The case for a multi-asset post-trade approach

Why the industry needs to be more joined-up across asset classes

Produced in collaboration with

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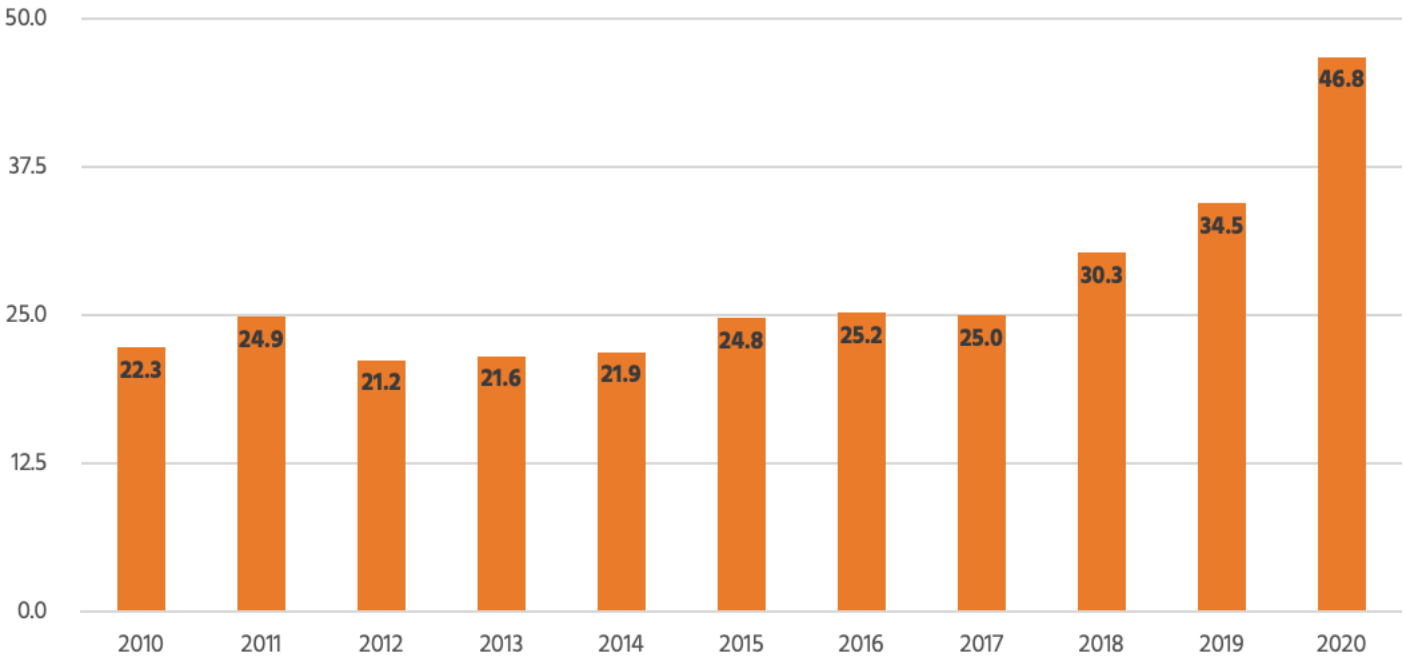
Firebrand research

Why multi-asset post-trade now?

The diversification of institutional investments into a broader range of asset types over the last couple of decades has been significant and transformative. Buy-side firms have expanded their investment focuses from the more traditional end of the investment spectrum to all kinds of alternatives, including real assets such as commodities, real estate and even crypto assets in some cases, in the search for yield. They have also expanded their use of the more esoteric fixed income and derivatives in a bid to garner greater returns as passive investment vehicles continue their growth in popularity among pension fund clients. Active asset management in today's markets also necessitates more active hedging activities, especially given the volatility experienced over the last 18 months.

The chart below highlights the global growth of listed futures and options markets from 2010 to 2020 and the ups and downs experienced over the last decade in terms of number of contracts traded, according to statistics from the Futures Industry Association. The significant increase in volume traded during 2020 reflects both the market volatility caused by the COVID-19 crisis and the demand for these asset classes that has increased over the last few decades. From an asset class perspective, total futures trading in 2020 rose 32.7% from 2019 figures to 25.55 billion and total options trading rose 39.3% to 21.22 billion. It was the third year in a row of setting an industry record in terms of total trading activity.

