GLOBAL INVESTOR/ISF AUTUMN SPECIAL 2016

GLOBAL INVESTOR ISF

AUTUMN SPECIAL 2016

The future has arrived

Securities finance and OTC derivatives remodelled as reform agenda becomes reality

International Securities Finance survey
Pension fund investment strategies
African capital market development
Luxembourg alternative funds
Asset management outsourcing

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Good news, terrible timing

The IORP II Directive contains many sensible resolutions to issues feared by UK pension schemes. But Brexit will inevitably complicate matters, says *James Walsh*, policy lead: EU & International, Pensions and Lifetime Savings Association (PLSA)

It might have been rather overshadowed by more headline-grabbing EU-related events at the end of June this year, but the new IORP Directive (IORP II) on workplace pensions should be firmly on pension schemes' radars.

In fact, given that the UK is obliged to implement new EU legislation as long as it remains an EU member state, and given that the Brexit process looks unlikely to move quickly, the PLSA's advice to pension schemes is to get to grips with the new directive's requirements in case they have to follow them at some point.

In a nutshell, IORP II sets out extensive new requirements on good governance and risk management within pension schemes, plus provisions on clear communications to members and the removal of barriers to cross-border schemes. The good news is that a solvency-based funding regime for defined benefit pension schemes was very strongly ruled out even before the start of the process. IORP II is expected to come into force in late 2016, after a vote in the European Parliament. Member states will then have two years to implement the law. Observant readers will already have done the sums on how this squares with the Article 50 process.

Cross-border schemes

One of the most interesting new provisions is a significant and welcome outcome in the long-running battle over funding of cross-border schemes. Article 15.3 of the new directive still requires these to be fully funded at all times, but the text now continues: "If this condition is not met, the competent authority of the home member state shall promptly intervene and require the IORP to immediately draw up appropriate measures and implement them without delay in a way that members and beneficiaries are adequately protected".

The text still requires full funding at all times for cross-border schemes, but it also allows them to have deficits and put recovery plans in place. Although the wording is an awkward compromise, the outcome is, in practice, a major improvement on what went before.

Fit and proper management

As long expected, the new Article 23 on fit and proper management says the requirement for professional qualifications only applies to those who carry out actuarial or internal audit functions. Other persons with key functions, such as trustees, are not subject to the professional rule. This protection for lay trustees was a major lobbying victory by the PLSA and its allies.

The new Own Risk Assessment will have to be compiled by schemes at least every three years or following any significant change to the scheme's risk profile. This will cover the scheme's risks, conflicts of interest and ESG factors.

Cross-border beneficiaries

Throughout the negotiation process the PLSA had been concerned that the wording of the new directive would see schemes deemed cross-border simply by virtue of having beneficiaries (as opposed to active members) in another member state.

This would have turned any scheme with pensioners in Spain or another EU country into a cross-border scheme. Recital 5c now states clearly that IORPs will not become cross-border simply because they have beneficiaries in another member state.

Depositories

A further victory for common sense can be seen in Article 35, which now says member states "may" require DC schemes to appoint a depository to oversee and safeguard assets. So it will be up to member states to decide whether to require DC schemes to appoint a depository. If equivalent protections are already in place, then Article 35 can be waived.

IORP II and Brexit

As with any EU issue, the referendum outcome is a major factor. Strictly speaking, the UK will be obliged to work towards implementation of IORP II as long as we remain a member of the EU. In practice, it is difficult to see the UK making this much of a priority when we are edging towards the exit door – especially as the deadline for final implementation of IORP II might fall a matter of weeks or months before departure.

For all these reasons, the PLSA's best guess is that the status of IORP II in the UK will – at some point – become one of the many loose ends to be resolved in the Article 50 exit negotiations. In the meantime, the sensible course is to get abreast of the new requirements and monitor events.

