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Circuit Breakers and the Mission of Stock Market Stability

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“Circuit Breakers” and the Mission of Stock Market Stability

J. Scott Colesanti, LL.M.*

I. Introduction

“Few of us can stand stock volatility. Another man’s, I mean.” So might have written the great Mark Twain had he focused his famed observation of prosperity on the reasons for stock exchange participation. For from the Middle Ages through the present, the stock market investor has tolerated (if not actively sought) a sudden, apoplectic rise in his own portfolio. For the same time period, investors have decried volatility not personally beneficial.

Volatility remaining both unavoidable and desirable, the likely follow-up question asks, to what extent is it tolerable? While markets rise, little care is given to the sustainability of prices and strength of underlying corporate fundamentals. But during prolonged or drastic periods of misfortune, stock market indices are targeted as unwieldy accelerants of decline. The scant attention given to such blame by experts and regulators in recent times has been expended in reluctantly fine tuning inorganic creations known as circuit breakers, obstacles to further decline tantamount to shutting off the lights and praying for the weekend.

This article examines the reason for (and efficaciousness of) such artificial obstacles to “panic selling.” Part II recaps some of the most storied tales of near market collapses on the Anglo-Saxon/American timeline. Part III examines the efficacy of the circuit breaker, a distinctly American solution that essentially throws sands in the gears of an operation which normally values speed and efficiency. And Part IV offers lines of in-

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1. The actual quote attributed to the popular satirist was “Few of us can stand prosperity. Another man’s I mean.” MARK TWAIN, FOLLOWING THE EQUATOR: A JOURNEY AROUND THE WORLD 166 (Digireads.com Publishing 2008) (1897).
quiry that might lead to a better version of the artificial brakes – at least insofar as retail investors are concerned.

II. A Classwide History of 'Irrational Exuberance'

In December 1996, then Federal Reserve Chairman Alan Greenspan interrupted a jovial period of market expansion to publicly comment that stock prices seemed to reflect an "irrational exuberance" among investors. But, frankly, quixotic stock pricing has been with us for centuries, and consistently succumbed to by expert and layman alike.

First, A Little History

Holland's "Tulip Bulb Craze" of the 1630s – in which speculators attempted to gauge desire for transplanted European flowers of both healthy and viral varieties - was said to have been so frantic and egalitarian as to ensnare "[n]obles, citizens, farmers, mechanics, seamen, footmen, maid-servants, even chimney sweeps and old clotheswomen." A century later, the British South Sea Bubble of 1720, as a noted economist highlighted, centered on stock foisted upon the public but nonetheless owned in part by "Half of the House of Lords and more than Half of the House of Commons False." Jumping ahead to America in the 20th century, The Great Depression can surely be seen as an equal opportunity catastrophe, effecting bankers and depositors alike. As the period's chief chronicler explained, there existed across the sociological divide a perverted American spirit, and a people "displaying an inordinate desire to get rich quickly with a minimum of physical effort;" the perversion afflicted not only the Astors and the Rockefellers (who clung to the resilience of "Blue Chip stocks") but also the market newcomer of the 1920s (who found himself able to buy $100 worth of stock with $5 down).

The "dot coms" of the last decade followed a rush to market of technology companies attending pioneering advances that permitted ordinary house-

2. The full quote reads in relevant part:

But how do we know when irrational exuberance has unduly escalated asset values, which then become subject to unexpected and prolonged contractions as they have in Japan over the past decade? . . . We as central bankers need not be concerned if a collapsing financial asset bubble does not threaten to impair the real economy, its production, jobs and price stability.


4. Id. at 40-41.


holds to trade stocks7 (in hindsight, the flurry was seen more as folly than progress, and its consequences more humbling than debilitating8). But the resulting “bubble burst” of March 2000 showered both groups with the same soap, and the resulting lesson was clear: Indulge in new fantasies of quick gains at the risk of unprecedented and Street-rapid declines.