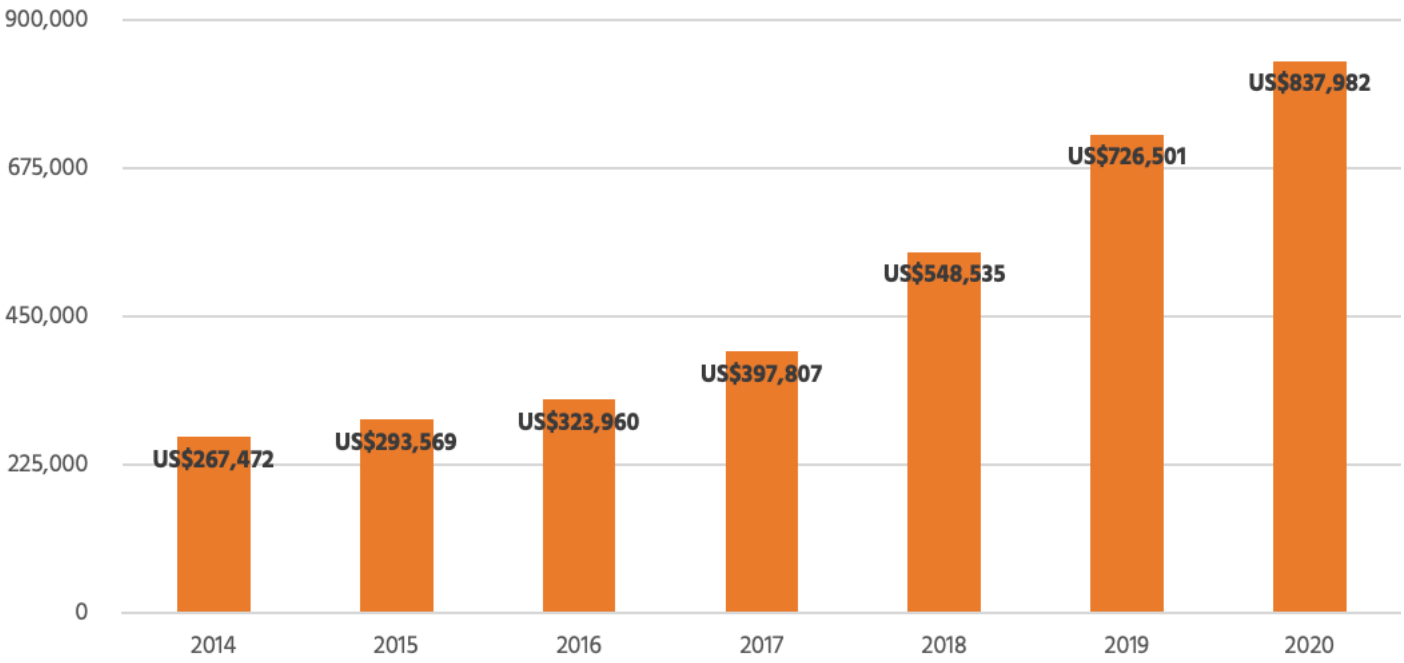
Total number of futures and options contracts traded on exchanges worldwide in billions



Source: Futures Industry Association, Firebrand Research

The more traditional asset classes such as exchange-traded bonds also experienced an uptick in electronic trading during 2020, following on from a continuing trend for these instruments to move from OTC onto exchanges over the last six years. The chart below highlights the average daily trading volume of bonds on fixed income trading venue Tradeweb, which supports both corporate and government bonds. Though bonds have remained a part of most large buy-side firms' portfolios, the fall in returns for these asset types has led many to seek out alternative investment avenues.

Annual average daily trading volume on Tradeweb (in US$ millions)