Select in haste, repent at leisure

Pension schemes are trusting fiduciary managers to make big decisions, writes *Maggie Williams*, but are putting inadequate effort into their own selection decision

The UK's financial watchdog, the FCA, is in the midst working on its Asset Management Market Study, a wide-ranging assessment of how the industry operates. The role of investment consultants is within its broad scope – and specifically the fast-growing practice of pension scheme fiduciary management, often carried out by an incumbent adviser. While the FCA is right to explore the way in which mandates are being won, does the failure to explore the market before appointing a fiduciary manager lie with the investment consultants – or schemes themselves?

Recent research by consultancy Aon Hewitt showed that 68% of trustees spend five hours or less per quarter on investment matters, and that their biggest concern by far is the scheme's funding level. If, as that research suggests, time-poor trustee boards are struggling to deal with their share of the collective £502bn ($651.5bn) UK defined benefit pension deficit, the case for fiduciary management – employing a third-party to manage assets day-to-day on the trustees' behalf – is compelling.

After a slow start, the fiduciary management market has started to gather pace. According to Aon's survey, 45% of schemes now employ some form of fiduciary manager compared to 28% in 2011. Research by KPMG released in January 2016 showed mandates in the sector now total £102bn.

Conflicts of interest

Schemes using fiduciary management services like to stay close to home. Aon's survey shows that 67% use either their existing actuary, investment consultant or investment manager as their fiduciary manager, with the remaining 33% opting for a third-party provider.

Trust and familiarity are always going to be key criteria in selecting a partner that will take over the day-to-day running of some or all of a scheme's assets, and redefine the way in which the trustee boards' fiduciary duty is delivered. Perhaps the decision to use an existing provider is not that surprising.

But the FCA's interest has been piqued by just how willing trustees might be to appoint an incumbent as a fiduciary manager. The regulator's market study was launched in November 2015 and is due to deliver final results in 2017 (with a delayed interim report in the fourth quarter of this year).

Its overarching aim is to investigate "whether competition is working effectively to enable both institutional and retail investors to get value for money when purchasing asset management services." Specifically, within that remit, it refers to "the role of investment consultants and potential conflicts of interest arising from the provision of advice and asset management services."

It could be argued that there is no conflict of interest here from a consultant's perspective – the step from adviser to implementer is a logical one. There is no legislative constraint against converting business in this way. Any marketing department will tell you of the cost-effectiveness of up-selling existing clients – especially when those clients don't look at the competition.

One of the drivers behind the FCA's current spotlight on fiduciary management is a 2014 KPMG report into fiduciary management, which showed 80% of new mandates were being awarded "on an uncontested basis". In January 2016, KPMG reported that just 23% of new mandates were advised by an independent third-party.

> **"It is poor governance and poor practice for trustees to appoint a fiduciary manager on an automatic basis without some form of market review or tendering process"**
> ANNE KERSHAW, MUSE ADVISORY

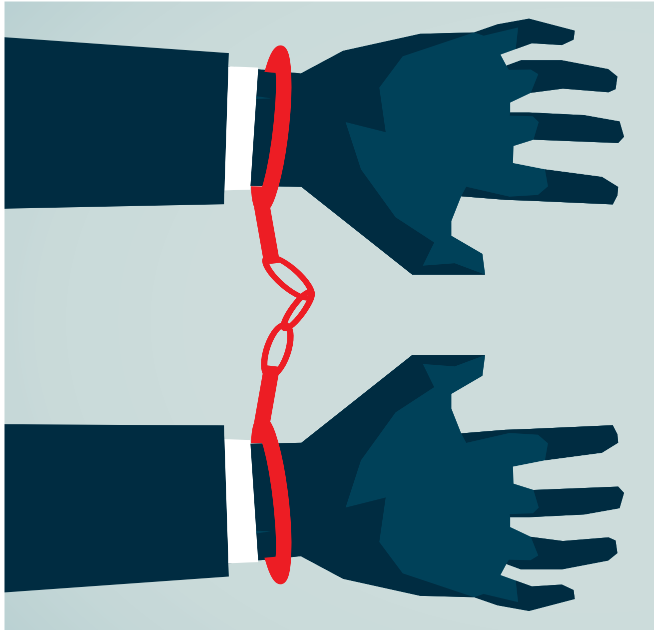
Therein lies at least a part of the problem. "It is poor governance and poor practice for trustees to appoint a fiduciary manager on an automatic basis without some form of market review or tendering process," says Anne Kershaw of governance specialists Muse Advisory. "We see it as trustees who need to change in this area."

