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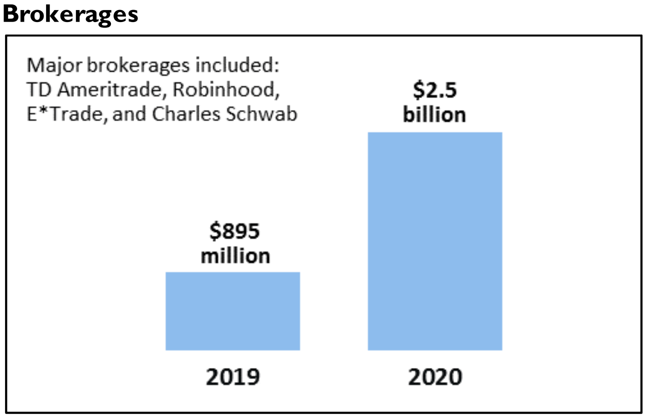
Broker-Dealers and Payment for Order Flow

Introduction

The last few years have witnessed an unprecedented surge in retail investor securities trading at major discount broker-dealers such as Robinhood, Charles Schwab, TD Ameritrade, and E*Trade. Among the factors that have driven this are the zero trading commissions that many of them now charge for trades. The non-existent commissions are often subsidized by a controversial rebate to the broker-dealers called *payment for order flow* (PFOF).

Market makers, alternatively known as wholesalers, make cash payments to retail broker-dealer firms in exchange for marketable retail customer stock order flows. In return for this PFOF, market makers such as Citadel, Virtu, Susquehanna, Wolverine, and Morgan Stanley typically execute the orders in-house, called internalization. Market makers also pay broker-dealers significant amounts of PFOF for order flow from stock options—contracts that give an investor the right, but not the obligation, to buy or sell a stock at an agreed-upon price and date. Such trades are generally not internalized but are instead routed to options exchanges such as the CBOE Options Exchange.

Figure 1. Aggregate PFOF Revenue from Four Major Brokerages



Source: CRS, with data from Alphacution.

Notes: PFOF = Payment for order flow.

Reporting from Alphacution, a research firm, indicates that aggregate PFOF revenue nearly tripled at four major broker-dealers—TD Ameritrade, Robinhood, E*Trade, and Charles Schwab—to $2.5 billion in 2020 from $892 million in 2019. By various accounts, PFOF has played a significant role in helping to lower retail broker-dealer commissions and then helping to usher in the more recent era of Robinhood-pioneered zero trading commissions. And because of this, it has indirectly helped generate a surge in retail securities investing, which, according to the investment bank Piper Sandler, grew from 13% of total trading share volume in December 2019 to 23% in December 2020.

Alphacution also reported that stock options—which have been described as an "accelerant" in the speculative trading of "meme" stocks such as GameStop, AMC, Blackberry, and Bed Bath and Beyond—accounted for 61% of total PFOF in 2020.

Market Makers

Broker-dealers receive small payments, typically in fractions of a penny per share, as their compensation for routing orders to market makers. For major broker-dealers, those pennies substantially add up. For example, total PFOF revenue for the first half of 2020 were as follows: $271.2 million for Robinhood, $120.1 million for Charles Schwab, $189.98 million for E*Trade, and $526.59 million for Ameritrade.

So why are market makers willing to spend such sums for stock order flow? According to Georgetown University finance professor James Angel:

> [M]arket makers offer to buy from customers at their bid price and sell to them at a slightly higher offer or ask price. Competition from market makers and other investors keeps the "bid-ask spread" between the bid and ask prices quite small. The market makers are selling the service of convenience for investors who want to trade quickly. They are not long-term investors, nor should they be. Market makers particularly like to take the other side of small retail trades because they know that those retail traders are not sophisticated institutional investors such as hedge funds. Market makers know that they can lose when they trade with large institutions that know more than they do. Market makers can buy from a retail order at the bid and sell at the ask or offer and pocket the bid-ask spread. They don't need to worry that retail investors as a group have better information and will dump shares on the market maker just before bad news is announced. Competition among market makers for retail order flow is so intense that market makers are willing to pay for order flow and offer various levels of "price improvement"—prices better than the national best bid and offer (NBBO) prices [the best prevailing offers to sell and buy a given stock across various trading venues].