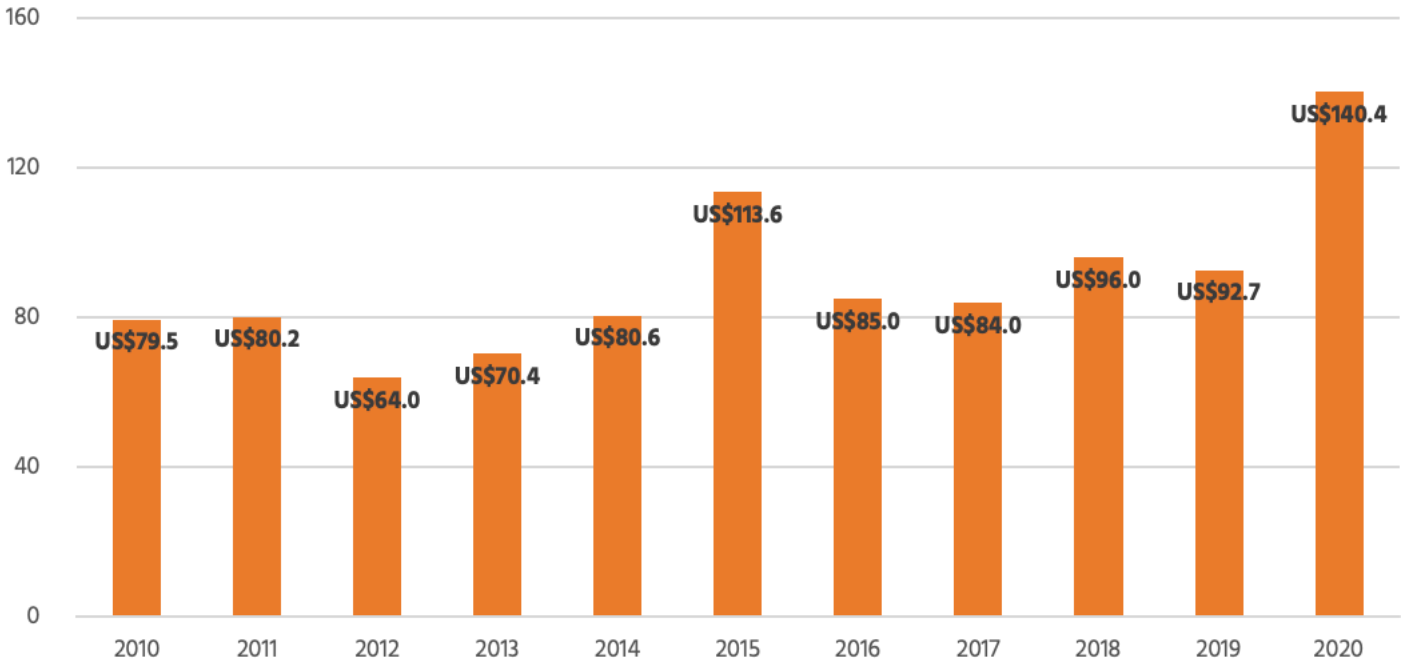
Source: World Federation of Exchanges, Firebrand Research

The growth in alternatives necessarily entails investment in riskier investments in real assets over a longer time frame, which must be supported by active hedging strategies. The private market investment universe, for example, has more than tripled in size from two and a half trillion dollars of traded value in 2007 to around eight trillion dollars in 2020. The market volatility caused by the COVID-19 crisis further underscored the need to build resilience into firms' investment strategies by expanding to cover an even wider pool of asset classes. Multi-asset strategies are here to stay and the ever-increasing pool of asset types will continue to place a strain on buy-side firms and their third-party service providers to keep up with changing market dynamics.

The impact on the sell-side

This buy-side demand for support across a broader range of asset classes has therefore placed increased pressure on their sell-side counterparts to meet these requirements. The complexity of dealing with this demand from a large variety of buy-side clients during the pandemic, when markets experienced significant volatility and volume increases, had a knock-on effect on settlement failures. The chart below highlights the significant increase in the value of equity trades that firms had to process in 2020 compared to the previous three years, according to the World Federation of Exchanges annual statistics. The pressure to support a broader range of asset classes, and high volumes in some of the traditional asset classes, have combined to significantly squeeze sell-side firms' post-trade operations and IT teams.

