CHX: Special Cases

August 27, 2015

1 Derivatively Priced Trades

1.1 Definition

 $sdaf^1$

1.2 Particular to CHX

We investigate the CHX points which occur in the top right region (low depth, high volume). Cond Code 4 is ONLY on exchange CHX and FINRA excluding all cond code 4 D has quotes! after a 1.5 months into 2014

1.3 Makeup of CHX Volume

1.4 Patterns Checked

For one such outlier, BAC on CHX on 10-Jan-2014, we open the individual trades: [[TRADE DATA OF ALL CHX TRADES IN BAC ON JAN 10]]

 $^{^{1}} http://www.chx.com/_posts/information-memos/2015/MR-15-04.pdf$

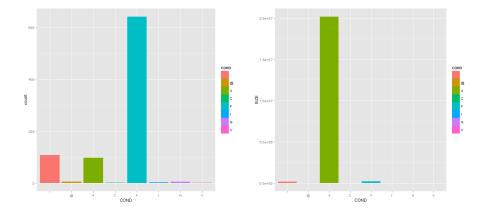


Figure 1: In January, although trades with condition code 4 constituted less than 15% of the trades, over 95% of volume held this condition code.

Most interestingly, we observe two large trades with condition code 4, indicating "Derivatively Priced" trades. Online literature suggests that activity in Exchange Traded Products² largely make up these trades, perhaps when different symbols are negotiated at a package price and the individual trades semi-arbitrarily take on parts of the cost.

The fact that such trades are not considered to be a true "Last Sale" and are allowed outside of limit-up and limit-down prices strongly indicates that these trades' prices are not dictated by the BBO.

As a response, all trades with condition code 4 were filtered out.

2 ISO Orders

This flat relationship could be attributable to the CHX outlier which hovered in the low-depth/high-volume region. Filtering out Derivatively Priced trades remedied this flatness.

²http://www.investopedia.com/terms/e/exchange-traded-products-etp.asp

 $^{{}^3} http://www.nasdaqtrader.com/content/technical support/specifications/utp/utdfspecification.pdf$

 $^{^4} http://www.finra.org/industry/trf/trade-report-modifiers-and-applicability-limit-uplimit-down-luld-price-bands$