"Some level of market testing or tender process would ensure that trustees make this important decision in possession of good market knowledge."

Kershaw acknowledges that the incumbent investment adviser may well be the best partner as a fiduciary manager "but it is hard to see how trustees know this without some degree of market review or tender."

The twin storm clouds of inadequate trustee board time and perilous funding positions, particularly post-Brexit, mean business is unlikely to slow down for fiduciary managers. But it remains the responsibility of the trustee board to build in due diligence around those mandates – whatever the FCA's market survey reveals.

Locked out of illiquid assets



The requirement for daily trading means DC pension investors are seldom offered the ability to capture the illiquidity premium. *Maggie Williams* asks whether it is viable for this to change

Nothing says 'long-term savings' like a pension. Yet in the UK, assets within defined contribution (DC) pension default funds must provide daily pricing and daily trading. Does the dichotomy of long-term investments and daily trading requirements constrain DC returns – or is it an effective trade-off that allows for members' needs and level of sophistication?

While their defined benefit (DB) cousins can take advantage of the premiums offered by holding illiquid asset classes, DC plans have been more limited in their investment scope and ambition. Stephen Budge, principal, DC & financial wellness at consultancy Mercer, says that there has been "little ability or appetite to try and bring illiquid holdings into DC default portfolios."

And yet, there are good reasons to consider illiquid assets as part of a DC plan. "Greater freedom in the approach to investment and flexibility should improve value to members, considering their long-term investment horizons," says Budge.

"Members' investment returns and asset diversification could be improved by allowing access to more illiquid assets, so there seems little argument against their inclusion in portfolios, based on an investment rationale," he adds.

To date, however, there have been few options available to DC default fund managers that would enable them to build in the greater diversification and added value that Budge describes. Schemes using diversified growth funds (DGFs) might include an allocation to illiquid assets, but use of these vehicles within defaults is still relatively muted; research carried out by State Street Global Advisors in early 2016 showed 31% of UK DC schemes had exposure to DGFs. The use of illiquids within those DGFs is also typically kept to a minimum.

> "There is a general belief that returns could be enhanced if the daily liquidity requirement were removed"
> STEPHEN BUDGE, MERCER

However, there are now signs of increased interest in creating funds that will provide access to illiquids for DC – while still retaining the current requirement for daily liquidity and trading.

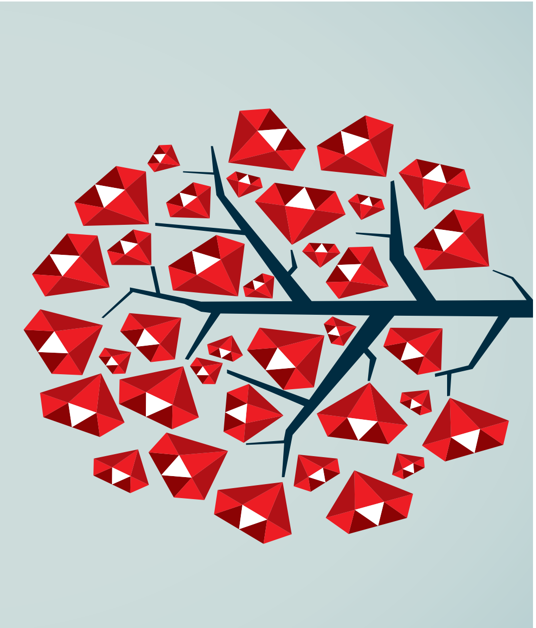
Swiss asset manager Partners Group launched the first private markets fund for the UK DC market in June 2016, investing in private equity, private debt, private infrastructure and private real estate. The daily liquidity requirement is met through allocation to listed private markets. The company launched similar funds for the US and Australia markets last year.

Budge believes that pooled fund structures such as this remain the most likely opportunity for accessing illiquid assets in the UK market. "Hopefully other managers will follow suit in due course," he says.

Liquidity mismatch

However, using a wrapper of daily-dealt assets to provide liquidity around a traditionally illiquid asset class can introduce different risks. The decision by many UK-based open-ended property funds to suspend withdrawals following the European Union referendum showed that while Brexit might mean Brexit, liquid didn't always mean liquid. Concerns over commercial property prices following the UK's vote to leave the EU saw retail investors rushing to make withdrawals from these vehicles. Asset managers responded with a combination of outright suspension of withdrawals and price cuts as they sought to make property sales to meet redemption requests.

"Making liquid funds out of illiquid asset classes runs some big risks and in late June, those risks came home to roost," says Ian Mason, portfolio manager, AEW Europe. "Investors were not protected in any way, as they didn't get the liquidity or pricing they thought



they were going to get."

Mason believes that building liquid funds from illiquid assets risks creating a solution that favours no-one. "The problem is that you end up with daily traded but poorer quality funds. They may give liquidity – but it comes at a cost. When investors wanted liquidity they couldn't have it [post-Brexit], but they are paying a cost for unused liquidity in lower returns."

Given the challenges and risks involved in creating liquid vehicles from illiquid asset classes, would a better option be to remove the daily trading and pricing requirements altogether? "There is a general belief that returns could be enhanced if the daily liquidity requirement were removed," says Budge.

Mason adds: "It would be better to put limits on a default fund of say 5% to 10% of a balanced portfolio, for illiquid assets. That is similar to the way in which DB schemes use illiquids."

Removing restrictions

Would closed-ended, genuinely illiquid assets work any better for DC if the rules were changed? For example, an infrastructure fund with a 15 to 20-year fixed-term horizon might meet the investment profile of a younger saver – or even possibly work in favour of a 40-year-old aiming to start accessing funds at the age of 60.

While at a high level, this looks like a good fit, Gavin Lewis, head of consultant relations at Vanguard cautions: "From a trustee perspective, the board needs to pay very close attention to the fund's timing strategy. Closed-ended structures might have a period when the fund manager goes to find assets to match, which causes a drag."

Lewis adds that, similarly, funds may roll over by one or even two years rather than the date originally planned. This potentially distorts redemptions.

Regulations aside, not all DC schemes will be in a position to invest directly in illiquid assets on behalf of their members. Scale is a consideration and, in that vein, Budge sees some of the larger master trusts as potential direct investors in illiquid holdings "but only when assets have increased in size".

There is also the consideration of the charges cap of 0.75% imposed on UK DC default funds. "The charges cap would be a huge restriction to say the least," says Lewis. "Cost restrictions are there to help the end investor, but it would be a big hurdle for illiquid assets."

Ultimately, every DC investor has control over their own assets – especially when it comes to accessing and using their pension pot from age 55 onwards. As such, the ability of DC investors to manage more complex and varied investment types with differing risk profiles needs careful consideration. Ankul Daga, senior investment strategist at Vanguard, says: "There are some intangibles here. When you look at the options of what to include [in a DC default], the question is, does this give the investor a better chance of success and peace of mind? A simple solution can enable investors to feel in control and make decisions."

> **"Making liquid funds out of illiquid asset classes runs some big risks"**
> IAN MASON, AEW EUROPE

While the day-to-day performance of a default fund, or the asset classes within it, should pose few concerns to investors with long-term savings horizons, for savers using drawdown, it may be more of an issue. Daga says "it can put an expectation on individuals to make a call on complex investment strategies that even some asset managers struggle with. It can make big demands on inexperienced individuals."