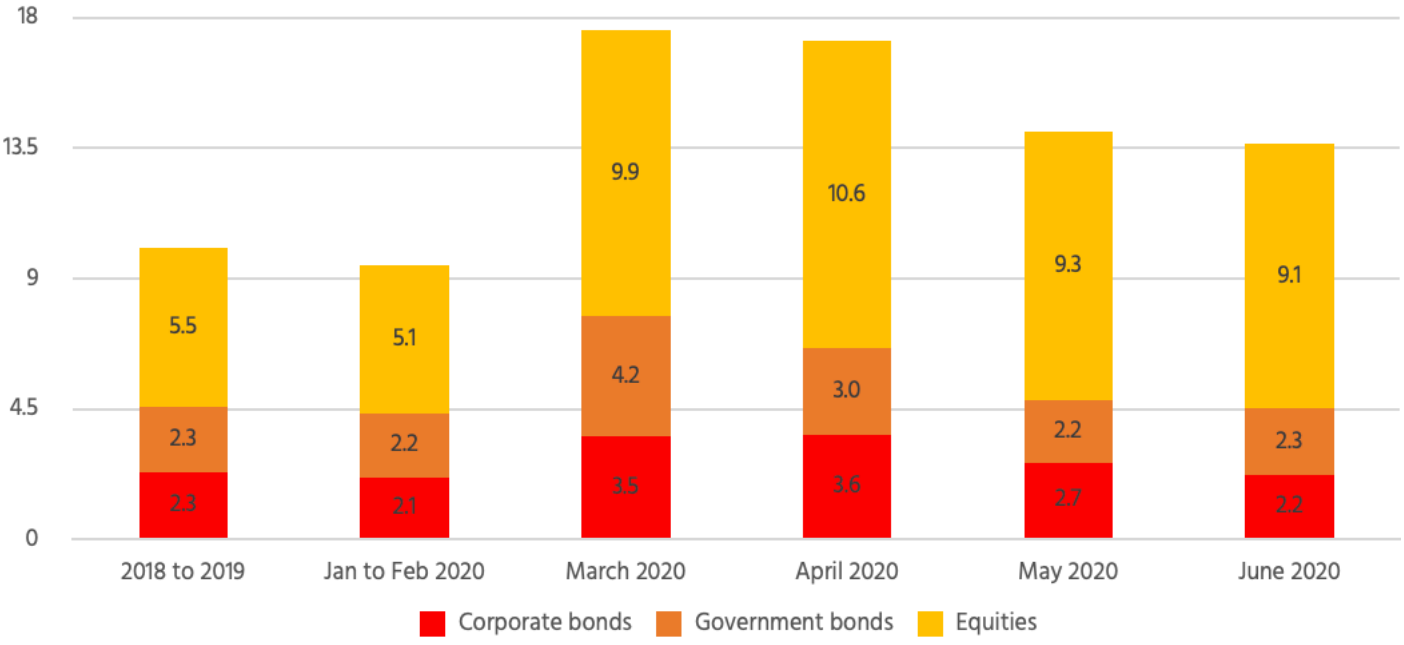
Total global equity market value traded (electronic order book) in US$ trillions



Source: World Federation of Exchanges, Firebrand Research

Settlement failures increased over the usual norms for bonds and equities during the early months of the global lockdown, as highlighted by the statistics provided by the European Securities and Markets Authority (ESMA) below. The chart highlights the percentage of instructions that failed as a share of the total value of settlement instructions across 31 European countries for the specific period of extreme volatility during 2020 compared to the averages over the previous two years. The statistics were gathered via the national competent authorities in each EU market and show the percentage of failed instructions at the national CSDs. While the level of bond settlement failures has reduced since, the same cannot be said for equities, which remain above their usual levels in early 2021. Interviewees involved in Firebrand's research into post-trade processes, conducted in the first half of 2021 indicate that settlement failures tend to result from manual processes in the middle office around trade confirmation and in the back office if systems are inefficient or lacking in required scalability to meet market volume increases.

Share of failed settlement instructions in 31 European countries as a percentage of value, 2018 to 2020

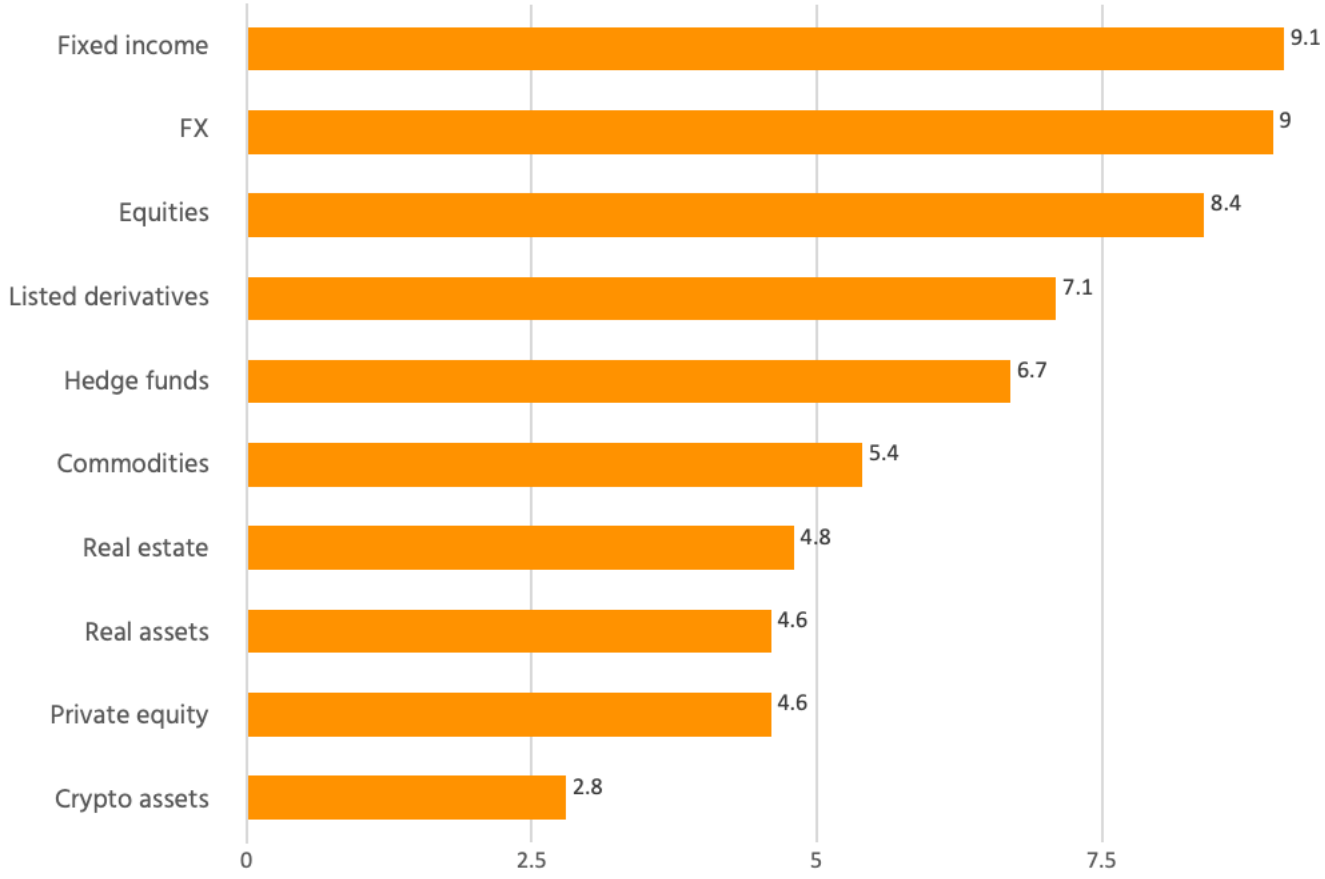


Source: ESMA, Firebrand Research

Based on Firebrand's research survey, also conducted in the first half of 2021 and involving 25 firms, most sell-side firms have siloed infrastructures to process the range of asset classes their clients and trading activities require. They have separate middle and back-office operations and technologies for dealing with equities, fixed income and derivatives, for example, because of the product-siloed manner in which most of these firms have operated up until this point. Regional regulatory and market practice divergence at the global level has accentuated the issue by adding regional silos into the mix, which has increased duplication of effort and cost. Post-trade processing inefficiency has been compounded by these legacy, silo-based infrastructures that have struggled to keep up with modern market requirements.

The below diagram highlights how well respondents to the Firebrand survey feel their post-trade environments support each of the asset classes they trade. Respondents were asked to score the support out of a total of 10 points and the results show that newer and more esoteric asset classes such as crypto assets and real assets score much lower than the more frequently traded and industrialised asset classes such as fixed income and FX. Interviewees indicate that they do not yet have a single system to cover all of their post-trade asset classes equally—most have evolved from specialising in support for one specific asset class and added support for others over time, often within a rushed timeframe and requiring extensive internal IT support.

Respondent views on their post-trade environment's coverage of various asset classes



Only 14% of respondent firms have a single system for processing all of their instruments, whereas the rest have silos by asset class and by geography. These siloed infrastructures are coming under increased pressure to adapt to bank and broker client demands for improved service levels and digitally-enabled support, as competition between sell-side firms continues to increase. The impact of all of this on sell-side firms includes:

- **Doing more with fewer operations staff:** Years of cost cutting and post-trade rationalisation exercises have taken their toll on firms' operations. There are very few staff to deal with any volatility or high volumes across the full spectrum of assets that a client may wish to trade, including everything from the most vanilla instruments to the most esoteric real assets. One interviewee at a Tier-1 bank notes that there is absolutely no management appetite for staff increases within operations and the only solution for the firm is to increase straight-through processing across all of its post-trade processes.

- **The need to focus operations staff on more value-additive tasks:** Process efficiency is of paramount importance with the industry's focus on reducing operational risk and improving resilience. Exception-based processing is foundational for this effort alongside reducing the number of manual tasks that can be easily automated and centralised across the full spectrum of asset classes.

- **Coping with higher volumes of electronic order flow:** The post-2008 crisis reform agenda pushed many over-the-counter (OTC) instruments onto trading venues and clearing houses, which increased the volume of data that post-trade teams must deal with on a day-to-day basis. This means that even OTC assets require some degree of industrialisation, and higher scalability of service needs to be achieved in a consistent manner across asset classes. An interviewee at a Tier-1 market maker indicates that reporting requirements across all of these asset classes has also placed pressure on its siloed legacy systems. Getting data out of the numerous systems, aggregating and reporting that information entails valuable team hours within the operations area as well as compliance.

- **Pressure to support the growth of data services:** Competition between sell-side firms has evolved to include a whole range of new services related to the provision of reliable data, from delegated transaction reporting support to environmental, social and governance (ESG) analytics. The provision of this data and these services is often tied to a comprehensive view of a buy-side client's activities across the markets, front-to-back—and by better understanding client activities, firms can be more proactive in their service provision.

- **Responding to competitive pressure for better post-trade services:** Given the downwards pressure on commoditised front-office services and best execution, firms must improve their support across the full trade lifecycle. A more harmonised experience across asset classes could be competitively differentiating for sell-side firms when all third-party services to the buy-side are under increased scrutiny. An interviewee at a large investment bank explains that the firm is keen to be able to respond to front-office requests for weekly changes in profit and loss analytics from the middle and back office.

These are just a handful of the client-side and internal pressures that sell-side firms are facing from a multi-asset support standpoint.

The effect of the regulatory reform agenda

Regulation has been a significant driver for change over the last couple of decades and it is another key component of a business case for a more joined up approach to post-trade across asset classes. For a start, global regulators are keen to see that banks and brokers have a good handle on their operational risk across all of their operations. A range of different regulatory developments have helped to build the case for a streamlined and unified cross-asset post-trade solution:

- **Operational resilience and risk oversight:** A number of regulators including those in the United States, Singapore and Europe have proposed requirements to tighten up firms' oversight of their technology and service providers. For example, the European Commission has indicated that it will be introducing new levels of governance and management oversight requirements for third party solutions as part of its Digital Operational Resilience Act (DORA). Firms will be required to regularly monitor and report about their technology and operational risk set-up. Silos will not be permissible as an excuse for slow or inaccurate management oversight. The simpler and more consolidated a firm's technology stack, the easier it will be to monitor and comply with these new requirements.

- **Regulatory reporting requirements across a greater number of areas:** Regulatory reporting requirements have also increased significantly since 2010 and these costs cannot continue to be absorbed in silos across the business forever. Tactical approaches to meeting a plethora of requirements across the globe, such as those related to trade and transaction reporting, cannot be sustained and firms will be compelled to consolidate reporting, which is much easier from an integrated and consolidated technology stack. The mutualisation of costs from across various business lines in the post-trade process should help to counterbalance increasing regulatory compliance costs over time.

- **More regulation encouraging the electronification of post-trade processes:** As well as adding in reporting requirements, post-crisis reforms have also pushed more and more asset classes onto exchanges and clearing. Regulators have now become much more engaged in reviewing the settlement aspect of the process as indicated by the EU's Central Securities Depository Regulation (CSDR) and the Securities and Exchange Commission's (SEC's) investigation of shortening the settlement cycle in the US by a day to T+1. The focus on improving industry efficiency and automation of the post-trade process across various asset classes increases the need for an industrialised approach to processing all of them.

Firms are struggling with silos

The operational structure of a firm tends to reflect its organic and inorganic growth over time. If a firm started life focused on servicing the requirements of a specific set of clients or market sector and then was later acquired by a larger firm primarily focused on other areas, for example, technology silos are likely to have persisted post-acquisition. Technology debt in the post-trade realm has also built up over time for many large and medium-sized firms as they have built on top of their legacy platforms to meet changing regulatory or client requirements. Post-trade system replacements have often been deferred in favour of build-outs for a variety of reasons including concern about high costs and project risk.

However, many of these platforms are not sustainable for the long-term, especially in light of continued market volatility and volume increases across asset classes. The costs are also challenging to justify when examined across duplicative systems that are performing similar tasks per asset class (see below). Several interviewees note that their legacy systems are currently unable to scale to meet the requirements of the market, and significant pressure is on the operations team to move away from manual processes and silos to a more integrated system with a single, streamlined workflow and centralised set of records across all asset types. The other benefit of the move is a rationalisation of the multiple third- and fourth-party vendor relationships these firms must otherwise maintain.

