

The Poor Performance of Individuals in the Brazilian Stock Market

Bruno Giovannetti (EESP-FGV)

CVM Conference
2018

Goal

- This is a description of the performance of individual investors in the Brazilian stock market: individuals who **directly** trade in the stock market

Goal

- This is a description of the performance of individual investors in the Brazilian stock market: individuals who **directly** trade in the stock market
- We use the **complete** stock trading activity of all individuals in Brazil from January 1st 2012 to August 16th 2017 (data from CVM, the Brazilian stock market regulator)

Goal

- This is a description of the performance of individual investors in the Brazilian stock market: individuals who **directly** trade in the stock market
- We use the **complete** stock trading activity of all individuals in Brazil from January 1st 2012 to August 16th 2017 (data from CVM, the Brazilian stock market regulator)
- Individuals perform worse than the market portfolio

Goal

- This is a description of the performance of individual investors in the Brazilian stock market: individuals who **directly** trade in the stock market
- We use the **complete** stock trading activity of all individuals in Brazil from January 1st 2012 to August 16th 2017 (data from CVM, the Brazilian stock market regulator)
- Individuals perform worse than the market portfolio
- This is consistent with other international datasets (US, Taiwan, and Finland)

Goal

- This is a description of the performance of individual investors in the Brazilian stock market: individuals who **directly** trade in the stock market
- We use the **complete** stock trading activity of all individuals in Brazil from January 1st 2012 to August 16th 2017 (data from CVM, the Brazilian stock market regulator)
- Individuals perform worse than the market portfolio
- This is consistent with other international datasets (US, Taiwan, and Finland)
- We believe that reporting these results for Brazil can be useful for local practitioners; individuals should be aware that **actively** trading stocks may lead to losses; simply investing in a well-diversified portfolio is in general a better idea

Individuals participation in the stock market

- For each individual-stock-day we observe the quantity of stocks the investor buys and sells and the volume the investor buys and sells

Individuals participation in the stock market

- For each individual-stock-day we observe the quantity of stocks the investor buys and sells and the volume the investor buys and sells
- We can follow individuals over time using an [anonymous](#) identification number

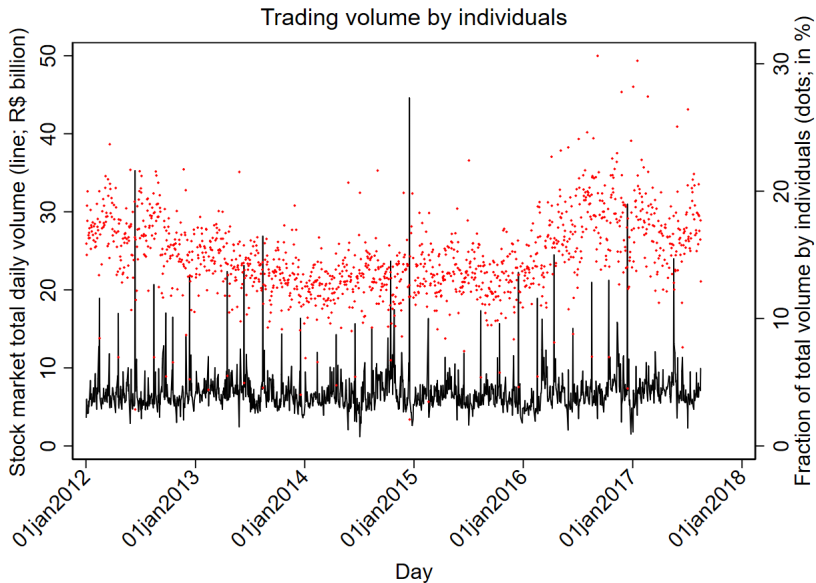
Individuals participation in the stock market

- For each individual-stock-day we observe the quantity of stocks the investor buys and sells and the volume the investor buys and sells
- We can follow individuals over time using an **anonymous** identification number
- From January 1st 2012 to August 16th 2017, a total of **903,617** different individuals traded stocks