The Present Persistent Recession

The tale (and attendant numbers) of the nation’s most recent economic nadir gets no less harrowing through repetition. In sum, our stock market listed stocks of giants that had simply wagered too much on exotic vehicles dependent upon an over-inflated real estate market.9 Proprietary positions at financial firms became so linked to “collateralized debt obligations” and similar exotics as to defy reason.10 The subsequent enormous rescue investment launched by the federal government itself spawned critics fearing the ultimate inefficaciousness of the bailouts.11

Indeed, the signs of the present crisis were hardly hidden – between 2006 and 2007, a famed consumer group, the nation’s largest regulator of brokerage houses, and an international banking giant all had publicly warned of the imminent decline of securities tied to the American housing market.12 Ultimately, the collective the failure to acquiesce to reason added one more wrinkle to the story of American market regulation: The need to protect wolves from other wolves.

Despite the variations in degree and triggers, all of these downturns thus stand as testimony to the unyielding prayer of the king and pawn alike for volatility. Indeed, the expansion of the investor base in recent years is likely to
cloud (rather than streamline) the dangerous game of market pricing, as the “endowment effect” causes each of us to overvalue something once we own it. Focusing more specifically on the American investor in the new millennium, the studies disclose a player “full of irrationalities and inconsistencies” who is at once too bold, too timid, too self-confident and too quick to trade.

Add to that undesirable list of qualities the parallel and notorious tales of Caligulan greed among the more experienced investors, and we begin to appreciate the need for a stock market halt. That such base, destructive characteristics of investors should persist is perhaps less astonishing than the continued tolerance of those who organize and oversee stock exchanges; the observation becomes more mundane when students of such bazaars come to learn of a fee structure that flourishes with both advances and declines (and shrinks only in the presence of inactivity) and thus avoids a halt until reaching irreparable proportions.

III. The Birth of the American Circuit Breaker

Between the morning of October 19, 1987 and the closing bell of October 20, 1987, the Dow Jones Industrial Average fell 25%. Shunning the drastic remedy of closing the markets (akin to FDR’s “bank holiday” of March 1933), the regulatory response ultimately took the form of ‘circuit breakers,’ crudely fashioned, limited trading halts essentially serving the purpose of sand in the stock exchange gears.

The trigger point for these market shutdowns were originally set at constant numbers of 250 and 400 DJIA points (loosely tied to the events of October 19, 1987). Those triggers remained constant from their implementation in April 1989 until April 1998. At that time, the calibration of the decline prompting a trading halt was changed to a percentage of the average closing values of the prior quarter. In turn, that percentage calculation was not altered until December 31, 2008. Consequentially, between October

13. See James Surowiecki, Status Quo Anxiety, The New Yorker, August 31, 2009, at 29 (discussing the American public’s “skittishness” to overhauling the medical care system).
16. The SEC, per statute, collects fees from stock exchanges as determined by the amount of trading volume they host. See Securities Exchange Act Section 31 — Transaction Fees/Recovery of cost of services (“The Commission shall, in accordance with this section, collect transaction fees and assessments that are designed to recover the costs to the Government of the supervision and regulation of securities markets and securities professionals, and costs related to such supervision and regulation, including enforcement activities, policy and rulemaking activities, administration, legal services, and international regulatory activities.). 15 U.S.C. §78ee (West 2007). The stock exchanges charge a commission to each member based upon revenues (calculated by shares executed) that is required by rule to be meticulously and timely tallied each month. See, e.g., New York Stock Exchange Rule Information Memo 96-12 (explaining that monthly form 600TC required of all members must record floor brokerage revenue including “income received from non-member broker-dealers as well as public institutional and retail customers.”).
17. See infra note 35 and accompanying text.
2007 and February 2009 – as an inflated DJIA gradually declined over 40%18 - the breakers were not triggered once, raising questions concerning their purpose and effect.19 To understand this inexplicable march toward ruin, we need first look at the index itself, and then its encumbrances.

