

KEEPING PACE WITH PAIRS



Since equity pairs trading was first introduced to the market in the 1980s, it has become immensely popular amongst investment managers, and has evolved from its original incarnation of matching a long position with a short position in two correlated stocks (still the most common type of pairs trade) to encompass a much broader landscape of strategies. Pairs trading can now be conducted cross-region, cross-currency, cross-asset, and cross-broker, with strategies including not only stock components, but also futures/options, ETFs, baskets, bonds, FX, crypto/digital assets, and more.

However, despite the wide variety of pairs strategies now being traded, traditional PMS, OMS and EMS systems have been slow to adapt, particularly from an algo trading perspective. This means that many firms have had to adjust their pairs trading workflow to accommodate system deficiencies rather than the other way around, i.e. having the ability to configure their systems to match their preferred workflow.

In this article, we look at how pairs trading is evolving, and what kind of functionality buy-side firms should expect from their PMS, OMS and EMS solution vendors in order to support their changing needs.

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CROSS-MARKET & CROSS-ASSET CHALLENGES

In today's markets, portfolio managers are increasingly seeking alpha from pairs strategies that go across markets, often in different regions, and across asset classes, with instruments that might be denominated in different currencies. Whether it's stock versus ETF, ETF versus basket, stock versus futures, or any other cross-asset pairs strategy, it is essential to be able execute each leg of the transaction simultaneously, and to hedge any currency exposure at the same time.

This can present a challenge to some firms, particularly if they run separate OMS & EMS systems for each asset class. Another hurdle they may face is if their brokers are also siloed, offering pairs trading algos that work for only one asset class (e.g. equities), but not for others. A futures-focused tool and an equities-focused tool, for example, may not communicate well with each other, and that extends to strategies involving futures against ETFs, ETFs against baskets, any FX hedging component, and any strategy that involves pairs of pairs.

Also, from a global perspective, firms with international trading desks often look for cross-exchange arbitrage opportunities, between US & Asia, or US and Europe, for example. To trade such strategies, they need to be able to seamlessly execute their pairs orders on different exchanges, taking into account market closes and opens, as well as any pauses within the trading sessions.

This is why, for any firm that is serious about pairs trading, it is essential to have the appropriate tools available, regardless of what their brokers provide.

WHY BROKER NEUTRALITY IS IMPORTANT

With many OMS & EMS platforms, the pairs functionality links directly to a broker's own algo trading engine. This can be restrictive if the firm, for whatever reason, needs to send one leg of a pairs trade to one broker and the other leg to another.

With TORA, the client controls the pairs algo rather than the broker, which means that the pairs trade can be executed through two separate counterparties, with each leg being routed individually as a single DMA order. As the broker just receives the DMA trade for that leg, and might not even be aware that it's part of a pairs trade, the client retains much greater anonymity around its pairs strategy. Even if the client is using the same counterparty for both legs of the pair, that counterparty only sees the individual legs, not the pairs trade itself.

This is an important point, because it protects the client from any information leakage around when the pairs trade is entered, how much size has been done, what the ratio is, and when it is unwound.

Trading through a technology provider such as TORA allows full broker neutrality to be achieved. This means that clients can continue to trade with the specialist brokers of their choice and retain control and flexibility over how their pairs orders are routed to the market, rather than being constrained by the functional limitations of an EMS linked directly to a broker's pairs algo.



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FUNCTIONAL REQUIREMENTS

As pairs trading becomes increasingly sophisticated, what are some of the features and functions that an OEMS should offer to clients that trade pairs in today's markets, over and above the cross-asset and broker neutral aspects already discussed?

Key functionality in any pairs suite should include a comprehensive list of market-neutral strategies, such as classic spread and ratio (or a combination of both), rights arbitrage, merger arbitrage and daily percent return.