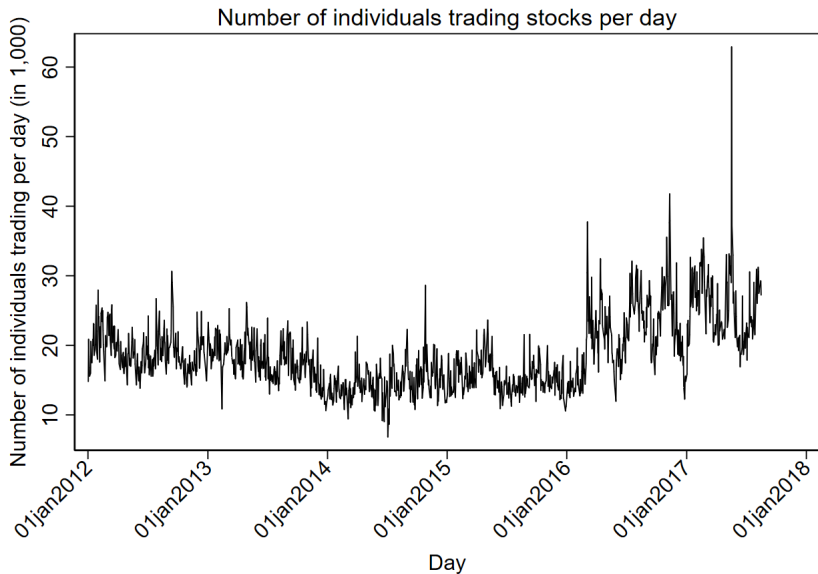
Individuals participation in the stock market

- For each individual-stock-day we observe the quantity of stocks the investor buys and sells and the volume the investor buys and sells
- We can follow individuals over time using an **anonymous** identification number
- From January 1st 2012 to August 16th 2017, a total of **903,617** different individuals traded stocks
 - ▶ the anonymous identification numbers that we received from CVM are assigned to the pair individual-broker. That is, if the same individual trades using two different brokerage houses we observe two different numbers. Hence, the real number of different individuals who traded stocks from January 1st 2012 to August 16th 2017 should be lower than 903,617

Individuals participation in the stock market



Individuals participation in the stock market



Buy-and-hold trades

Performance as a group

- We first compute the performance of individual investors **as a group**

Performance as a group

- We first compute the performance of individual investors **as a group**
 - ▶ we aggregate to the stock-day level all purchases and sales by individual investors (excluding day-trades, which are analyzed later in isolation)

Performance as a group

- We first compute the performance of individual investors **as a group**
 - ▶ we aggregate to the stock-day level all purchases and sales by individual investors (excluding day-trades, which are analyzed later in isolation)
 - ▶ we keep the stock-days with **positive net volume** (stock-day pairs for which individual investors, as a group, were net buyers)

Performance as a group

- We first compute the performance of individual investors **as a group**
 - ▶ we aggregate to the stock-day level all purchases and sales by individual investors (excluding day-trades, which are analyzed later in isolation)
 - ▶ we keep the stock-days with **positive net volume** (stock-day pairs for which individual investors, as a group, were net buyers)
 - ▶ we compute the profit considering they sell 5, 10, 20, 40, 60, 80, 100, 120, and 240 trading days after the days with positive net volume

Performance as a group

- We first compute the performance of individual investors **as a group**
 - ▶ we aggregate to the stock-day level all purchases and sales by individual investors (excluding day-trades, which are analyzed later in isolation)
 - ▶ we keep the stock-days with **positive net volume** (stock-day pairs for which individual investors, as a group, were net buyers)
 - ▶ we compute the profit considering they sell 5, 10, 20, 40, 60, 80, 100, 120, and 240 trading days after the days with positive net volume
 - ▶ to compute the profit we use **excess returns**, the difference between the stock return h days ahead and the market return h days ahead, computed using closing prices adjusted for dividends

