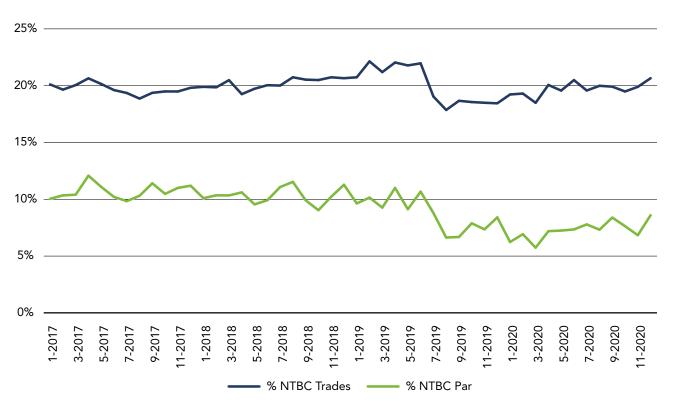


Non-Transaction Based Compensation (NTBC) Trade Reporting

In August 2016, amendments to MSRB Rule G-14 required dealers to use a non-transaction-based compensation (NTBC) special condition indicator when reporting certain trades to the MSRB's Real Time Transaction Reporting System (RTRS). As stated in the G-14 interpretative guidance, "the NTBC indicator is intended to distinguish all customer transactions that do not include a transaction-based compensation component from those transactions that do include a mark-up, mark-down or commission."

While there have been notable changes in the overall municipal market since the implementation of the NTBC indicator in August 2016, likely related to use of Separately Managed Accounts (SMAs) and mutual funds, there have not been analogous shifts in transactions flagged as NTBC. On average, 20% of customer trades have been flagged as NTBC each year since 2017, while the proportion of par traded in NTBC trades has decreased from 11% in 2017 to 7% in 2020. (See Figure 1.)

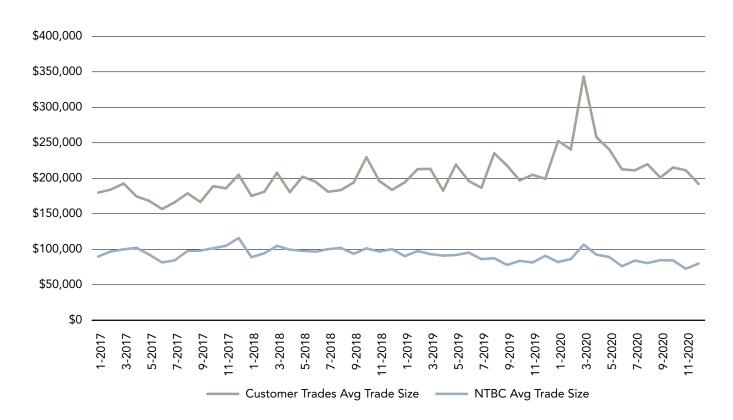
FIGURE 1: PERCENT OF CUSTOMER TRADES AND PAR REPORTED AS NTBC—OVERALL MARKET, 2017–2020



¹ All following analysis excludes trades of variable rate bonds and short-term instruments under nine months including variable rate instruments, auction rate products and commercial paper.

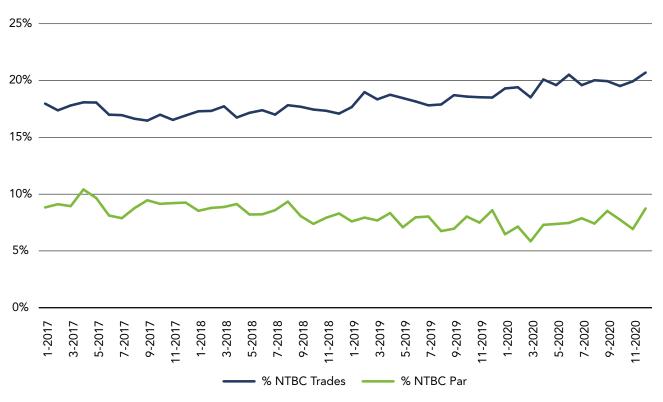
Overall, average trade size for all customer trades has increased 34% since 2017, with an annual average trade size of \$179,188 in 2017 and \$240,266 in 2020. (See Figure 2.) This comes as par traded increased 16% and number of trades decreased 13% over that same period. This increase is driven largely by an increase in institutional-sized customer purchases and a decrease in individual investor-sized customer purchases, as discussed in detail in the recently published report "Municipal Securities Market Sees Noticeable Shift in Buying Patterns." However, NTBC trades have seen little change in average trade size, from an annual average trade size of \$97,032 in 2017 to \$86,220 in 2020, down 11% overall. In 2020, there were 14% fewer NTBC trades and 24% less par traded in NTBC trades compared to 2017.

FIGURE 2: AVERAGE TRADE SIZE FOR CUSTOMER TRADES AND NTBC TRADES, 2017-2020



A significant and sudden decrease in customer trading activity using the NTBC indicator in June 2019 is visible in Figure 1. This aligns with a change in business models by certain firm(s) in the municipal bond market, which led to significantly fewer reported NTBC trades. When those firm(s) are removed from the analysis, the June 2019 decrease is eliminated; the percent of customer trades reported as NTBC appears to slightly increase from 2017 to 2020; and the percent of par reported as NTBC decreases less, moving from 9% of par in 2017 to 7% of par in 2020, compared to 11% of par in 2017 and 7% of par in 2020 when those firm(s) are included. (See Figure 3.)

FIGURE 3: PERCENT OF CUSTOMER TRADES AND PAR REPORTED AS NTBC—WITH EXCLUSIONS², 2017–2020



Overall, the percentage of customer trades reported with the NTBC indicator has remained steady at 20% since 2017 while the percentage of par has dropped below 10%. On average, NTBC trades are smaller than other customer trades and trading patterns can be greatly impacted by changing business models at broker dealers.

² Excludes firm(s) whose business models changed in 2019, leading to a sudden decrease in the number of reported NTBC trades.



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