

# Accessing the opportunities in Brazil's capital markets

A guide to trading on B3 for  
international proprietary trading firms

**Proprietary trading firms from across the global market are increasingly looking for new markets to trade. Increased competition in local markets combined with lower interest rates and muted volatility has reduced the opportunity for profit in many major established markets.**

At the same time, emerging market exchanges have developed their offerings to improve access and appeal to international firms.

Brazilian exchange B3 has been at the forefront of that trend over the past decade. For this report, Acuiti spoke with proprietary trading firms from across the globe about their experiences in trading on the market to provide guidance for firms looking to connect.

Brazil is an emerging market. And like most emerging markets, there is a complex web of local regulations to navigate. This results in longer lead times to onboard and a requirement to invest more time in understanding the local market to trade it.

However, according to proprietary trading firms spoken to for this report, the high interest rate and equity volatility, the burgeoning retail market and B3's increasing investment in infrastructure, the complexity of trading in Brazil is far outweighed by the potential to profit.

## Fast growing Brazil


Over the past five years, Brazil has been among the fastest growing derivatives markets in the world. Average daily volumes of derivatives contracts traded on B3 has grown from 3m in 2016 to 25m today. Last year B3 boasted the second highest derivatives trading volume in the world after a volume increase of 63% on the previous year.

According to data compiled by the FIA, B3's One Day Inter-Bank Deposit Future (DI) was the most traded contract globally by volume in 2020, pipping CME's Eurodollar futures to the top spot. The IDI Index Options contract was the 5th most traded rates contract and the most traded rates options contract globally.

Activity on B3 is not limited to interest rates. The mini-Bovespa future was the 2nd most traded equity contract and B3's mini-US dollar and US dollar futures contracts were the 3rd and 9th most traded FX contracts.

Nor is the high trade volume simply a result of a lower contract size. By notional value, B3's mini-Bovespa future and DI future were the 15th and 24th most traded future globally in 2020 while the mini dollar future was the 31st most traded according to data published by COEX Partners and Acuiti.

The growth in volumes on B3 has been driven by a variety of factors. A burgeoning equities IPO market has attracted new issuers to the exchange while significant volatility in both the core equity market and the domestic interest rate has driven demand for hedging and risk management among domestic institutional investors.



**“B3 are always eager to listen to what you have to say and are open to ideas. The international team is first rate and really understand our business and requirements. They follow up on suggestions and take into account our feedback. The client service is exceptional”**

**Proprietary trading firm, US**

Alongside the growth in local institutional participation in the market, local retail traders have increasingly engaged to trade across cash, futures and options. The number of individual investment accounts at B3 has risen from 700,000 in 2018 to 3.9m today. Simultaneously, B3 has engaged with the international proprietary trading community and developed new products, incentive schemes and invested in technology to meet the needs of the market.

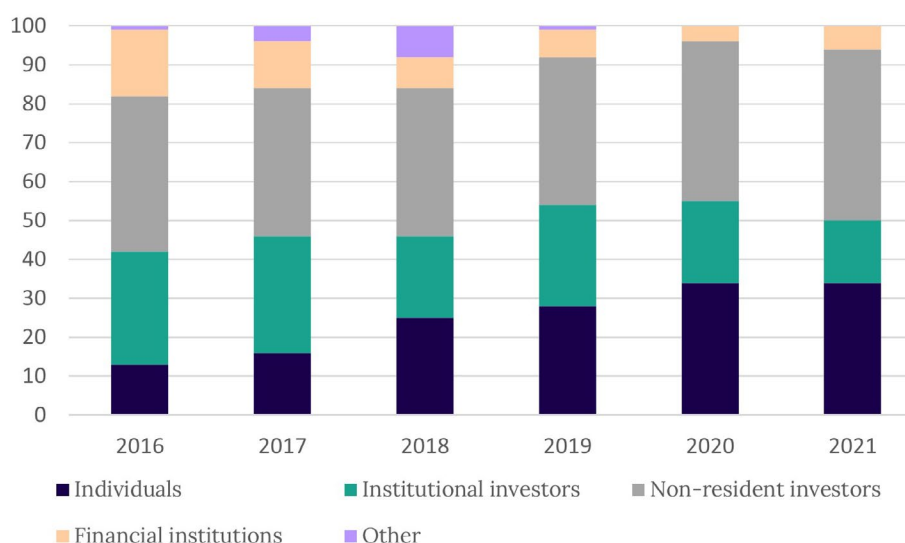
This increase in both domestic and international activity has created a virtuous circle of volume growth that is attracting increasing numbers of international proprietary trading firms. Over the past decade, the market has evolved from hosting a small number of the largest firms in the US and Europe to a global coverage of entities of all sizes.