Performance as a group

- We first compute the performance of individual investors **as a group**
 - ▶ we aggregate to the stock-day level all purchases and sales by individual investors (excluding day-trades, which are analyzed later in isolation)
 - ▶ we keep the stock-days with **positive net volume** (stock-day pairs for which individual investors, as a group, were net buyers)
 - ▶ we compute the profit considering they sell 5, 10, 20, 40, 60, 80, 100, 120, and 240 trading days after the days with positive net volume
 - ▶ to compute the profit we use **excess returns**, the difference between the stock return h days ahead and the market return h days ahead, computed using closing prices adjusted for dividends
 - ★ by using excess returns, we measure the **relative performance** with respect to a passive investor who simply buys the market portfolio

Performance as a group

- We first compute the performance of individual investors **as a group**
 - ▶ we aggregate to the stock-day level all purchases and sales by individual investors (excluding day-trades, which are analyzed later in isolation)
 - ▶ we keep the stock-days with **positive net volume** (stock-day pairs for which individual investors, as a group, were net buyers)
 - ▶ we compute the profit considering they sell 5, 10, 20, 40, 60, 80, 100, 120, and 240 trading days after the days with positive net volume
 - ▶ to compute the profit we use **excess returns**, the difference between the stock return h days ahead and the market return h days ahead, computed using closing prices adjusted for dividends
 - ★ by using excess returns, we measure the **relative performance** with respect to a passive investor who simply buys the market portfolio
 - ★ by using closing prices we **abstract from bid-ask spreads**

Performance as a group

- We first compute the performance of individual investors **as a group**
 - ▶ we aggregate to the stock-day level all purchases and sales by individual investors (excluding day-trades, which are analyzed later in isolation)
 - ▶ we keep the stock-days with **positive net volume** (stock-day pairs for which individual investors, as a group, were net buyers)
 - ▶ we compute the profit considering they sell 5, 10, 20, 40, 60, 80, 100, 120, and 240 trading days after the days with positive net volume
 - ▶ to compute the profit we use **excess returns**, the difference between the stock return h days ahead and the market return h days ahead, computed using closing prices adjusted for dividends
 - ★ by using excess returns, we measure the **relative performance** with respect to a passive investor who simply buys the market portfolio
 - ★ by using closing prices we **abstract from bid-ask spreads**
 - ★ furthermore, the profit computation does **not consider trading fees**

Performance as a group

- Individuals, as a group, make **bad buying decisions**

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy
 - ▶ minus R\$ 469 million, if they sell 10 trading days after they buy

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy
 - ▶ minus R\$ 469 million, if they sell 10 trading days after they buy
 - ▶ minus R\$ 877 million, if they sell 20 trading days after they buy

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy
 - ▶ minus R\$ 469 million, if they sell 10 trading days after they buy
 - ▶ minus R\$ 877 million, if they sell 20 trading days after they buy
 - ▶ minus R\$ 1.13 billion, if they sell 40 trading days after they buy

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy
 - ▶ minus R\$ 469 million, if they sell 10 trading days after they buy
 - ▶ minus R\$ 877 million, if they sell 20 trading days after they buy
 - ▶ minus R\$ 1.13 billion, if they sell 40 trading days after they buy
 - ▶ minus R\$ 1.18 billion, if they sell 60 trading days after they buy

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy
 - ▶ minus R\$ 469 million, if they sell 10 trading days after they buy
 - ▶ minus R\$ 877 million, if they sell 20 trading days after they buy
 - ▶ minus R\$ 1.13 billion, if they sell 40 trading days after they buy
 - ▶ minus R\$ 1.18 billion, if they sell 60 trading days after they buy
 - ▶ minus R\$ 1.26 billion, if they sell 80 trading days after they buy

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy
 - ▶ minus R\$ 469 million, if they sell 10 trading days after they buy
 - ▶ minus R\$ 877 million, if they sell 20 trading days after they buy
 - ▶ minus R\$ 1.13 billion, if they sell 40 trading days after they buy
 - ▶ minus R\$ 1.18 billion, if they sell 60 trading days after they buy
 - ▶ minus R\$ 1.26 billion, if they sell 80 trading days after they buy
 - ▶ minus R\$ 1.42 billion, if they sell 100 trading days after they buy