A potential mismatch between the need for regular income in retirement, typically on a monthly basis, and the long-hold nature of illiquids could also be an issue, adds Lewis. "People expect monthly income, but if you are in an illiquid asset class that doesn't mature for five years, that causes problems. Yield-generating assets such as real estate might be able to assuage some of those issues, but it is still not a perfect match."

One-off withdrawals are another potential sticking point says Daga. "Savers could be looking at transacting and withdrawing money around a life or market event," he says, pointing to a "potential nightmare" for investors needing instant access from fixed-term funds. "It then becomes the responsibility of DC plan sponsors to communicate effectively around the assets and members' ability to access them. People need to be educated and given the responsibility, then the tools and shown how they use them. But pension engagement is so low in the UK."

Total liquidity is only really necessary for DC investors in a small handful of instances (such as withdrawing the whole pot in cash). However, even if the regulatory requirements for daily pricing and trading were removed, making illiquid assets work in the context of drawdown, delivering vehicles within the charges cap, and protecting potentially unsophisticated investors might suggest that anything other than daily trading is beyond the scope of DC.

But increasing demand for diversity, to help drive better value for DC plan members, means that the debate around accessing illiquid assets is unlikely to be silenced. The real challenge for the market will be delivering default funds that offer the right balance between accessibility for end investors and improved returns through greater diversification.

The inside edge

Large pension schemes are increasingly bringing investment management in-house to reduce costs and increase control. The results can be impressive, finds *Maggie Williams*

Low interest rates and muted investment returns have put increasing pressure on institutional investors to gain greater control over their cost base. For large pension schemes and other institutional investors, one route to that objective has been to bring asset management operations in-house.

In September 2015 the Investment Association estimated that around £130bn ($169.9bn) in assets were managed in-house by occupational pension schemes in the UK. And research carried out by State Street at the end of 2014 across 15 countries showed that 81% of pension schemes involved in the survey intended to manage more assets in house.

Examples of that trend in practice include UK retailer Tesco's Tesco Pension Investment team, set up in 2012. Following an overhaul of its investment practices, the Railways Pension Scheme established the Railpen Investments board, to oversee the scheme's investment strategy and decision-making. And, as the Local Government Pension Scheme pooling project, which will see 89 UK local authority pension schemes merged into just eight funds, develops there are already intense discussions about the balance between internal and external asset managers for the funds.

Increasing sophistication

The move to in-house management is far from a UK-only phenomenon. "Tier one pension schemes across Europe are bringing an increasing proportion of their portfolios in-house," says Tony Griffiths, senior analyst for Cerulli Associates.

Griffiths adds that he also sees pension funds beginning to broaden their ambitions, in terms of the asset classes being brought in-house. "The focus has moved on from local equities and other traditional asset classes to alternative investments. Many of the more sophisticated schemes, particularly in Northern Europe, are looking to build out their private investment capabilities."

Adam Gillett, senior investment consultant at Willis Towers Watson, identifies cost reduction as a motivator, with the aim of driving higher net returns. "Cost cutting is always attractive, but combine that with low growth and difficult investment environments and it becomes particularly compelling."

A lower cost base is, however, only one reason why large pension funds are moving assets in-house. "There is also a sense of having better control over what's going on in your portfolio," says Gillett. "With the external manager model there is some inevitable compromise along the way. Asset holders are thinking that they can do it on their terms and wrest back some control from external managers."

Part of that element of gaining greater control is about understanding the finer details of how the portfolio is operating. Mark Austin, head of relationship management, institutional investor group – self-managed asset owners and insurance at Northern Trust, says: "There is a desire to get a holistic view of the scheme's assets versus its liabilities. They want more granularity and ability to explore data to help the scheme understand its overall position."

Levels of control

The term in-house asset management can cover a wealth of different approaches, whether direct investment, managing an asset allocation overlay or carrying out fiduciary management in-house. However, direct investment is unlikely to prove suitable for schemes below a certain size. "A rule of thumb is that for asset owners above $10bn it's an option and they will see the advantages of scale. If you are much smaller than that, it becomes hard to build up the necessary resource and really benefit from that operating model," says Gillett.

