Shorting Restrictions, Liquidity, and Returns by Charles M. Jones

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Purpose: Do short sale constraints matter?

- Addresses:
 - Specific constraints put in place in 1930s.
 - Effects of these constraints on prices, volatility, and liquidity.
- Does not specifically address:
 - Could short selling be harmful?
 - Could short selling be beneficial?
 - Should there be constraints on short selling?
 - Would other types of short selling constraints matter?
 - These topics are left for other researchers.
- Question: Does market context affect how we think about short-selling?
 - 1930s Was short selling harmful?
 - 1990s Were short selling constraints harmful?

Methodology

- Event study Three events
 - Authorization of Hypothecation April 1932 constrained supply of loanable shares
 - NYSE Downtick rule October 1931 restricted the ability to sell short
 - SEC Uptick rule February 1938 also restricted the ability to sell short
- Variables of interest
 - Stock prices
 - Short interest
 - Interest rate on stock loans
 - Spreads
 - Volume
 - Volatility
 - Price impact
- Determine if there were significant changes in the variables of interest around the three events.

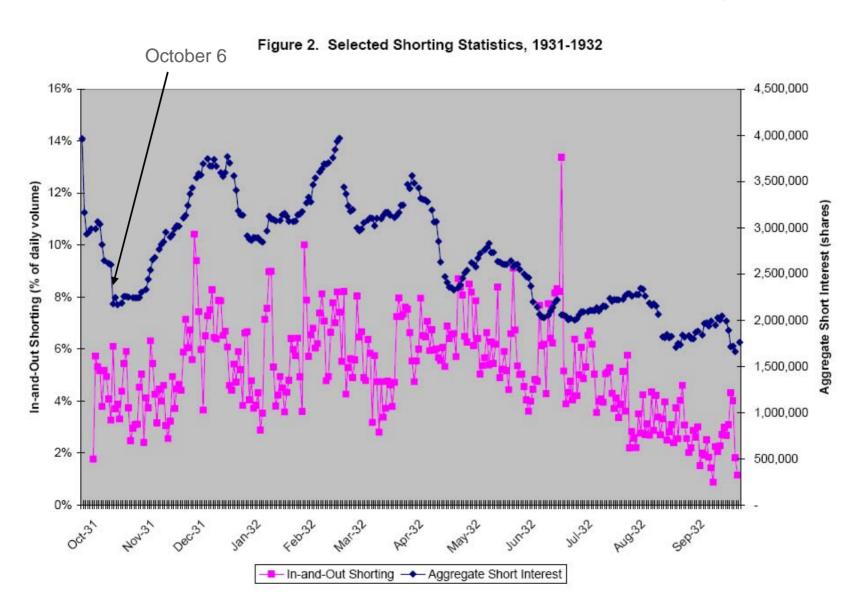
Findings

Variable	Authorization of Hypothecation	NYSE Downtick Rule	SEC Uptick Rule
Prices	News - up 3.5%	Up 14%	News – flat
	Effect – down 6.7%		Effect – up 3.4%
Short Interest	Declined sharply	Declined sharply	No effect
Stock Loan Market	More expensive to borrow shares	Cheaper to borrow shares	More expensive to borrow shares between news and effect.
Spreads	Increased	Decreased	Decreased
Volume	Increased	No effect	Decreased
Volatility	Slight increase	No effect	No effect
Price Impact	No effect	No effect	No effect
Liquidity**	Worsened	Improved	Improved

Caveats

- Statistical power
 - Market conditions were very volatile, weakening statistical power.
 - October 5, 1931, the day before the NYSE downtick rule, was the 4th biggest down day in history, and the first 10% down day since 1929, and a then record low close for the Dow Jones Railroad Index. (Figure 3)
- Identifying the events, what did the market expect?
 - Figure 2, short interest declines in advance of NYSE downtick rule in October 1931.
 - More generally, was the market expecting some action, just uncertain about type and timing.
- Liquidity interpretation challenging
 - Does substituting limit orders for market orders hurt or help liquidity?
 - Depends on perspective, buyer vs. seller, aggressive vs. passive, long vs. short.

Caveats - NYSE Downtick Rule, Were the Shorts Surprised?



Applicability

- Two issues:
 - · Changes in the market since the 1930s
 - Changes in traders and investors since the 1930s.
- Markets have changed in many technical ways
 - More transparent
 - More focus on systemic risk
- Traders and investors not that different than the 1930s.
- Are the results applicable to liquidity in less liquid stocks
 - Study was on the most liquid stocks
 - Stock specific results inconclusive

Conclusions

- Looking at price trends during the 1930s and the repeated introduction of additional restrictions on short selling, both covered and not covered by this paper, it is reasonable to conclude that short selling constraints don't matter much.
- Markets adapt, effects apt to be short lived.

But:

- Counterfactual analysis is very difficult.
- Sometimes a short lived effect is what's needed.