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Market Structure

Building an equity options market: The story of Brazil's B3

In this series of articles, we are exploring single-stock options in key markets in the Asia Pacific region. Following an outline of the present situation for equity options in each of these markets, we offer our recommendations for how to grow them. In this article, we trace how Brazil's B3 built one of the most successful global SSO markets almost from scratch, providing an example for exchanges around the globe. To read previous instalments, [click here](#).

In 2011, when Marcos Antonio Skistymas of Brazil's B3 exchange surveyed the local trading landscape for opportunities, he saw good signs. Single-stock options, popular in regions like the US, were seeing surprisingly strong demand among the country's burgeoning retail investor base. For someone looking to develop this market, it was a promising indicator.

There was an obstacle though: Virtually all of that trading was happening off-exchange.

Fast forward to 2022, and on-exchange trading has taken hold in Brazil, with the average number of equity options contracts traded daily on B3 having increased by 117%.

This is the story of how B3 established a thriving listed equity options offering in a market once dominated by off-exchange trading. In previous articles we have discussed how SSOs can benefit investors seeking risk management or income generation. The flexibility of these instruments has made them a popular choice in markets around the world, as a cost-efficient means of achieving exposure to underlying assets. As major derivatives markets like Japan, Korea, mainland China and Taiwan seek to build out their own SSO markets, we feel B3's path can provide a blueprint for growth.

Brazil market: SSO



Source: B3

From the outset, B3 aimed to follow a robust and disciplined process for growing their on-screen SSO market, according to Skistymas, managing director for listed products. That meant initially focusing on retail investors and improving technology to support on-screen SSO trading. A little over a decade later, and the results are clear to see.

Skistymas describes B3’s journey in five steps, adaptable to markets across the world.

1 “Upgrade technology to encourage and support on-screen trading.”

An important first step for building an on-screen SSO market for B3 was upgrading the exchange's technology to better accommodate this type of trading. Superior technology enables different types of investors to participate. It does so by providing them with easier access and the ability to trade with greater frequency, according to Skistymas.

Technology also proved useful for strengthening the exchange’s relationships with market makers. It provided better tools for B3 to monitor market maker activity and accelerate the feedback process, allowing market makers to quickly make adjustments to their algorithms to comply with their obligations.

2 “Focus on fair pricing and creating liquidity in a limited number of names.”

B3 initially focused on building liquidity in a small number of names, targeting the products investors were most interested in. “We preferred to leverage on the spreads instead of on the

depth of the book in the first instance, so we could offer fair prices mainly to encourage retail investors to trade on screen," said Skistymas.

The exchange worked closely with market makers to grow liquidity. "We designed our market making program with input from global market makers and institutional investors, both of whom identified gaps that we needed to address," according to Skistymas. "We worked together very closely with the market makers and had a daily monitoring and regular feedback process. They could quickly adjust their algorithms to ensure fair pricing and this attracted more retail investors to trade on the screen."



For SSOs, 10-20 names is a good starting point, enabling liquidity providers to scale up the necessary support for new names. From there, names can be added five at a time. The chart above shows an average 44% reduction in the spread between bid and offer prices for names that were added to the market maker program, illustrating a significant benefit to investors. This demonstrates the impact of the additional liquidity brought by market makers and reinforces B3's commitment to fair pricing on the screen.

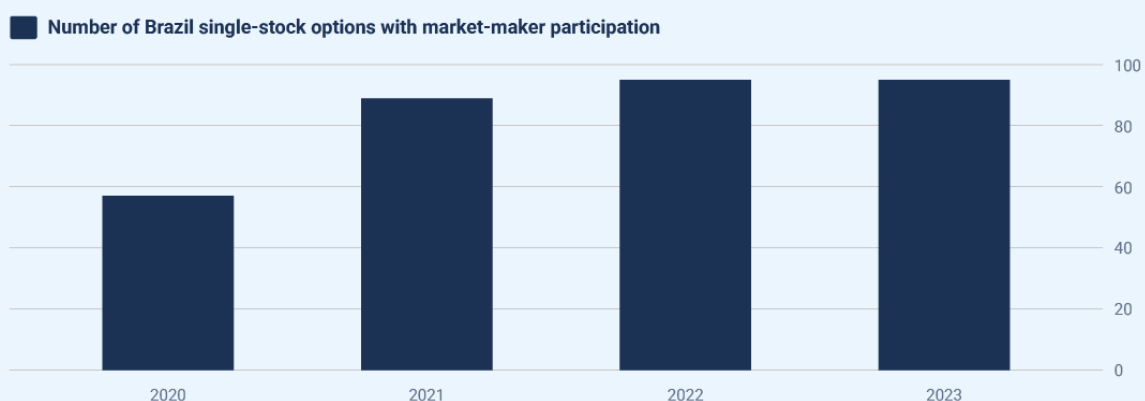
3 “Build depth in the order book to attract more institutional investors.”

Institutional investors typically trade larger volumes than retail investors. Technology is important for ensuring there is adequate liquidity for larger trade sizes, but so is a competitive and well managed market maker program, with obligations on size and number of contracts to ensure adequate depth in the book.

"As trading volumes on the screen grew, we started to introduce more technology, and this enabled us to accredit more market makers in our programs," said Skistymas.

