## **Summary on Industry Expert Lecture – CF968**

**Presentation Title:** "A quick walk thru the Trading Floor."

Presented by: Dr Rafael Velasco

**Presented on:** 24/2/2017

Brief Profile of Speaker: "Rafael Velasco is Global Portfolio Trading Strategist of

Citigroup since May 2010. He works on Index Event Trading, Portfolio Analysis and Optimised Hedging, Market Impact Models and Liquidity and Market Microstructure Analysis. Rafael completed his PhD from the University of Essex in 2009 and has also been a lecturer at the London College of Business Management and Information Technology as well as the University of Essex. He has co-authored a paper on Nonlinearities in stochastic clocks of the market that was published in 2010 in the Journal of Quantitative Finance. Rafael Velasco speaks Spanish and English fluently, and has a working

knowledge of French and Swedish".

**Supervisor:** Prof: Edward Tsang

**Summary prepared by:** Cyriac Kodath

**Course:** MSc Computational Finance

**Post Graduate ID:** 1603752 / CK16455

## **Summary**

Trading floors of investment banks are unique in their layout and designed with the objective of maximising efficiency, communication and transparency. Traders work in fast paced and highly charged environments. They need to be professional in their dealings with clients and colleagues and also handle stress from losses. A work day for a trader can start very early or end late depending on their role and the markets traded.

The front office of an investment bank handles the sales, trading and interactions with the clients. The front office has the objective of making money. Departments such as risk management, compliance and back office function parallel to the front office for assistance and oversight.

Today, investments banks do not undertake proprietary trading on account of regulations. Investment banks trade on behalf of their clients in two ways. As an agent, the bank merely executes the client's orders for a commission. The price risk and execution risk is carried by the client.

As a principal, when a client wishes to trade a basket or a large block of shares, the investment bank offers a guaranteed price immediately and carries the price risk and execution risk. If the investment bank is able to sell (buy) the shares in the market at a premium (discount) to the agreed price with the client, it makes a profit. Investment banks need to use caution in their transaction cost analysis for assessing liquidity and volume in the market and keep the flow of information top secret. Principal trades can extend from a day to even weeks for completion. A quote for a principal trade is called a risk bid¹ on account of the risk that the bank carries. Here, an investment bank leverages its knowledge and proximity to the market to ensure the best price for a client, while earning a premium.

Investment banks also undertake program trading which involves a global basket of shares to be traded based on extensive pre-trade analysis to ensure the best fills. Transition management trading for larger funds involve conversion of a legacy portfolio into a target portfolio<sup>2</sup>. The operational complexity of transition management is much higher than program trading on account of its larger size<sup>3</sup>.

Trading on index rebalancing events, expiry day volume spikes and corporate actions are also common today. Almost all trades are executed electronically on various trading platforms. Algorithmic execution is often used for minimising slippage.

While trading strategies and methods are constantly evolving and increasing in complexity, the distinguished speaker sees a disconnect between academia and industry in areas such as machine learning for trading which could be the next big trading opportunity in the future.

<sup>&</sup>lt;sup>1</sup> Risk bids are usually two way (i.e. price to buy and sell) to hide the direction of the trade, until the trade is finalised.

<sup>&</sup>lt;sup>2</sup> For example - A Sovereign fund having a legacy portfolio of fixed income may require conversion into a target portfolio of emerging market assets.

<sup>&</sup>lt;sup>3</sup> Often upwards of US Dollars 500 Million to 3 Billion.

## References:

[1] Dr Rafael Velasco (2017) Power Point Presentation titled "A quick walk thru the Trading Floor."