Participation from these firms is expected to continue to grow. A study by Acuiti in 2020 found that Brazil was the third most sought after market for global proprietary trading firms to connect to after India and China. In addition, FCMs that Acuiti spoke with for this report confirmed increasing client demand for connecting to B3 and many proprietary trading firms not currently trading in Brazil said that they were planning to do so in the next 12 to 18 months.

Several factors are drawing international proprietary trading firms to B3. In interviews with Acuiti for this report, senior executives at proprietary trading firms that traded on Brazil highlighted the opportunities to profit from the volatility in B3's equity and interest rate markets and the diverse make-up of participants on the market.

Interest rate volatility is just one example. Over the past five years, Brazil's core interest rate has gone from 14% down to 2% and back up to 5.25% moving 3.25% over the six months between March and August this year – a larger move than any in the US, UK or EU rates market over the past 13 years.

This volatility has created significant opportunity for trading firms. Several executives that Acuiti spoke with for this report said that the DI rates contract was among the most profitable in their global rates portfolios. Others highlighted the make-up of the market with a diverse mix of institutional and retail participation and a relative lack of competition compared with other core derivatives markets as major benefits of trading on B3.



**Fig 1: Breakdown of investors on B3 2016 - 2021**

## Recent initiatives at B3

B3 has invested significant time and resources over the past decade into understanding the demands of international proprietary trading firms and developing the market to accommodate these requirements and increase participation.

Over the past decade, the exchange has invested in the Puma trading engine, developed in partnership with the CME Group, combined its equities and derivatives clearinghouses and consolidated local market infrastructure with the deal to merge with Cetip, the Brazilian depository for OTC securities and derivatives. Following that deal in 2017, the combined group rebranded as B3.

The project to combine CCPs also saw the development of the new CORE risk methodology, which enables netting of positions between asset classes generating significant capital efficiencies for end clients. The exchange has also invested in a new state of the art data centre designed to meet the needs of sophisticated proprietary trading firms.

In addition to the technology investments, B3 has expanded its product range with the launch of several new derivatives contracts including the DAP interest rate contract, which is designed to offer exposure to real interest rates.

The exchange has also expanded the universe of single stock options contracts reaching more than 120 of which more than 60 have permanent market maker programmes. In addition, B3 made technical changes to several contracts such as pairing its currency futures with the US dollar rather than the BRL to increase their relevance to the international market.

Finally, B3 has developed a suite of contracts on international indices such as the Nikkei, S&P 500 and a contract on the Argentinian index to offer a greater range of exposures to participants in the local market. To boost interest from the local retail market it also developed a mini version of the Bovespa index, one of the most successful new derivatives contract launches in the history of the market.

The exchange is in the process of launching DAX and EURO STOXX contracts as well as a soybean contract, which will all go live before the end of 2021.

**“The DI contract is in our top 10 of contract that we traded globally for intra-day opportunities and the volumes are continuing to increase. We are currently looking to broaden out what we are trading on the market and see many opportunities to further our partnership with B3.”**

**Proprietary trading firm, Europe**

## Navigating the nuances

While the opportunities on B3 are significant for international proprietary trading firms, there are several nuances of trading on the market that need to be understood by firms.

