. No one should expect them to stay in the game when conditions are unfavorable.

HFTs that act like market makers should be given special privileges in return for genuinely and consistently making markets. Other 'highly automated' trading as per broker algos should have different standards applied.

Exchanges should define minimum participation levels for MM functions and maximum spreads.

Bit of all three to be honest. HFT firms are better able to adapt to market conditions and play a critical role in providing liquidity. What is most important is that exchange operators place circuit breakers and trading limits in place to prevent algorithms from having a detrimental impact on market mechanisms like what happened during the flash crash.

We do make market in contingent environments. That is also when this business is most in demand and most profitable.

Higher trading volume doesn't mean higher investment liquidity.

HFT firms focus on short term strategies that work. The majority of fund managers are agency businesses that focus on what sells not what works.

It has been noted in various industry publications, for example BIS's most recent study which showed that HFT do not flee the market in times of stress anymore than traditional sell side firms. In fact, on our platform we see that HFT has had a net positive impact on market gapping as they have create many more price points in the order book.

Some HFTs are also market makers (you mention IMC, Susquehanna, etc.). So I think you need to make a distinction between HFTs that dont have market making obligations, in which case they can withdraw liquidity whenever they like, and those that are market makers and have associated obligations.

HFT firms are not true market makers. Market operators, backed by strong regulation, need to create a framework that is fair and robust where predatory trading and market manipulation is firstly prevented and secondly, prosecuted. These behaviours are not solely carried out by HFT, and much of the HFT behaviour is simply superior technologically - not dishonest.





SURVEY DETAILS

QUESTION 3

2

The overall adoption of high frequency trading in APAC is expected to lag behind Europe & the US by a significant margin due to the lack of IT infrastructure, complexity in regulation, and lack of attractive market microstructure. However, the presence of high frequency trading firms in most of the major APAC markets confirms that given the right mixture of conditions, the penetration of high frequency trading flow could be significant and quite rapid. The most recent estimates suggest that high-frequency traders in APACs HFT hubs in Australia and Japan make up about 20 % the equity market's volume with the rest of APAC having virtually no HFT activity. But estimates vary widely. How do you rate the regional percentages of HFT Trading volumes as a % across the equities asset classes?

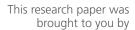
		LESS THAN 10%	10-20%	20-30%	30-40%	OVER 40%
	AUSTRALIA	5%	40%	38%	9%	8%
	JAPAN	3%	33%	40%	13%	11%
*	HONG KONG	29%	37%	20%	11%	3%
	SINGAPORE	26%	43%	2 1%	8%	1%
0	INDIA	52%	31%	14%	1%	1%
	CHINA	71%	22%	5%	1%	1%
•	KOREA	39%	31%	16%	7%	6%
	INDONESIA	78%	15%	6%	1%	0%
	THAILAND	75%	20%	5%	1%	0%

QUESTION 4



Which categories of HFT activity do you expect to increase or decrease over the next 5 years?

	MUCH MORE	MORE	SAME	LESS	MUCH LESS
EQUITIES	19%	63%	14%	4%	0%
FX	24%	55%	20%	1%	0%
OPTIONS	18%	48%	29%	5%	0%
FUTURES	24%	56%	19%	1%	0%
FIXED INCOME	6%	44%	43%	6%	1%
ETFS	17%	49%	31%	4%	0%











Low latency trading is the corner stone to the HFT strategy. The categories below are all examples of changes emerging today that reflect the mainstreaming of the low latency trading trend. To what extent do you consider that these categories will change over the coming years?

	LESS Prevalent	NO Change	MORE Prevalent	VERY COMMON
Specialist low latency brokers	6%	27%	58%	9%
Low Latency measurement as part of the TCA	3%	28%	59%	10%
Clearing firms catering to HFT needs	3%	26%	62%	9%
Flash crashes and other trading technology induced market scares	8%	36%	48%	8%
Trading venues catering to HFT needs	3%	19%	62%	16%
Regulation dramatically impacting HFT activity (eg. French transaction tax)	2%	25%	63%	11%
Latency monitoring services linked with all key trading technology products	0%	16%	70%	13%
Trading risk control technology services	1%	15%	64%	19%
Colocation and new proximity trading services across all APAC exchanges	1%	11%	57%	30%
Low latency data services and analytic services	0%	19%	56%	25%
Anti gaming technology services to protect traders from HFT predictors	1%	34%	56%	10%
Easy access to global markets and more HFT impacted asset classes	1%	20%	65%	13%

QUESTION 6



In recent years, we have seen a massive shift towards in the use of technology and the provision of HFT services on the part of leading exchanges and alternative trading venues. What do you see as the longer term implications of exchanges adopting the HFT based market making technology driven model and the impact of increased competition? The categories below are examples of what some people suggest might be the future. How do you rate the likelihood of these things occurring?

	UNLIKELY	POSSIBLE	LIKELY	VERY LIKELY
HFT players will totally capture the trading venues and change the rules in their favour	48%	37%	12%	3%
HFT firms themselves will become brokers and data centres will become the new trading venue	30%	40%	25%	6%
Exchanges will become much smaller with more automated processes and risk control functions	37%	30%	27%	6%
HFT firms will be unable to cancel orders as they do today and will focus more on quant models	22%	50%	24%	4%
Trading will be continuous 24 hrs, 7 days a week and human traders will be eliminated	44%	34%	15%	6%
Technology vendors will become the new market stars as they find new competitive tech strategies	20%	42%	30%	8%

Was this research paper of much interest? Want and need to learn more about High Frequency Trading?

We can help.

Trading Architecture Asia is APAC's largest conference and exhibition dedicated to **capital market IT trading issues with Buyside, Sellside & Trading Venue** perspectives on Asian and global trading operations, and is ideally positioned to provide benefits to trading teams with its international trading technology pedigree and proven track record of low latency-HFT expertise sorting fact from fiction. We detail both the commercial and the technology facts you need for making profit in this machine dominated world while staying safe and compliant with new regulations.

Want more information?

Let us know at +65 6408 9217 and quote "Spotlight on HFT"

Coming soon:



Real-time risk analytics, trading surveillance and its application to high speed algorithmic trading

Log your interest at wbrinfo@wbresearch.com and we'll send you a copy once it's ready.

Brought to you by:

