Growing pains

The boom in buy-side derivatives usage

Investment firms are accounting for an ever-larger share of derivatives trading volumes. The Buy-side Derivatives 2015 survey, conducted recently by *Asia Risk* and sponsored by Calypso Technology, reveals the challenges these firms are facing in terms of both regulation and technology, and how these challenges are being addressed

Trading of derivatives contracts is steadily rising, particularly among investment management firms – that is, asset managers, pension funds, insurance firms, sovereign wealth funds, family offices and other institutional investors. This change is happening for a number of reasons, including:

- increased familiarity with these instruments;
- the growing recognition they can help boost returns and reduce risk; and
- a desire to access a wider range of assets of different types and in different geographies.

At the same time, regulatory requirements are changing fast around how over-the-counter (OTC) derivatives in particular are traded, cleared and reported – most notably due to the Dodd-Frank Act in the US and the European Market Infrastructure Regulation (Emir).

As a result, legacy portfolio management technology is quickly becoming outdated and unable to perform the necessary functions, leaving investment firms with significant operational and risk management headaches.

This in-depth survey report of asset managers, insurance companies and pension funds provides useful and often surprising insight into the state of investment management derivatives trading.

Derivatives usage on the rise

The buy side – including traditional and alternative asset managers, pension funds, insurance firms, sovereign wealth funds and family offices – has been steadily increasing its use of derivatives.

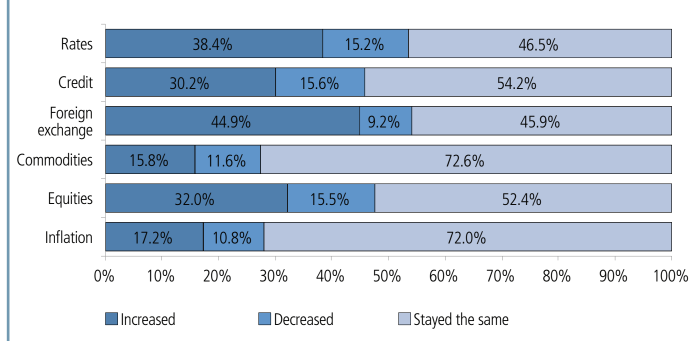
This is due not only to increased trading by existing users, but also to a growing number and range of users. In the past, hedge funds were the only significant traders of derivatives on the buy side; now, these instruments are popular among all players in the investment space, from insurers to pension funds to traditional and passive investment houses.

The market is seeing the fastest growth in cleared derivatives, largely driven by the expanding body of regulation requiring OTC instruments to go through an approved clearing house.

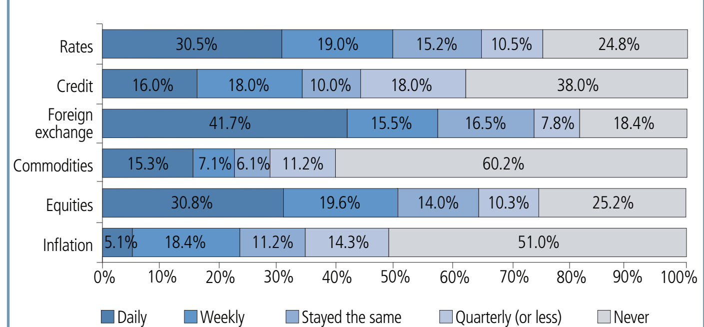
Data from the Bank of International Settlements[1] indicates buy-side derivatives usage has risen substantially since 2008, particularly for interest rate products, which accounted for $505 trillion, or 80% of the derivatives market, as of end-2014.

[1] Statistical Release: OTC derivatives statistics at end-December 2014, *Bank for International Settlements, 2015.*

1 How has your use of derivatives changed since 2008?

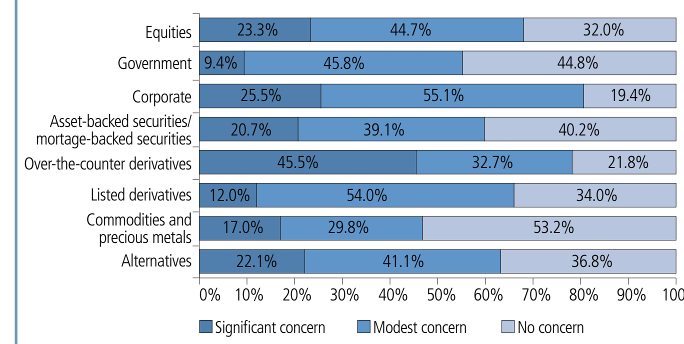


2 If you trade derivatives, how often do you trade them?

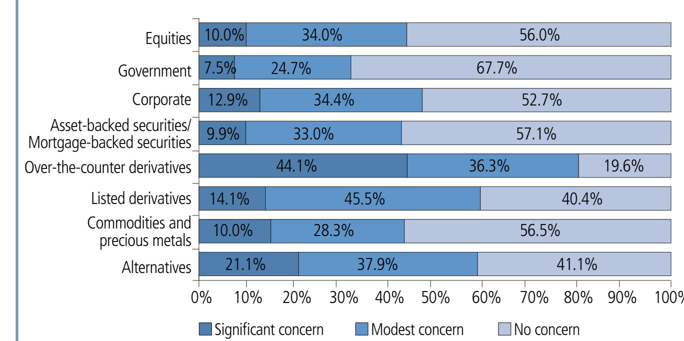


"Derivatives are now institutional investors' bread and butter," says Sylvain Privat, head of investment management solutions at Calypso Technology. "It has become a core function of investment firms to trade swaps and futures." There has been a particularly big ramp-up in derivatives usage in the past two to three years among investment management clients, he notes.

3 Which asset classes cause the most concern from a risk management perspective?



4 Which asset classes cause the most concern from an operations perspective?



Significantly more survey respondents said their derivatives usage had increased since 2008 than said it had fallen (figure 1). By asset class, forex instruments led the pack in terms of volume growth, followed by equity and interest rate derivatives.

Around half of respondents said they use forex, interest rate and equity derivatives on a daily or weekly basis. In fact, four in 10 trade forex derivatives on a daily basis, and three in 10 trade equity or rates derivatives daily (figure 2).

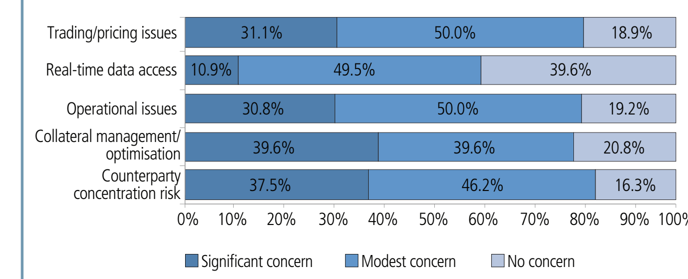
"Certainly, [our] use of derivatives has increased," says an investment professional at an Australian asset management firm. The fund house's use of interest rate futures and swaps has grown above all in recent years, he adds. And he expects the firm's forex derivatives volumes to rise in the coming years, because it is boosting currency exposure as a return driver for its absolute return strategies.

Drivers of volume growth

Use of derivatives is rising for both hedging and yield-enhancement purposes, and is driven by a number of factors. One is undoubtedly investors' growing familiarity with these instruments and the benefits they offer.

Another overarching trend is that investment management firms are using an increasingly wide range of products and strategies, which are growing in sophistication and making more use of derivatives. Portfolio managers are increasingly using derivatives-based vanilla, delta one or structured product strategies to benefit from market inefficiencies or quickly implement ideas in their portfolios.

5 What are your biggest challenges managing derivatives in the post-Dodd-Frank/Emir world?



One example of this is a strong rise in demand in recent years for absolute-return, benchmark-agnostic strategies, which heavily trade derivatives. This interest has been boosted by the fact that in the current and sustained low-yield environment, there is increased risk in holding long-term long-only portfolios, notes the Australia-based investment executive.

His firm has been increasing its use of such strategies and also employing more forex overlay mandates, whereby it uses derivatives to provide currency exposures on top of the investment portfolio to boost returns.

Another reason for derivatives' growing popularity is their ability to quickly and cost-effectively provide tailored exposure to any asset class – a major benefit in particularly volatile or uncertain markets. Survey respondents cited liquidity as one of their main concerns when trading derivatives, which can provide easy access to the most liquid assets.

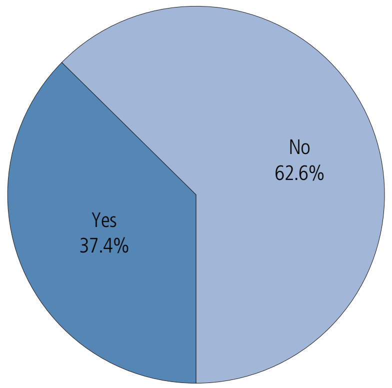
Buy-side concerns

Of course, any relatively new and growing market will have its share of challenges. When asked which asset classes in their portfolio cause the most concern from both a risk management and an operational perspective, by far the most common answer among survey respondents was OTC derivatives (figures 3 and 4). In response to both questions, almost half those surveyed cited this asset class as causing them "significant concern".

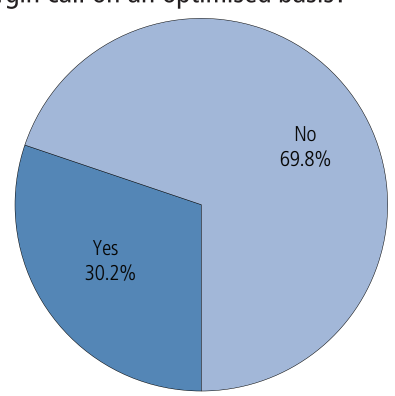
Some 80% of respondents had either significant or modest concerns around operations and risk management with respect to OTC derivatives. The findings indicate the bulk of users are struggling to cope with derivatives trading, partly because they have not implemented the appropriate processes or systems to deal with these instruments in the new regulatory environment.

"Many buy-side firms still don't have the infrastructure to cope with derivatives trading," notes Privat. "A large number rely on manual processes and Excel spreadsheets to handle derivatives and therefore don't have the integrated view of risk and end-to-end operational workflow that is required for these products, which can be very complex."

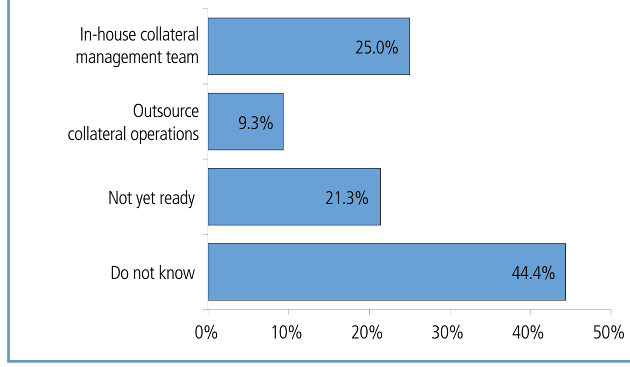
6 Do you have real-time, intraday access to your collateral inventory?



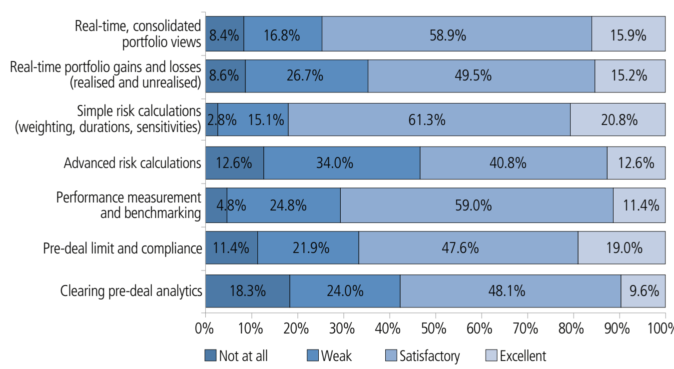
7 Are you able to pre-allocate your available collateral for each margin call on an optimised basis?



8 How do you manage your collateral to comply with Iosco non-cleared margin regulations?



9 How well does your current PM infrastructure support the following business activities?



Specific challenges

There are specific challenges investment managers face when trading derivatives in light of the Dodd-Frank and Emir requirements. The two causing the most concern are collateral management optimisation and counterparty concentration risk, according to the survey's respondents (figure 5).

In fact, at least 30% of buy-side firms have significant concerns around trading and pricing, collateral management, counterparty risk and operational issues. "This shows that there are material consequences on many different levels for investment firms coming from regulations," says Privat.

There are questions around how the rules will be implemented, and investment operations staff are spending a lot of time keeping on top of issues such as collateral management reporting, notes the Australia-based investment executive.

"[Derivatives management] is the area we spend by far the most of our time on now, trying to understand and make sure we get the right processes in place around issues like clearing and reporting," he adds.

When it comes to counterparty concentration risk, the aim of centrally clearing swaps is to do away with this issue, but executives at buy-side firms do not think this will necessarily be a panacea.

The investment executive says new clearing requirements may create new types of risk, as a handful of clearing houses will be responsible for all OTC transactions.

"We are often speaking to clearing broker representatives and clearing houses to understand their models and how they protect the margins we post to them," he notes. "This may affect how we approach each of them."

Collateral management – A key issue

Collateral management is a relatively new challenge for the investment industry, but one that is fast becoming critical.

"There is increasing awareness that collateral management has to be taken seriously and requires a central solution if it is to be processed efficiently," says Privat. "Centralised inventory and optimal allocation of collateral is becoming crucial in the investment management industry."