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy
 - ▶ minus R\$ 469 million, if they sell 10 trading days after they buy
 - ▶ minus R\$ 877 million, if they sell 20 trading days after they buy
 - ▶ minus R\$ 1.13 billion, if they sell 40 trading days after they buy
 - ▶ minus R\$ 1.18 billion, if they sell 60 trading days after they buy
 - ▶ minus R\$ 1.26 billion, if they sell 80 trading days after they buy
 - ▶ minus R\$ 1.42 billion, if they sell 100 trading days after they buy
 - ▶ minus R\$ 1.38 billion, if they sell 120 trading days after they buy

Performance as a group

- Individuals, as a group, make **bad buying decisions**
- Considering the complete trading activity by individuals from January 1st 2012 to August 16th 2017, the total **gross** profit was
 - ▶ minus R\$ 236 million, if they sell 5 trading days after they buy
 - ▶ minus R\$ 469 million, if they sell 10 trading days after they buy
 - ▶ minus R\$ 877 million, if they sell 20 trading days after they buy
 - ▶ minus R\$ 1.13 billion, if they sell 40 trading days after they buy
 - ▶ minus R\$ 1.18 billion, if they sell 60 trading days after they buy
 - ▶ minus R\$ 1.26 billion, if they sell 80 trading days after they buy
 - ▶ minus R\$ 1.42 billion, if they sell 100 trading days after they buy
 - ▶ minus R\$ 1.38 billion, if they sell 120 trading days after they buy
 - ▶ minus R\$ 1.00 billion, if they sell 240 trading days after they buy

Average individual

- The average return of the **average individual** is also negative

Average individual

- The average return of the **average individual** is also negative
- For each individual we compute his total volume invested in the whole period

Average individual

- The average return of the **average individual** is also negative
- For each individual we compute his total volume invested in the whole period
- We then compute a weighted-average of the returns following all his purchases, using the volume of each purchase divided by his total volume invested as the weight

Average individual

- The average return of the **average individual** is also negative
- For each individual we compute his total volume invested in the whole period
- We then compute a weighted-average of the returns following all his purchases, using the volume of each purchase divided by his total volume invested as the weight
- As before, we (i) use **excess returns**, (ii) **abstract for trading fees and bid-ask spreads**, and (iii) consider 5, 10, 20, 40, 60, 80, 100, 120, and 240-day horizons

Average individual

- The average return of the **average individual** is also negative
- For each individual we compute his total volume invested in the whole period
- We then compute a weighted-average of the returns following all his purchases, using the volume of each purchase divided by his total volume invested as the weight
- As before, we (i) use **excess returns**, (ii) **abstract for trading fees and bid-ask spreads**, and (iii) consider 5, 10, 20, 40, 60, 80, 100, 120, and 240-day horizons
- We compute the average return of each individual and then the average of this variable across all individuals

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy
 - ▶ $[-0.63\%, -0.60\%]$, if they sell 10 trading days after they buy

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy
 - ▶ $[-0.63\%, -0.60\%]$, if they sell 10 trading days after they buy
 - ▶ $[-1.12\%, -1.07\%]$, if they sell 20 trading days after they buy

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy
 - ▶ $[-0.63\%, -0.60\%]$, if they sell 10 trading days after they buy
 - ▶ $[-1.12\%, -1.07\%]$, if they sell 20 trading days after they buy
 - ▶ $[-1.24\%, -1.18\%]$, if they sell 40 trading days after they buy

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy
 - ▶ $[-0.63\%, -0.60\%]$, if they sell 10 trading days after they buy
 - ▶ $[-1.12\%, -1.07\%]$, if they sell 20 trading days after they buy
 - ▶ $[-1.24\%, -1.18\%]$, if they sell 40 trading days after they buy
 - ▶ $[-1.39\%, -1.30\%]$, if they sell 60 trading days after they buy