### **Onboarding**

Proprietary trading firms connecting to B3 should expect the onboarding process to be longer than in the core Western markets. As with most emerging markets, there are a host of local complexities and regulatory requirements outside the control of B3 that must be navigated.

In general, to start trading on B3, proprietary trading firms need to designate local tax and legal representatives as well as selecting a local broker and custodian. There are currently 29 local brokers that are authorised to act for foreign investors including several local branches of international banks and brokers.

Trading firms also need to register with the Securities and Exchange Commission of Brazil (CVM), the Central Bank of Brazil, the Brazilian Federal Revenue Service (RFB) as well as with B3 itself. This process will be taken care of by the local legal representative.

Brazilian regulation requires full identification of the ultimate beneficial owner of each trade and so firms in general cannot trade through their FCM's account as they do on most other international markets. Firms should also be aware that Brazilian regulators require physical documentation to be filed, which must be witnessed and notarized before being sent to B3 and local authorities.

This can result in an onboarding process of around six months and proprietary trading firms looking to connect to Brazil should factor this lead-time into their plans. B3 is continually working to make the process easier but is dependent on changes to the regulatory framework.

The regulation in Brazil does allow a Simplified Registration Process for firms that access the market under a collective account via their international broker. This is a good option for smaller firms that don't need to have control of the total process and for larger firms that have a comprehensive service agreement with their international broker.

To assist in the onboarding process, B3 offers international proprietary trading firms both an onboarding incentive programme to help with the costs of onboarding the market and a new trader incentive programme to aid with the development of traders new to trading on B3. Proprietary trading firms currently trading on B3 that spoke with Acuiti for this report were very positive about the incentive schemes offered.

### **Connectivity and DMA**

Proprietary trading firms looking to trade on B3 via DMA can do so directly through a vendor, via a local broker co-location or via their own co-location set-up. Proprietary trading firms should be aware though that the import tax of bringing in co-lo infrastructure is high.

Therefore, most firms choose to rent equipment from local brokers. While an unusual set-up compared to many international markets, executives that Acuiti spoke with for this report were happy at the availability of choice and quality of equipment provided by local brokers.

Some of the largest proprietary trading firms have chosen to take on the costs of importing their own equipment to install at the data centre. However, the majority of prop firms have worked with the plethora of local brokers and local suppliers who offer alternative options on a rental basis.

A host of ISVs provide access to B3 including the major providers to the proprietary trading market. Network providers are also engaged with Brazil and offer low latency connectivity to enhance existing routes into Brazil.

### **Contract design**

Another factor that proprietary trading firms should be aware of when they begin the process of connecting to B3 is the difference in contract structure of the flagship DI1 interest rates contract.

The DI trades as a percentage rate expressed annually rather than the standard unit price on which most international rates contract trades. Contracts also have different maturities depending on their term and the traded date and tick size changes depending on the contracts' time to expiry. In addition, the DI contract opens at a different price to the previous day's close owing to a correction rate applied to the daily settlement price.

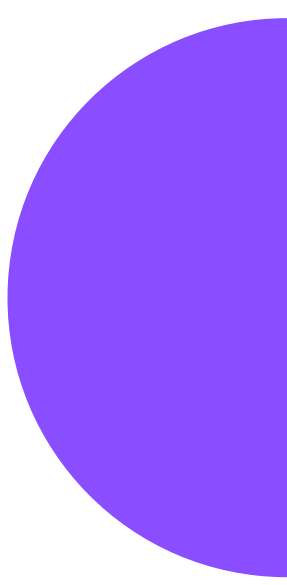
Understanding the contract design and performance requires some investment both in terms of its impact on trading strategies and in order to process the trade through middle and back-office systems.