The DJIA

A weighted tally that has measured market fortunes for over 110 years, the Dow Jones Industrial Average is comprised of 30 equity stocks. Approximately two thirds of this group are manufacturers of industrial and/or consumer goods. While the index is calculated daily, its roster is altered at glacial speed (General Motors and Citigroup, two early casualties of the economic crisis, were finally removed in June of 200920). Originally centering on 11 railroad stocks (the number of 30 was arrived at in 1928), the barometer remains the most quoted market measure in the world and has itself become a vehicle for investment (through speculative options).21

As an index, the price-weighted averaging remains a bit obtuse. The actual number representing the “DJIA” is calculated by adding the trading prices of the [30] component stocks and using a divisor adjusted for stock dividends and splits, cash equivalent distributions equal to 10% or more of the closing prices of an issue, and substitutions and mergers.”22

As a barometer of the country’s economic fortune, the average is user-friendly, ubiquitous and unique. The DJIA reacts with equal displeasure to both battle and bankruptcy;23 it may or may not applaud public disclosure of halted corporate waste.24 It is at once benefactor from and victim of Internet

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18. For historical DJIA closing prices, see http://finance.yahoo.com/q/hp;s=^DJI. Between October 1, 2007 (14,027) and February 27, 2009 (7,062), the DJIA fell 49.7%.

19. See, e.g., AnnaMaria Andriotis, When Circuit Breakers Get Triggered, Smart Money, Oct. 24, 2008, available at http://www.smartmoney.com/investing/stocks/Decode-Setting-Off-Circuit-Breakers (“For a circuit breaker to go into effect now, the DJIA would have to drop by 1,100 points or more.”) Chedley A. Aouriri et al., Exchanges – Circuit Breakers, Curbs, and Other Trading Restrictions, Investment FAQ (2008) available at http://invest-faq.com/cbc/exch-circuit-brkr.html (“The new game in town is how to outfox the circuit breakers and buy or sell quickly before the 50-point move triggers the halting of the automated trading [by broker-dealers].”).


trading.\textsuperscript{25} In sum, it always reacts, and, in so doing, repeatedly proves its utility as both originator and interpreter of bad news.

\section*{The Brakes}

Stated bluntly, the outright suspension of business at a stock exchange is undesirable. Apart from the conventional wisdom that such periods of inactivity fuel fear and stockpile sell orders, academics and others have put forth convincing arguments that such closures can serve political (and not necessarily salutary) purposes.\textsuperscript{26}

Ironically, it is the stock exchanges who often wish to avoid a "bank holiday" like the one implemented by FDR in March 1933. In fact, during the Market Crash of 1987, the successful attempts of the NYSE Chairman to keep markets open were seen as at once and bold and rational.\textsuperscript{27} Conversely, registered broker-dealers, bearing the brunt of ever-increasing customer sell orders, clamor for a respite; de facto shutdowns at these entities are well known to regulators and have inspired directives and rules aimed at keeping phone lines and operations open.\textsuperscript{28}

Concerning the aforementioned Crash of October 19-20, 1987, the Securities and Exchange Commission (S.E.C.) issued an autopsy report containing mixed messages. Specialists – the well-heeled entities that match buyers with sellers and operate as either to keep markets afloat – were said to have "in the aggregate, performed satisfactorily."\textsuperscript{29} Yet, the S.E.C. Report confessed that "a disturbing number of NYSE specialists on October 19th either were not sellers or did not take substantial positions."\textsuperscript{30} Eschewing soft targets such as a sudden dearth of foreign investors or the role of derivatives, the Report took aim at exchange operational structures and their ability to handle the unprecedented selling volume.

\begin{itemize}
\item \textsuperscript{26} See, e.g., Professor William L. Silber, Birth of the Federal Reserve: Crisis in the Womb (New York University School of Business Working Paper No. FIN-03-27, 2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1299468 (arguing that the suspension of trading at the NYSE for four months following the outbreak of World War I enabled President Wilson to both launch the Federal Reserve and forestall an outflow of gold).
\item \textsuperscript{27} \textit{Charles Gasparino, King of the Club: Richard Grasso and the Survival of the New York Stock Exchange} 59-61 (Collins Business 2007) (detailing the Chairman's private and public efforts to keep the NYSE open for business despite pressure from its constituents and onlookers).
\item \textsuperscript{28} See, e.g., S.E.C. Staff Legal Bulletin No. 8 (Sept. 8, 1998), available at www.sec.gov/rules/othern/slbrm8.htm (stating the views of the SEC's Division of Market Regulation about the need for broker/dealers to maintain enough internal systems capacity to operate properly when trading volume is high); \textit{See also} NYSE Rule 51, available at http://rules.nyse.com/nysetools/Exchangeviewer.asp?SelectedNode=chp_1_2&manual=nyse/nyse_rules/nyse-rules/ (requiring NYSE member firms to remain open "for the transaction of business on every business day.").
\item \textsuperscript{30} \textit{Id.}
\end{itemize}
Those structures were said to have become overloaded in October 1987, as the average daily NYSE trading volume of 175 million shares more than tripled and automated trading programs competed with retail order flow. Order imbalances – the extent to which sellers outnumbered buyers – were attributed by the S.E.C. mainly to institutional customers, both clarifying the mechanics or ordinary order-routing on an exchange and dispelling the notion that the layman’s panic precipitated the Crash.31

The mechanics of the October overload can be summed up as follows: Orders in a particular stock were routed manually or electronically to a Specialists booth. Two-thirds of these orders were entered via the DOT (Designated Order Turnaround) system, a computerized order facilitator handling orders to buy or sell up to (in most instances) 2,099 shares. Originally designed to both allow Specialist access for small, retail orders and to free up Floor traders for bigger, block deals, the DOT system had over time accommodated varieties of trading including “List DOT” (i.e., orders containing lists of various securities to be bought or sold) and Super DOT” (i.e., large) orders that equally allowed firms to enter orders directly from firm trading desks (thus bypassing the Floor “crowd”). Perhaps more importantly, the DOT system had grown in such efficiency that, by 1986, 92% of all DOT orders were “executed and reported back to the originating firm within two minutes.”32

Interestingly, it was this curious “List” or “program trading”33 that prompted the S.E.C. Report to note that, on October 20, 1987, “the NYSE requested that its members not use the DOT List processing feature for any program trades.”34

To be sure, the S.E.C. report clarified the disaster and updated the public on the workings of the exchanges. But the remedies would need to be implemented by those exchanges themselves. Faced with an unprecedented decline, a broad array of investors, and the more immedi-

31. The S.E.C. Report reads as follows:

Overall, the predominant source of selling pressure throughout the [October 19, 1987 trading] day was from institutional accounts, including portfolio insurance selling, mutual fund liquidations, margin liquidations, and selling by foreign accounts.. .The most significant factors during the afternoon downturn appear to have been the convergence of stock selling from index arbitrage and portfolio insurance strategies around 1:30-2:00, and continued selling from a broad range of sources including portfolio insurance strategies thereafter. .

*Id.* at 2-19. Conversely, a broader, less specialized clientele is cited for the amazing DJIA recovery of 102 points (5.88%) and record volume of 613.7 million shares on October 20th. *Id.* at 2-20.

32. *Id.* at 7-19 n. 61.

33. “Program Trading” is an automated hedging strategy defined by the NYSE as “a wide range of portfolio trading strategies involving the purchase or sale of 15 or more stocks having a total market value of $1 million or more.” See www.nyse.com/glossary/Glossary.html (last visited Oct. 8, 2009). In recent years, it has reached noteworthy proportions of overall trading at the NYSE; in June 2009, the practice accounted for, during one week, over 48% of all volume on the exchange. See http://www.nyse.com/pdfs/PT06.22-06.26.pdf (last visited Oct. 8, 2009).

ate concern of accommodating dramatically increased volume, the NYSE simply codified the practice it had quietly implemented during its October 1987 crisis of delaying orders and imploring its members to stop sending program trades. In effect, a market that strove to impress upon the public its speed and transparency would—in rare times of chaos—stop work and leave stock prices clouded.