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy
 - ▶ $[-0.63\%, -0.60\%]$, if they sell 10 trading days after they buy
 - ▶ $[-1.12\%, -1.07\%]$, if they sell 20 trading days after they buy
 - ▶ $[-1.24\%, -1.18\%]$, if they sell 40 trading days after they buy
 - ▶ $[-1.39\%, -1.30\%]$, if they sell 60 trading days after they buy
 - ▶ $[-1.37\%, -1.28\%]$, if they sell 80 trading days after they buy

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy
 - ▶ $[-0.63\%, -0.60\%]$, if they sell 10 trading days after they buy
 - ▶ $[-1.12\%, -1.07\%]$, if they sell 20 trading days after they buy
 - ▶ $[-1.24\%, -1.18\%]$, if they sell 40 trading days after they buy
 - ▶ $[-1.39\%, -1.30\%]$, if they sell 60 trading days after they buy
 - ▶ $[-1.37\%, -1.28\%]$, if they sell 80 trading days after they buy
 - ▶ $[-1.59\%, -1.48\%]$, if they sell 100 trading days after they buy

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy
 - ▶ $[-0.63\%, -0.60\%]$, if they sell 10 trading days after they buy
 - ▶ $[-1.12\%, -1.07\%]$, if they sell 20 trading days after they buy
 - ▶ $[-1.24\%, -1.18\%]$, if they sell 40 trading days after they buy
 - ▶ $[-1.39\%, -1.30\%]$, if they sell 60 trading days after they buy
 - ▶ $[-1.37\%, -1.28\%]$, if they sell 80 trading days after they buy
 - ▶ $[-1.59\%, -1.48\%]$, if they sell 100 trading days after they buy
 - ▶ $[-1.43\%, -1.32\%]$, if they sell 120 trading days after they buy

Average individual

- The average return of the average individual lies within the following 95% confidence intervals:
 - ▶ $[-0.29\%, -0.27\%]$, if they sell 5 trading days after they buy
 - ▶ $[-0.63\%, -0.60\%]$, if they sell 10 trading days after they buy
 - ▶ $[-1.12\%, -1.07\%]$, if they sell 20 trading days after they buy
 - ▶ $[-1.24\%, -1.18\%]$, if they sell 40 trading days after they buy
 - ▶ $[-1.39\%, -1.30\%]$, if they sell 60 trading days after they buy
 - ▶ $[-1.37\%, -1.28\%]$, if they sell 80 trading days after they buy
 - ▶ $[-1.59\%, -1.48\%]$, if they sell 100 trading days after they buy
 - ▶ $[-1.43\%, -1.32\%]$, if they sell 120 trading days after they buy
 - ▶ $[-2.06\%, -1.88\%]$, if they sell 240 trading days after they buy

Bid-ask spread

- On the top of their trading losses, individuals have to pay **bid-ask spreads** (and trading fees)

Bid-ask spread

- On the top of their trading losses, individuals have to pay **bid-ask spreads** (and trading fees)
- By dividing the volume purchased (on a day, in a stock, by an individual) by the quantity purchased, we obtain the average price of the purchase

Bid-ask spread

- On the top of their trading losses, individuals have to pay **bid-ask spreads** (and trading fees)
- By dividing the volume purchased (on a day, in a stock, by an individual) by the quantity purchased, we obtain the average price of the purchase
- We divide this average price of the purchase by the closing price of the day. A number greater than one indicates that individuals would be better off by, instead of choosing a time to buy the stock during the day, simply buying at the daily closing auction (they would then avoid the bid-ask spread)

Bid-ask spread

- On the top of their trading losses, individuals have to pay **bid-ask spreads** (and trading fees)
- By dividing the volume purchased (on a day, in a stock, by an individual) by the quantity purchased, we obtain the average price of the purchase
- We divide this average price of the purchase by the closing price of the day. A number greater than one indicates that individuals would be better off by, instead of choosing a time to buy the stock during the day, simply buying at the daily closing auction (they would then avoid the bid-ask spread)
- The average of this ratio across all 16,612,439 investor-stock-day purchases is 1.002694, indicating that the average (effective) bid-ask spread paid by individual investors is 0.2694%