Best Execution

For decades, PFOF has been the subject of policy debates on its merits and shortcomings by regulators, industry stakeholders, academics, and Members of Congress. The uproar in the winter of 2021 surrounding the behavior of

GameStop stock, which was traded by various broker-dealers who received PFOF, has renewed such debates. At the center of policy debates over the arrangements is the broker-dealer's *duty of best execution* with respect to the execution of customer trades, a duty that is chiefly enforced by the frontline regulator of broker-dealers, the Financial Industry Regulatory Authority (FINRA), regulated by the Securities and Exchange Commission (SEC). *Best execution* denotes the broker-dealer's obligation to seek the most favorable terms for a customer's transaction in the context of the prevailing circumstances. Compliance parameters are dictated by a mix of FINRA-based rules, notably Rule 5310, federal securities statutes, and court rulings.

Among the factors that may be considered in the fulfillment of the obligation are the terms of the execution price, the speed of execution, available execution order sizes, the security's trading characteristics, the likelihood of price improvement, and the presence of PFOF.

The Debate over Conflicts of Interest

At the heart of the ongoing policy debate over PFOF are long-term concerns that the arrangement may compromise the broker-dealer's duty of best execution. Advocates of PFOF argue that the arrangement indirectly benefits investors by subsidizing low or zero commission rates and other services. In addition, they note that marketable retail orders that tend to be routed to the PFOF rebaters must be executed under best execution protocols and are done at the NBBO or at a price that improves on it. By contrast, critics, including some former SEC officials, say that because broker-dealers do not generally pass the PFOF rebates onto their clients, they may have economic incentives to send retail orders to rebating market makers, creating potential conflicts over their duty of best execution. PFOF has been effectively banned in the United Kingdom due to conflict-of-interest concerns.

Prior to the widespread advent of zero commissions, a 2018 book, *the New Stock Market*, by Glosten and Rauterberg from Columbia University Press, argued that "the key question, thus, is whether brokers pass on to customers the substantial payments they receive for order flow in the form of lower commissions, given that internalizers offer only nominal price improvement. Still, if there is a problem, passing through the payments would solve it."

The Regulation of PFOF

The SEC's regulatory approach to PFOF basically involves disclosing its existence.

Rule 606. Under Rule 606(a) of Regulation National Market System (Regulation NMS), adopted by the SEC under the Securities Exchange Act, broker-dealers must provide quarterly, aggregated public disclosure of their practices in the routing and handling of "held orders" requiring prompt execution at the best possible price. Generally upon a customer's request, under Rule 606(b) of Regulation NMS, a broker-dealer must provide customer-specific disclosures related to the routing and execution of the customer's exchange-listed securities submitted on a "not held" basis that gives the broker-dealer both time and price discretion during the prior six months.

Rule 607. Under Rule 607 of Regulation NMS, broker-dealers must, upon opening a new customer's account, provide annual descriptions of the terms of any payments received for order flow and any profit-sharing arrangements that may influence a broker-dealer's order routing decision.

The 2020 SEC Robinhood Settlement

Providing some ammunition to PFOF detractors, in December 2020, Robinhood agreed to pay $65 million to settle charges from the SEC that between 2015 and 2018, it had misled clients on its PFOF revenue and the quality of its service, which the agency said had cost its customers $34 million. Robinhood's chief counsel said that the practices do not reflect the current company.

The Biden Nominee for SEC Chair

During a March 2, 2021, Senate Banking, Housing, and Urban Affairs Committee hearing, Gary Gensler, President Biden's nominee for SEC chair, said that the agency would examine "how to ensure that customers still get best execution in the face of payment for order flow."

Academic Research

Some related academic research has recently been conducted. For example, in 2021 research, Adams and Kasten found that the adoption of PFOF-facilitated zero commissions led to improved trade execution quality. And 2020 research by Jain, Mishra, O'Donoghue, and Zhao found that PFOF-facilitated zero commissions led to overall improvements in market quality. By contrast, according to a 2016 study by the CFA Institute, a group that certifies investment managers, trades executed at the best-quoted prices surged after the United Kingdom effectively banned PFOF.

Some Policy Options

A number of policy changes concerning PFOF have been suggested by observers, including:

- Banning PFOF, which could entail a significant rise in broker-dealer commissions;
- Enabling investors to opt out of PFOF while maintaining market access; and
- Requiring broker-dealers to produce execution quality statistics for their clients.

Related CRS Products

CRS In Focus IF11663, *Robinhood, the Fintech Discount Broker: Recent Developments and Concerns*, by Gary Shorter.

CRS Insight IN11591, *GameStop-Related Market Volatility: Policy Issues*, by Eva Su.

Gary Shorter, Specialist in Financial Economics

IF11800

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