"This meant we could focus on the depth of the book and address the needs of institutional investors. Competition between market makers further tightened the spreads on the screen."

Growing market-maker participation



Source: B3

4 “Bring new investors to the market and seek continuous feedback.”

Educating market participants such as brokers, asset managers, banks and international market makers and providing avenues for regular feedback was critical for B3. It was also important to demonstrate a commitment to act on this feedback when and where appropriate.

"The educational process enabled us to better understand what we needed to address in terms of topics such as market maker obligations, new and existing products, discussions with the broker community, different trading strategies, etc.," said Skistymas. "We tried to address all the points this community brought to us quickly. If there was a collective view that we needed to do something, then we tried to deliver very fast, so we didn't lose the traction with them," he added.

This allowed B3 to capitalise on the surge in SSO trading that occurred during the pandemic. "We experienced very strong retail flows and we were prepared for it, because we had a very strong market maker program with more than seven market makers for each symbol, fair prices on the screen, depth in the book and a very robust monitoring process," said Skistymas.

5 “Add new products and features.”

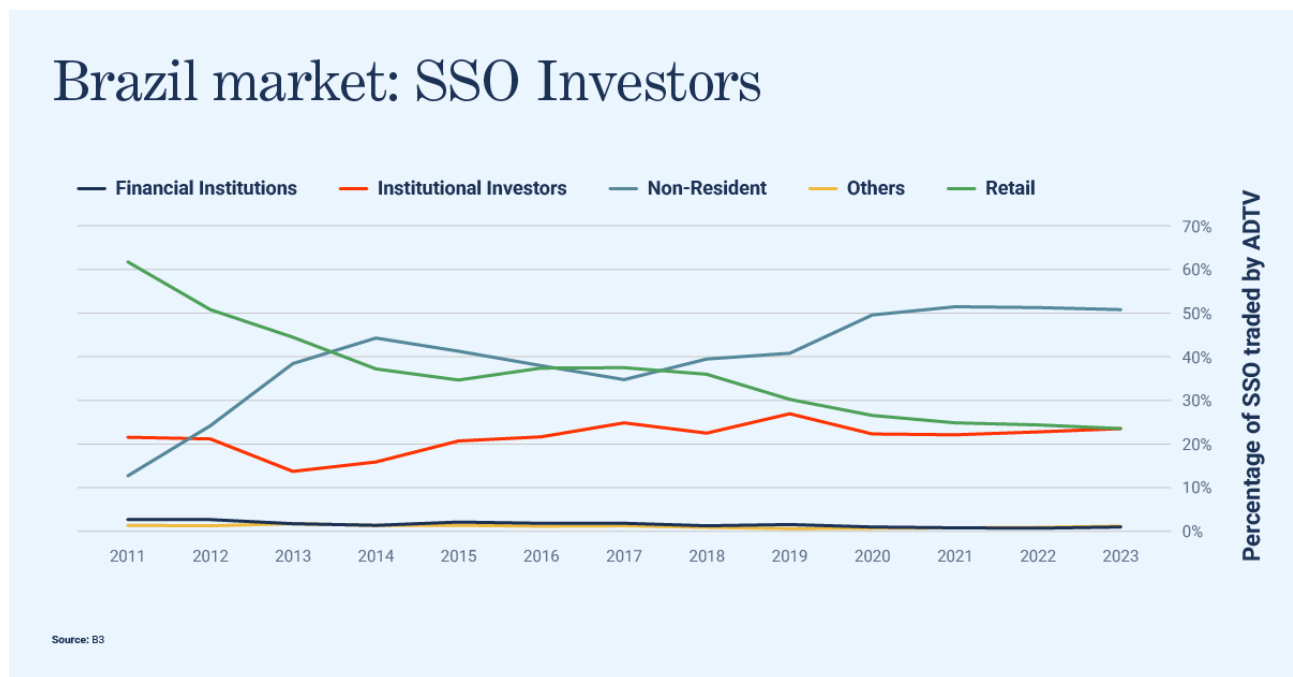
As the market matured, B3 was quick to introduce additional products and features. That could mean new expiries or even flex options, which provided more tools for investors to manage their risks and generate income.

"We are now preparing for what we are calling the next generation of liquidity," said Skistymas. The exchange is "looking firstly to develop and introduce weekly options and then further down the track, zero-day-to-expiry options."

Conclusion

For B3, the result of these efforts is clear, and not just in trading volumes. In 2011, when the Brazilian SSO market looked very different, retail investors comprised more than 60% of market participants, with institutions making up 22% and international investors and market makers comprising just 13%.

Today, retail investors make up around 24%, while non-resident investors and market makers are 51% and institutional investors comprise 24%. This represents a much healthier balance of investor types, a testament to what B3 has built and an example for exchanges around the globe.



About Optiver

Optiver is a global market maker with offices in Amsterdam, London, Chicago, Austin, Sydney, Shanghai, Hong Kong, Singapore and Taipei. Founded in 1986, today we are a leading liquidity provider, with close to 2,000 employees in offices around the world, united in our commitment to improve the market by competitive pricing, execution and thorough risk management. By providing liquidity on multiple exchanges across the world in various financial instruments we participate in the safeguarding of healthy and efficient markets. We provide liquidity to financial markets using our own capital, at our own risk, trading a wide range of products: listed derivatives, cash equities, ETFs, bonds and foreign currencies.