Day-trading in stocks

Day-trades

- From January 1st 2012 to August 16th 2017, a total of 182,794 different individuals did at least one day-trade using stocks

Day-trades

- From January 1st 2012 to August 16th 2017, a total of 182,794 different individuals did at least one day-trade using stocks
- A day-trade is an individual-stock-day observation with quantity purchased equal to quantity sold

Day-trades

- From January 1st 2012 to August 16th 2017, a total of 182,794 different individuals did at least one day-trade using stocks
- A day-trade is an individual-stock-day observation with quantity purchased equal to quantity sold
- There are 8,289,233 day-trades in the period made by individuals

Day-trades

- From January 1st 2012 to August 16th 2017, a total of 182,794 different individuals did at least one day-trade using stocks
- A day-trade is an individual-stock-day observation with quantity purchased equal to quantity sold
- There are 8,289,233 day-trades in the period made by individuals
- For each day-trade we compute the profit of a day-trade as the volume sold minus volume purchased (hence, **the profit does not consider trading costs**)

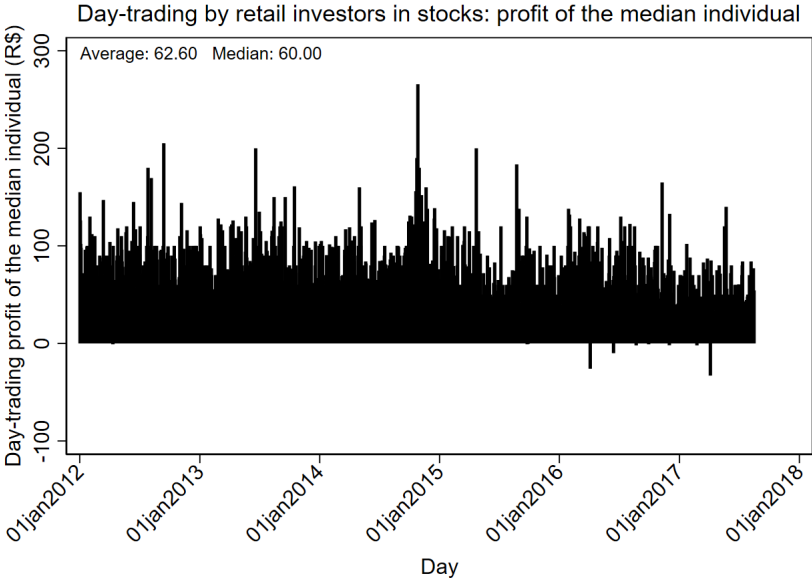
Day-trades

- From January 1st 2012 to August 16th 2017, a total of 182,794 different individuals did at least one day-trade using stocks
- A day-trade is an individual-stock-day observation with quantity purchased equal to quantity sold
- There are 8,289,233 day-trades in the period made by individuals
- For each day-trade we compute the profit of a day-trade as the volume sold minus volume purchased (hence, **the profit does not consider trading costs**)
 - ▶ From January 1st 2012 to August 16th 2017, day-trading stocks generated a total of R\$ 648 million in **gross** profits to individuals

Day-trades

- From January 1st 2012 to August 16th 2017, a total of 182,794 different individuals did at least one day-trade using stocks
- A day-trade is an individual-stock-day observation with quantity purchased equal to quantity sold
- There are 8,289,233 day-trades in the period made by individuals
- For each day-trade we compute the profit of a day-trade as the volume sold minus volume purchased (hence, **the profit does not consider trading costs**)
 - ▶ From January 1st 2012 to August 16th 2017, day-trading stocks generated a total of R\$ 648 million in **gross** profits to individuals
 - ▶ The **average gross profit per day-trade** is R\$ 60.60. This should be hardly sufficient to cover trading costs

Day-trades



Conclusions

Conclusions

Average individual

Conclusions

Average individual

Buy-and-hold

Day-trading

Conclusions

Average individual

Buy-and-hold

Day-trading

Active trading leads to
losses even before trading costs
are considered

Conclusions

Average individual

Buy-and-hold

Day-trading

Active trading leads to
losses even before trading costs
are considered

Losses: worse than random (market)...