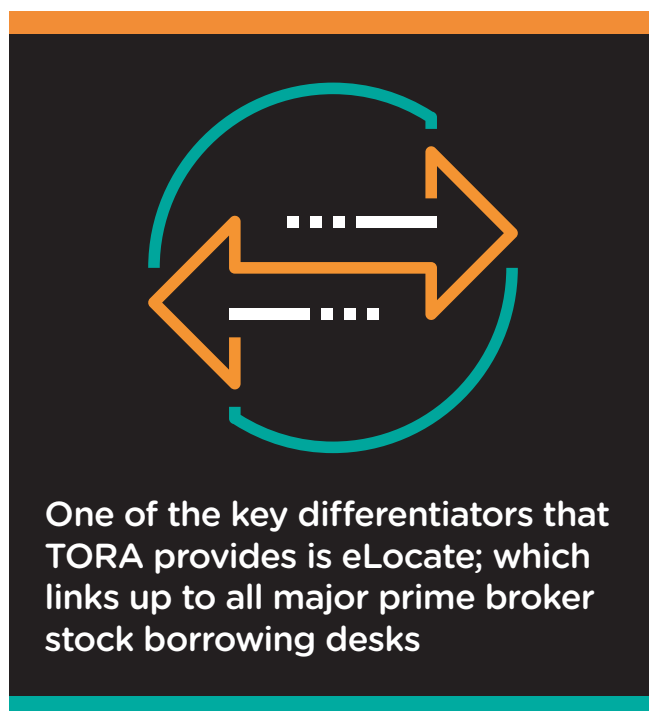
The OEMS should also offer various execution styles to control the aggressiveness of each leg, and the ability to manage volume participation at multiple price levels, along with a range of options around floating on one or both legs, and managing slippage when one leg cannot be hedged within its limit price.

Traders shouldn't have to constantly watch the screen, it should also be possible to automate

what happens with a hung leg, by pre-defining aggression levels that determine whether to trade at market, to stay on the bid or offer, or to go to mid-tick, for example.

One of the key differentiators that TORA provides is eLocate; which links up to all major prime broker stock borrowing desks. This advanced functionality allows clients to log on once to access all broker platforms across the market, enabling clients to access the borrow and trade it directly without having to switch to different platforms and perform multiple logins.

Because TORA's pairs suite has been built in response to customer demand, clients benefit from the comprehensive feature set they would expect from their individual brokers' algos, together with this wide range of additional capabilities, in a single platform so that all relevant parties within the organisation, including portfolio managers and compliance, can see what is going on in real time.



ADVANCED TWAP AND PARTIAL HEDGING

Another key requirement, when using a TWAP algorithm to reduce the market impact of a pairs order, is to be able to define start and end times, and to fine tune those parameters to send out orders at specific intervals, with pre-defined instructions on when and where to cross the spread. For example, a trader may wish to input a passive catchup strategy for cases where the pair gets out of limit, inputting the catchup percentage for the unmarketable period (i.e. the period when the pair is out of limit).

In order to minimise slippage in such cases, TORA enables clients to drip feed a pairs trade into the market using its own TWAP algorithm. Using what we call "partial hedging", the order can be sliced into continuous waves, to execute based upon the aggression level set within the algo. However, a common issue when using TWAP algos for pairs trades is when markets are moving fast, causing spreads to widen. In such cases, the algo can be sitting waiting for one of the waves to execute the lead leg and miss an opportunity if there is a sudden spike in the market. TORA's partial hedging functionality avoids this situation by enabling the wave size to be automatically reduced in fast markets.

FX HEDGING

When trading cross currency FX pairs, firms need to be able to either feed in their own FX rate, use an FX rate that the client wants to use, or use automated FX conversion.

TORA supports all three methods of FX hedging and, using real-time FX rates, provides a unique way to dynamically auto-hedge the FX component of a cross-currency pair, in effect adding a third leg to the pair, which can also be routed to a separate broker. This ensures that the pairs strategy is FX neutral throughout the whole trade. TORA is currently the only provider in the market to offer this pioneering functionality.



CONCLUSION

Buy side firms have long understood the benefits of pairs trading, and pairs strategies will continue to provide a rich source of alpha for firms who are able to use them in new and unique ways. However, in order to do that, firms will need to have the right tools available, ones that give them the control, flexibility and rich functionality they need in order to stay competitive in such a fast-evolving market.

They also need to be able to operate at scale and not be restricted by the capacity of single broker engines. TORA's scalable, cloud based, broker neutral platform provides firms with everything they need to support their current and future pairs trading activities.

ABOUT TORA

TORA is the leading global provider of advanced investment management technologies supporting the full trading lifecycle. TORA has a full suite of cloud-based SaaS delivered execution, analytics and compliance tools, as well as order, portfolio and risk management capabilities and a global FIX network.

TORA's products are utilised by hundreds of the industry's leading hedge funds, asset managers, proprietary trading firms and sell-side trading desks globally. TORA has over 250 employees globally. With its headquarters in San Francisco TORA has offices across the globe including New York, Hong Kong, Tokyo, London, Jersey, Romania, Singapore and Sydney.