Another encouraging development is the buy side's growing recognition that collateral management has an impact on portfolio returns; 41% of respondents said they were aware of this. Privat sees this as an interesting finding, because it shows investment firms are realising that managing collateral more efficiently can boost portfolio performance.

"There is increased awareness that this is a vital function, and it requires the appropriate processes and tools if it is to be managed properly," he notes.

The ongoing low-yield environment has probably helped sharpen investors' focus on efficient collateral allocation as they seek to squeeze out every last drop of return.

The Australia-based investment executive confirms: "Our focus [on collateral allocation] has increased. We're looking at what we can do to become more sophisticated in that area."

Underprepared for collateral management

All that being said, the investment industry is still underprepared for managing collateral properly. Most asset managers and investors are not properly equipped to do centralised daily monitoring or optimally allocate their collateral.

Six in 10 survey respondents said they do not have real-time, intraday access to their collateral inventory, and seven in 10 are not able to pre-allocate their available collateral for each margin call on an optimal basis (figures 6 and 7).

In addition, almost half of the survey's respondents are not aware of The International Organization of Securities Commissions' (Iosco) non-cleared margin guidelines being implemented in national regulations (figure 8). A further 21% are at least aware of the coming changes, but are not yet ready for them. The Basel Committee on Banking Supervision and Iosco will require all bilateral OTC trades to be collateralised with calculation of both initial and variation margin. This will have major implications for both investment operations and risk management, says Privat.

The lack of preparedness is, in many ways, understandable, because the new requirements around collateral represent a new reality, he says. But it clearly needs to be addressed.

The right solutions?

One thing that would help buy-side firms deal with the myriad issues involved with derivatives trading is having suitable tools in place.

Around half of survey respondents (46%) said their portfolio management infrastructure was either non-existent or weak in the level of support it provided for advanced risk calculations (figure 9). The situation was similarly bad when it came to clearing pre-deal analytics and not much better for pre-deal limits/compliance and real-time portfolio gains and losses.

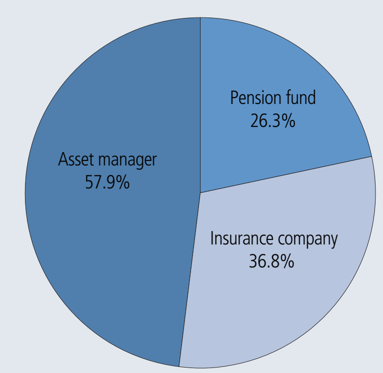
The fact that portfolio management systems do not offer suitable OTC clearing and analytics functions yet is not particularly surprising because the requirements in these areas are relatively new.

"New regulations are forcing certain instruments to be centrally traded, cleared and reported, which means investment managers are having to think about everything in a different way," says Privat. "It makes perfect sense that there's a gap [in technology and expertise] there, but that will be filled in the coming years."

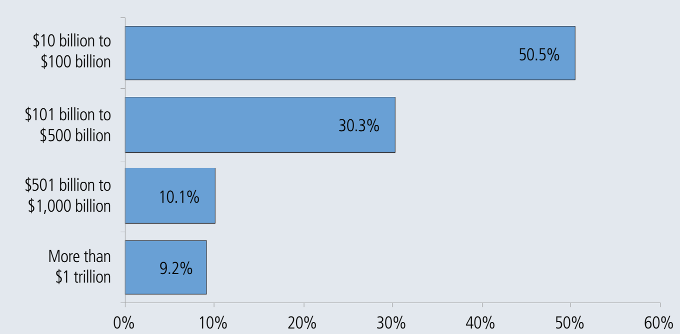
Buy-side derivatives 2015 – How the survey was conducted

The survey was conducted by *Asia Risk* on behalf of Calypso Technology over a six-week period from the start of August to mid-September this year. The aim of the survey was to better understand why and how buy-side firms are using derivatives, and the extent to which they are doing so. There were 189 respondents, from asset management firms, insurance companies and pension funds.

Breakdown by respondents



Assets under management



Sylvain Privat, Head of Product Management, Investment Management Solution, Calypso Technology

Sylvain Privat joined Calypso Technology in 2013 to head and lead the product management for the company's investment management solution. Responsible for all strategic and regulatory-driven developments for the buy side across the front office, risk management and operations management. He has 12 years of experience in the industry and, in his previous roles with Sophis and Misys, Sylvain has been helping small and large investment firms around the world to address their business, operational and regulatory challenges. Sylvain holds an MSc in general engineering from L'Ecole Centrale Paris, with a specialisation in applied mathematics and finance.