**NYSE Rule 80B**

Implemented in 1988, the breaker is codified at NYSE Rule 80B, which reads as follows:

Rule 80B. Trading Halts Due to Extraordinary Market Volatility

(a) Trading in stocks shall halt on the Exchange and shall not reopen for the time periods described in this paragraph (a) if the Dow Jones Industrial Average reaches Level 1 below its closing value on the previous trading day:
   (i) before 2:00 p.m. Eastern time, for one hour;
   (ii) at or after 2:00 p.m. but before 2:30 p.m. Eastern time, for 30 minutes.

If the Dow Jones Industrial Average reaches Level 1 below its closing value on the previous trading day at or after 2:30 p.m. Eastern time, trading shall continue on the Exchange until the close, unless the Dow Jones Industrial Average reaches Level 2 below its closing value on the previous trading day, at which time trading shall be halted for the remainder of the day.

(b) Trading in stocks shall halt on the Exchange and shall not reopen for the time periods described in this paragraph (b) if the Dow Jones Industrial Average reaches Level 2 below its closing value on the previous trading day:
   (i) before 1:00 p.m. Eastern time, for two hours;
   (ii) at or after 1:00 p.m. but before 2:00 p.m. Eastern time, for one hour;
   (iii) at or after 2:00 p.m. Eastern time, for the remainder of the day.

(c) If the Dow Jones Industrial Average reaches Level 3 below its closing value on the previous trading day, trading in stocks shall halt on the Exchange and shall not reopen for the remainder of the day.

The key is the trigger points, which, as described earlier herein, were adjusted (belatedly) to a percentage scale in 1998. The original miscue in calibration arguably relegated the device to disuse: The only triggering of the Breaker between 1989 and 1998 was in 1997, when trading was halted (twice) in response to plummeting markets in the Far East.

The “Levels” are re-evaluated quarterly by the NYSE, and were adjusted in the fall of 2008 to read as follows:

- **Level 1 Halt (10% decline)**
  A 1,050-point drop in the DJIA before 2 p.m. will halt trading for one hour; for 30 minutes if between 2 p.m. and 2:30 p.m.; and have no effect if at 2:30 p.m. or later unless there is a level 2 halt.

- **Level 2 Halt (20% decline)**
  A 2,100-point drop in the DJIA before 1:00 p.m. will halt trading for two hours; for one hour if between 1:00 p.m. and 2:00 p.m.; and for the remainder of the day if at 2:00 p.m. or later.

- **Level 3 Halt (30% decline)**

35. Gasparino, *supra* note 25, at 58-60 (describing the NYSE’s suspension of Super DOT orders during the October Crash).


37. *See* Andriotis, *supra* note 18 (describing a 300-point plunge followed by a 200 point plunge later in the day).
A 3,150-point drop will halt trading for the remainder of the day regardless of when the decline occurs.\(^{38}\) The Breakers, inextricably tied to the DJIA for the prior quarter, are thus dependent upon the collective market movement of the most recent times; further, the chance of them being triggered is hampered by a robust Bull Market (as the DJIA enjoyed between 2003 and 2007). As has been aptly noted, the Breakers failed to “kick in” during a week in October 2008 in which the DJIA lost over 1,000 points or on any of the alarmingly volatile trading days starting in the summer of 2008.\(^{39}\) The drastic declines prompting their use, the infrequent adjustment of the trigger points, and the one-day nature of that trigger analysis have all lead to the tool’s infrequent invocation, thus lending support to the argument that the Breaker’s value lies much more in a psychological barrier to continued institutional selling than to a halt to widespread market panic.\(^{40}\)

Better Brakes

It seems clear that, as either an imaginary fence or a practical wall, the breakers’ greatest effect will be on the behavior of the institutions and the experts, who, situated literally or figuratively on the Exchange Floor, are most likely to augment a decline and thus warrant a “cooling off period.” The circuit breaker is simply not designed to curb the “irrational exuberance” of the masses popularized throughout the ages.