However, while some firms that Acuiti spoke with argued that it would be easier to trade a standard futures contract, others praised the "elegance" of the contract design and highlighted the fact that it offered several additional benefits to the standard futures contract format including the ability to trade convexity in interest rates to expiry.

### **Fee structure**

The fee structure at B3 requires some understanding and total costs can be hard to predict. Different asset classes are subject to different fee structures and most instruments attract multiple fees, often depending on specifics of the maturity of the contract traded and the time held. Again, this requires some internal development work to be able to predict and process fees when trading on B3.

B3 is currently working on streamlining the fee schedule for the DI1



**“The interest rates offering is very strong. There is significant rate volatility and a deep and liquid market. The main interest rate product is elegant by design and an example to the rest of the world”**

**Proprietary trading firm, Europe**

interest rates contracts, which will significantly improve the predicability of costs. However, for the time being, firms should anticipate that they will not be able to forecast trading costs to the penny with the specificity that they can on the major international markets.

### ***Margining and margin finance***

B3 developed the unique Close-Out Risk Evaluation (CORE) margining model following the consolidation of its clearinghouses, which previously housed different asset classes separately. The model calculates risk of a portfolio of positions across multiple asset classes modelling risk across market risk, liquidity and collateral and cashflow.

The model works differently from what is standard on other markets and therefore needs to be integrated into trading models. B3 offers a margin calculator that can be used to calculate and predict margin requirements. The exchange is working on developing and improving the API simulator and will soon launch a browser-based platform to run simulations.

While CORE margining brings benefits with regards to cross margining it is also a more flexible methodology with parameters changing on a daily basis. In addition, B3 has relatively high margin requirements for certain strategies and instruments. For example, short positions on equities are subject to over 100% margining requirements plus another amount that varies from each ticker. Details of margin requirements can be found on B3's website.

Local brokers in Brazil are not allowed to offer margin finance to international trading firms. To mitigate this limitation, one major international clearing firm has developed a service for firms in certain jurisdictions (most Western market but not in any Asian jurisdictions currently) to offer offshore margin finance. The model allows firms to post collateral offshore with the FCM without the need to post in Brazil.

### ***Taxation***

There are two taxes levied on financial instruments in Brazil – income tax and the IOF, a tax on credit, insurance, FX and securities transactions. Revenues earned by proprietary trading firms in Brazil are subject to both taxes.

Non-residents trading fixed income securities are subject to a tax rate ranging from 22.5% down to 15%, depending on how long the investment is held with the top rate for periods of less than 180 days. The IOF penalizes short-term investments ranging from a rate of 96% on investments that are liquidated or have a maturity date of 1 day to 0% for those of 30 days or more.

Stock investment funds, swaps and options traded off exchange are subject to a 10% tax. While other income, including capital gains attracts a 15% rate on profits. There is an exemption from the income tax arising from trading in the secondary markets on exchange across equities, futures or options products. This exemption applies only for non-residents that are not from a tax haven country.

The tax rates in Brazil, therefore are relatively complex and proprietary trading firms should seek the advice of local tax specialists to fully predict and manage tax rates.



## Conclusion: a world of opportunity

For most proprietary trading firms, the hurdles in onboarding and understanding the nuances of trading on B3 will be far outweighed by the potential to profit on the market.

The international development team at B3 is constantly engaging with international proprietary trading firms to understand requirements and develop the market and has a host of initiatives underway from the implementation of a new technology infrastructure for the gateways to the simplification of the fee schedule for the DI1 interest rate contract.

Acuiti spoke with over 50 proprietary trading firms globally for this report. We found that firms that were engaged with the market were in general planning to expand their coverage of instruments and that many firms that had not yet engaged were planning to do so in the next 12 to 18 months.

This points to continued growth on the exchange and an extension of the virtuous circle of opportunity for proprietary trading firms.

As proprietary trading houses look overseas for new opportunities, B3 is perfectly poised to offer these firms a way to trade interest rate, equity and FX volatility on a robust and established infrastructure in a stable regulatory environment.

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