Costs considerations for a multi-asset system investment

System testing by operations staff and others

Data mapping and reconciliation for client and regulatory reporting

Internal IT staff time and effort to support various technology platforms

Resources required for upgrades

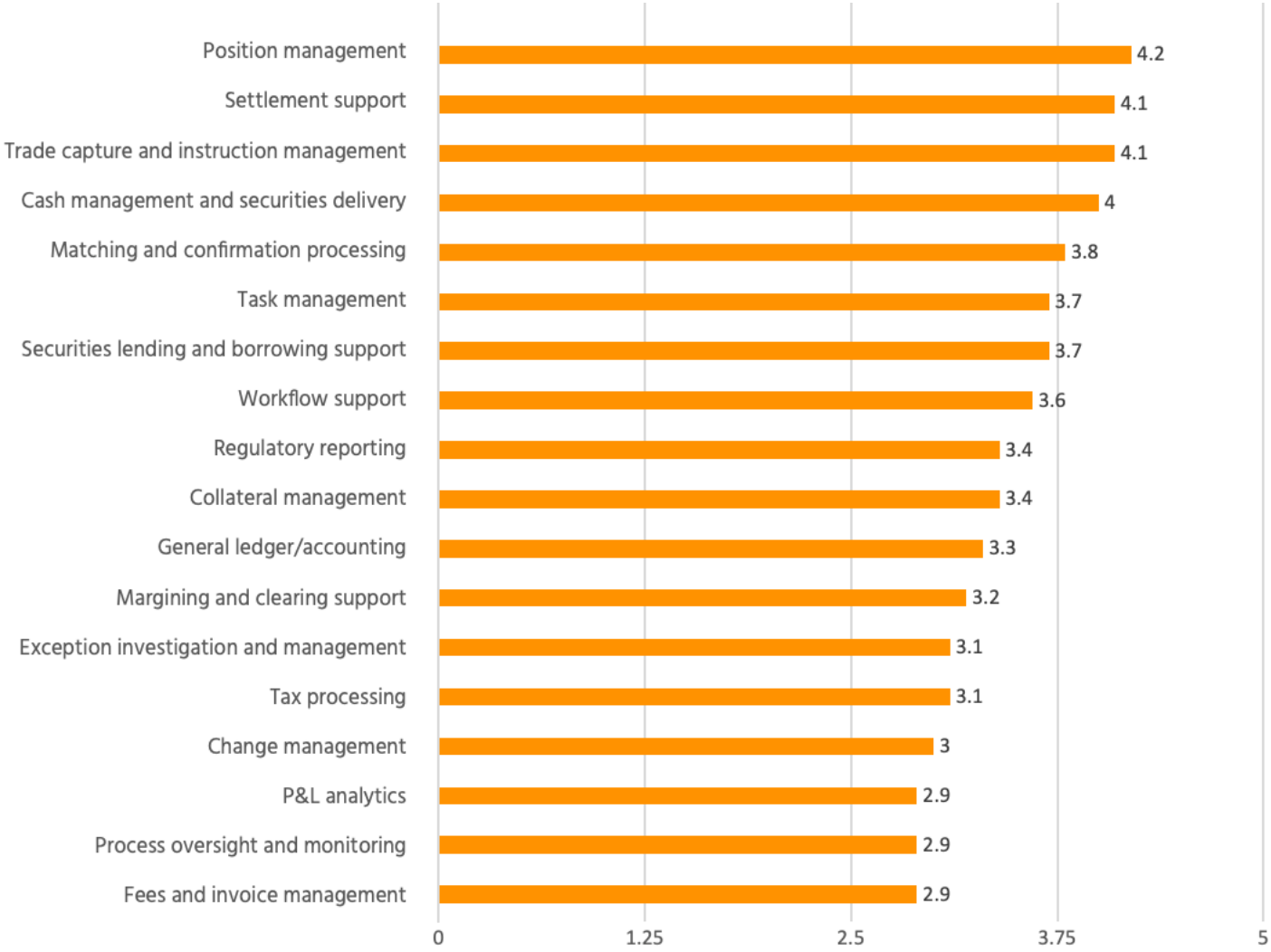
Annual license costs

Training staff to use the new features across multiple platforms

Silos hinder digital transformation

A large component of the industry's digital transformation agenda is dependent on the ability to gather data and insights from across a financial institution's various operations. The 2021 Broadridge Next Gen Technology Adoption Survey indicates that 67% of firms are currently focused on digital implementation, including digitalising workflows, improving the client experience and building out data intelligence analytics. The productive use of artificial intelligence (AI) is reliant on a critical volume of normalised data that can be fed into such technologies to deliver relevant insights. The more harmonised the post-trade environment, the easier it is to apply technologies such as AI to speed up exception resolution and deliver workflow efficiencies, both of which are currently problematic in firms' post-trade environments, scoring 3.1 and 3.6 out of five, respectively (see chart below).

Respondent views on their post-trade environment's functional capabilities



Process oversight and change management also score poorly at 2.9 and 3 out of five in terms of the rankings, which reflects the siloed nature of firms' environments front-to-back as well as across asset classes. Visibility of trade breaks and settlement failures is likely to be compromised if data and flows must be tracked and aggregated across multiple systems, and many inefficiencies and risks result from duplicative effort to gather data from across the various environments.