With that and other observations in mind, the author suggests three overall conclusions:

“Panic selling” as we know it (i.e., wild market swings evidencing unpredictability and volatility) are rarely the result of the impulse desires of novice market participants. In fact, “market corrections” are largely effected and perpetuated by professionals. Further, the retail player now controls less than half of the market. As recently as June 2009, million share “program trades” constituted nearly 50% of the daily trading volume of the NYSE,\(^{41}\) thus raising the threshold question of whether measures aimed at a retail order flow will impact a market governed by the professional trader.

Circuit breakers are created and maintained solely by entities with a vested interest in the market remaining open; viewed in this light, the stopgaps are but figurative concessions to regulators fearful of an unarrestable decline.

These two points are underscored by the original and continuing rationale for Circuit Breakers: As a response to an un-

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40. See supra note 36 and accompanying text.
41. See supra n. 33.
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preceded spiral of decline in October 1987, and as an unseen wall to program trading profits in more modern times. Yet, as the politicians and pundits alike clamor for the return of the retail investor to the stock market, little is being done to examine how such investors benefit from a market that strives to avoid periods of “extraordinary market volatility.”

Concomitantly, the author suggests the following measures as necessary necessities talking points as we endeavor to unravel the market problems of 2007-2010:

**FREQUENCY**
The Circuit Breakers need to be reset more often and in more meaningful fashion.

**PRECISION**
The weeds need to be separated from the oak trees. Should all trading stop on frantic trading days, or should the exchanges make more use of their universal abilities to halt trading in a particular stock?

**UNIFORMITY**
The logical theory posits that irrational exuberance should be limited on the way up in addition to the way down; concomitantly, the logical means should require breakers to kick in when stocks rise more than X % in any given trading hour, session, or day.

**REGULATION**
For all the reasons discussed in this paper, the S.E.C. needs to play a more active role in a field traditionally delegated to the various exchanges. The White House’s Financial Regulatory Reform plan of June 2009 perhaps dangerously continues a trend of too much delegation of market oversight to the market itself.

**EDUCATION**
The retail investor must appreciate that these artificial halts were designed to both restrain and protect the institutional players that were thought to have come dangerously close to pitting the market in 1987. Although touted by exchanges as surge protectors (an illusion occasionally reinforced by the press), a delay of 1 hour, 2 hours, or even a trading day will rarely shield an investment in a 401k or college savings plan.

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45. See *Exchanges — Circuit Breakers, Curbs and Other Trading Restrictions*, supra note 34 (“The circuit breakers cut off the automated program trading initiated by the big brokerage houses. . . This automated connection allows them to short-cut the individual investors who must go through the brokers and specialists of the stock exchanges.”).
IV. Conclusion

As the great Twain also penned, "History shows that the moral sense enables us to see morality and how to avoid it." \(^{46}\) Likewise, Circuit Breakers serve best to remind us when volatility has become intolerable, but the measures do little in practical terms to stymie insufferable declines. The optimal solution to our cascading markets would probably lie in communication of truly material events, faster appreciation of market forces and trends, and linked markets (worldwide). But in the interim, artificial brakes remain the best means of staving off a complete market meltdown. The trick thus becomes making such brakes more flexible, more utilized, and more consistent with the findings resulting from S.E.C. scrutiny.

Moving forward, as our Congress and others complete the autopsy on the 14,000 DJIA, painful questions need be addressed. Why have the stock exchanges acted as steadfast spectators to a disastrous downturn that the public has been reminded of on a daily basis? As is abundantly clear, we are in our darkest hour since 1929. \(^{47}\) Why has the S.E.C. relegated supervision of trading starts and stops to the exchanges themselves, the very participants who most immediately profit from trading volume? And why does an active government extol market indices when such crude numbers belie a complicated and diverse bazaar of economic activity? If current events do not succeed in triggering these inquiries, then perhaps exchanges and indices are best forever left to the vested interests that propel such measures and markets forward, and market players best left to continue rooting for their own little slice of volatility.


\(^{47}\) See, e.g., Washington Lawyer, July/August 2009, 24 ("As the nation plods through the worst recession since the Great Depression").