Conclusions

Average individual

Buy-and-hold

Day-trading

Active trading leads to
losses even before trading costs
are considered

Losses: worse than random (market)...

How come? Behavioral biases

Conclusions

Average individual

Buy-and-hold

Day-trading

Active trading leads to
losses even before trading costs
are considered

Small profit before trading costs
(R\$ 60 per day)

Losses: worse than random (market)...

How come? Behavioral biases

Conclusions

Average individual

Buy-and-hold

Day-trading

Active trading leads to
losses even before trading costs
are considered

Small profit before trading costs
(R\$ 60 per day)

Losses: worse than random (market)...

Trading costs should bring this close to zero
or even negative

How come? Behavioral biases

Conclusions

- Perverse trading ability is due to **behavioral biases**

Conclusions

- Perverse trading ability is due to **behavioral biases**
 - ▶ We (research group at EESP-FGV) have been studying the behavioral biases of Brazilian investors

Conclusions

- Perverse trading ability is due to **behavioral biases**
 - ▶ We (research group at EESP-FGV) have been studying the behavioral biases of Brazilian investors
 - ★ disposition effect (loss aversion)

Conclusions

- Perverse trading ability is due to **behavioral biases**
 - ▶ We (research group at EESP-FGV) have been studying the behavioral biases of Brazilian investors
 - ★ disposition effect (loss aversion)
 - ★ low diversification (overconfidence)

Conclusions

- Perverse trading ability is due to **behavioral biases**
 - ▶ We (research group at EESP-FGV) have been studying the behavioral biases of Brazilian investors
 - ★ disposition effect (loss aversion)
 - ★ low diversification (overconfidence)
 - ★ purchases of salient stocks (limited attention)

Conclusions

- Perverse trading ability is due to **behavioral biases**
 - ▶ We (research group at EESP-FGV) have been studying the behavioral biases of Brazilian investors
 - ★ disposition effect (loss aversion)
 - ★ low diversification (overconfidence)
 - ★ purchases of salient stocks (limited attention)
 - ★ preferences for lottery-like (loss aversion)

Conclusions

- Perverse trading ability is due to **behavioral biases**
 - ▶ We (research group at EESP-FGV) have been studying the behavioral biases of Brazilian investors
 - ★ disposition effect (loss aversion)
 - ★ low diversification (overconfidence)
 - ★ purchases of salient stocks (limited attention)
 - ★ preferences for lottery-like (loss aversion)
 - ★ nominal price illusion (cursed beliefs)

Conclusions

- Perverse trading ability is due to **behavioral biases**
 - ▶ We (research group at EESP-FGV) have been studying the behavioral biases of Brazilian investors
 - ★ disposition effect (loss aversion)
 - ★ low diversification (overconfidence)
 - ★ purchases of salient stocks (limited attention)
 - ★ preferences for lottery-like (loss aversion)
 - ★ nominal price illusion (cursed beliefs)
 - ▶ Our main result so far: they are strongly correlated at the cross-section of individuals

Conclusions

- Perverse trading ability is due to **behavioral biases**
 - ▶ We (research group at EESP-FGV) have been studying the behavioral biases of Brazilian investors
 - ★ disposition effect (loss aversion)
 - ★ low diversification (overconfidence)
 - ★ purchases of salient stocks (limited attention)
 - ★ preferences for lottery-like (loss aversion)
 - ★ nominal price illusion (cursed beliefs)
 - ▶ Our main result so far: they are strongly correlated at the cross-section of individuals
- Big question: What do do? Could we “nudge” (a la Thaler) biased investors?

Thank you

Bruno Giovannetti (EESP-FGV)

bruno.giovannetti@fgv.br