The benefits of a joined-up approach

The regulatory focus on operational resilience and risk management once again comes into play here. Regulators would like to see financial institutions better manage their third-, fourth- and fifth-party relationships, including all of their technology and service providers, which is more easily achieved via a consolidated approach. The fewer vendors and silo-based systems that a sell-side firm has to manage, the better from the operational oversight and risk mitigation perspective. And by adopting a unified, multi-asset solution on an agile, mutualised service basis, firms can position themselves for improved cost/income ratios, enhanced levels of efficiency and responsiveness to service change, a more robust risk and control framework, and the ability to provide a better client experience.

A business case for investment in a multi-asset class approach to post-trade can therefore be built using the following aspects:

- **Cost reduction:** This could be tied to decommissioning existing silo-based systems and transforming to a strategic multi-asset solution, and/or in consolidating or redirecting operational and support resources by eliminating duplicative and manual processes.

- **Compliance-related objectives:** There are many different regulations that could be aided by a consolidated view of clients, data and a more harmonised approach to asset class processing. Consistency of systems and controls is also a huge part of the ongoing regulatory focus on operational resilience. Compliance risk is much lower when there is greater transparency of processes across the whole firm.

- **Operational risk reduction:** Risk reduction might be a difficult metric to judge if firms don't have a good handle on their operational risk dynamics and core business management metrics, but it is an important benefit of investment in a more consolidated approach to post-trade. Teams are better able to focus on managing exceptions centrally across business lines, automating as many processes as possible, and centralising their risk management framework across asset types.

- **Business expansion and support:** Deploying a streamlined and unified technology platform that can support multiple asset types and that has a modern, more flexible architecture allows firms to scale up their capabilities to meet the requirements of new markets and new asset classes.

- **Consolidation of relationships and better oversight:** Third party provider oversight has increased in industry importance over recent years, so there is a solid business case for a strategic vendor relationship covering all asset types that plays into operational risk reduction, cost reduction, and increased governance and accountability. Costs are much more predictable year-on-year with a more consolidated approach to vendor relationship management.

- **Business-wide position management:** Collateral management, financing and margining activities across asset classes are much easier with a consolidated view of holdings and positions. Firms can also garner a better view of risk exposures across positions and therefore become more proactive in their management of those risks.

- **Scalability:** As recent volatility has highlighted, some firms have been challenged to scale to meet market requirements and volume spikes—a more consolidated approach enables firms to scale-up in the required areas when needed by reducing duplicative processes and eliminating system redundancy.

- **The ability to focus on transformation rather than plumbing:** The efficiencies gained by consolidating and industrialising post-trade processes means firms can redirect staff and investment resources toward developing new capabilities and digitally transforming other areas of the business.

A focus on the future

The digital transformation process for multi-asset processing isn't a big bang and it takes careful planning to move from the current state of siloed legacy applications to a more strategic and efficient post-trade environment. There are some basic steps to bear in mind that should be at the heart of every transformation programme:

Step 1: Break it down

Firms have to break such projects into manageable phases and identify initial areas of business pain that would benefit most from transformation in the short-to-medium-term. Examining areas of significant inefficiency and process duplication is a first step, alongside assessing areas that pose high compliance, operational or business risks. The ability to capture new and emerging growth opportunities is also a factor for consideration. Business buy-in is much easier if you have achievable targets in the short-term as well as the long-term.

Step 2: Seek out an experienced partner

Vendors are often easier to influence than your own internal stakeholders and IT teams when it comes to key investments. Some banks might consider themselves to be fintech firms, but the majority don't have the time or the resources to keep pace with how fast technology is evolving. It is the vendors' business to keep pace with (or sometimes to even keep ahead of) change. Finding the right partner that has the capabilities to invest in next generation technology to help future-proof their solution suite—and your business—is key. This includes the vendor's management and product team that should have deep knowledge and experience within the space—in a time of increased focus on operational resilience, vendor partners need to fully understand the operational flows that they must support.

Step 3: Keep communicating progress

Post-trade investments can lose momentum if firms don't retain the buy-in of their key stakeholders throughout the lifetime of the project. Every step should be documented and filled with proof points for the range of functional sponsors—that could be risk reduction metrics or it could be cost savings as a result of decommissioned systems. Project sponsors may change, so all these proof points should be kept simple and relevant to the sponsor's function to quickly get new faces onboard with the project's goals. Consistently tracking a set of metrics that highlight efficiency and risk within the post-trade processing lifecycle is an ideal way of proving the ongoing worth of the investments made and to highlight any hotspots that may require future investment.

Broadridge Financial Solutions

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