



Under-regulated:

A true story about a huge loophole in the North American financial markets.



Imagine going to an auction...

- You are the highest bidder, so the auctioneer yells "SOLD!"
- However, when you go up to claim your item, the auctioneer informs you, "I'm sorry, but we have the right to match or beat any price. We chose to beat your winning \$100 bid by one cent".
- The seller receives \$100.01, and you go home empty handed.
- This happens again and again.*





After a while, what do you think would happen in the auction room?

- Many participants would become frustrated that they weren't getting any items, and would leave the auction empty handed.
- Other participants would have to over-pay to get their item (pay a price that the auctioneer was not willing to beat).



This is similar to what is happening in the North American stock markets.

Brokers/Dealers, banks, OTC market makers, and high frequency traders are operating through legal loopholes, giving them a privileged status.

Dollars and Sense...

- It makes sense that the participant that gives the highest bid for a stock should get to own it when someone wants to sell to them.
- It also makes sense that the person who offers their stock at the lowest price should get to sell their stock first.
- Every participant should have **fair** and **open** access to the market.
- The market should be **transparent**.
- This is the way stock markets were designed to operate.



Cutting in line

- Similar to the auction example, there are privileged participants that are able to match the best bid or the best offer, **stepping to the front of the order queue***.
 - This is because of a loophole in regulation that allows them to match or beat the best offer by only fractions of a cent. So, on a \$100 stock, they may beat the best offer by, not even a penny, but \$0.0001.
 - The privileged participants say that they are providing a service to the investor by giving them “price improvement”. These privileged participants are internalizers.
- This practice is known in the industry as “**sub-penny**”.



How much is the price improvement?

- The actual extra amount that the investor receives is variable. However, most often it is negligible*.
- For example, on a 100 share order of a \$20 stock, if an investor received an extra \$0.0001 per share, they would receive **\$0.02 extra on their \$2,000.00 transaction.**

What are the costs to the investing public of internalization?

- There are **quantifiable** and **unquantifiable** losses associated with this.
 - When buying a stock: Investors are forced to buy the stock at a higher amount, (known in the industry as paying the spread). Or, they may choose not to buy the stock.
 - When selling a stock: Investors are forced to sell the stock at a lower price, (paying the spread). A seller may choose not to sell because of the adverse environment.
- We can estimate the amount of money that is being discretely siphoned off of investors by looking at profits made by the companies that are doing this.



What are the quantifiable losses?

- In short, it is estimated to be **billions** of dollars*.
- Want to understand the math?
 - Yes? The next slides will explain it.
 - No? Skip past the slides “Adding up the profits”.



Adding up the profits...

By cutting in line, the internalizers force investors to “pay the spread”.

Remember from our first example:

- At a particular point in time:
- AAPL bid is \$374.95, and the best offer is \$375.00.
- This means if a participant that wants to sell Apple stock, they should be able to sell it at the best bid price of \$374.95. A participant that wants to buy Apple should be able to buy it at the best offer price of \$375.00. The spread is $\$375.00 - \$374.95 = \$0.05$.

If an investor tries to buy the stock (at \$375.00), the internalizer will jump the line, and sell to them at \$374.9999 in front of offer.

If an investor tries to sell a stock (at \$374.95), the internalizer will jump the line and buy the stock at \$374.9501 in front of bid.

$\$374.9999 - \374.9501 is \$0.0498/share. This is the profit to the internalizer.

Do this thousands of times per day on thousands of different stocks, and the profits can add up very quickly.



Adding up the profits...

In 2010, the Securities Exchange Commission estimated internalization in the USA to be 17.5%* of the overall stock market volume.

Let's look at the amount of shares traded on the NYSE at April 21, 2011* as an example:

$$\begin{aligned} &17.5\% \times 1,209,892,307 \text{ shares traded}^* \\ &= 211,731,154 \text{ shares internalized} \end{aligned}$$

Assuming a conservative estimate that average spread is \$0.01, the privileged participant might make an average of \$0.0098/share (from trading inside the \$0.01 spread).

$$\begin{aligned} &211,731,154 \times \$0.0098 = \$2,074,965/\text{day or} \\ &\$2,074,965 \times 250 \text{ business days/year} = \mathbf{\$518,741,326} \end{aligned}$$

This is for one exchange with conservative estimates.

There are more than 15 different exchanges in the USA.
There are hundreds of exchanges in the world.

With conservative estimations, the internalizers are quietly siphoning billions of dollars by internalizing.

Add to this the unquantifiable costs, which are arguably much larger.

This is a HUGE problem.

The problem

- Our financial markets are being corporately controlled.
- This represents an abuse of power. These corporations are not following the intent of the law. They are using a loophole to siphon money from citizens to corporations.
 - This has ties to some of the fundamental concerns of the Occupy Movement.
- They are not openly disclosing this to investors.
- There has not been adequate discourse on this topic. It is not being covered adequately by the media.
- The regulatory bodies of these exchanges have failed to close this loophole within a reasonable amount of time.

How can this be resolved?

The financial regulators need to close the loopholes.

The NYSE Internalization proposal:

This proposal just allows more participants to step in front of natural liquidity. We need to stop the NBBO from being abused, and this proposal is a step in the wrong direction.

This proposal should not be allowed.

For more information on these “sub-pennying” abuses refer to <http://www.defendtrading.com/subpennying.html>

Thank you for your time.

Note: The footnotes to this presentation can be seen by moving your mouse over the orange icons, located at the top left of the appropriate pages.