Austin points to the complexity of infrastructure required to support an in-house manager, and the associated set-up costs. "It's not just about hiring asset managers – they need a base to work out of and the pension fund may have to build the infrastructure to support that. That includes trading desks, which might be outsourced, middle office support and technical support. To enable the asset manager to turn ideas into performance is complicated and by the time you've added the other staff

required to support them, the cost adds up."

The costs attached are also likely to be affected by the types of asset class being managed in-house. "Moving from local to global equities, for example, may seem a relatively small leap, but the number of analysts alone required to implement a successful strategy may be large, and expensive," cautions Griffiths.

Most schemes adopt a mix-and-match approach, with some asset classes – such as active equity and fixed income – managed internally. External managers are still likely to hold mandates both in low-cost sectors such as global indexed funds where there is little cost benefit from setting up an in-house team, and in highly specialist classes such as multi-asset credit or frontier markets where the expertise and reach of an external manager is likely to continue to bring benefits.

Governance challenge

Bringing asset management in-house introduces some different risk factors and changes to scheme governance. "Some smaller schemes would be more exposed to the key man risk – although that can be similar to an external manager with a couple of key staff," says Gillett. He adds that this can put pressure on the CIO of an internal team, to appoint, manage and retain the right people. "It's a different skillset to manage money yourself rather than to research external parties and monitor them, so getting the right people in and retaining them is vital."

Designing appropriate reward structures, aligning those with the requirements of the scheme and getting the right belief and culture are all key to success. Gillett says: "If you are planning to insource, it requires a fundamental belief that this will be better for you. That goes into culture as well – accountability and risk-taking is a shift. It's hard to put your finger on, but it's an important factor on whether insourcing is a successful move."

Inevitably, moving to in-house asset management also includes a shift in relationships with third-parties, with a strong emphasis on risk control. Outsourcing key investment operations such as trading desks means developing rigorous service level agreements, key performance indicators and robust governance. "How do those providers manage disaster recovery, or risk control? If something happens that means you can't trade, there is a significant risk for the pension scheme," says Austin.

The nature of the relationship with custodian banks also changes. While the fundamental roles such as custody and performance management remain largely the same, reporting becomes more frequent – typically on a daily rather than monthly basis. "The role is broader in terms of support [for in-house management]," says Austin. "It does change the relationship. Contact with the middle office within in-house asset management is much more frequent. The relationship is more like a partnership than it is with an external asset manager and asset servicing."

Custodians also have a fundamental role to play in the process of bringing asset management in-house. While segregated mandates may already be held by the custodian, undertaking the process of bringing assets together from other pooled funds is likely to be part of the remit as well.

Building an in-house asset management structure from scratch is potentially daunting and the goal of higher net gains only achievable by schemes with sufficient scale to genuinely benefit from a move in-house. However, for pension plans that can support it, the trend towards moving in-house looks set to continue, driven by cost control and a desire for more granular management of the scheme's assets.

Case study: USS

The Universities Superannuation Scheme (USS), the UK's largest pension fund, manages around 70% of its assets in-house, according to Roger Gray, chief investment officer at USS. "As a large fund, there are cost, alignment and time-horizon advantages in investing primarily via in-house investment capability," says Gray. He adds that external managers are used where internal managers cannot be justified or obtained on a timely basis, and where USS finds suitable alignment with external managers.

"The benefits and breadth of in-house management depend on the scale of assets. At our scale, a range of internal activities can be delivered cost-effectively, alongside the benefits of focusing on long-term investment rather than commercial incentives."

For USS, the results have been impressive and maintained over a significant time period. Relative to the scheme's strategic allocation benchmark, the team has returned added value of £1.1bn over the last year and £2.2bn over five years, to the 2015/16 financial year-end. This equates to outperformance at annual rates of near 2.4% and over 1% per annum respectively.

Containing catastrophe

The Brexit referendum once again highlighted the difficulty of conducting stress tests, says *Paul Golden*, with asset managers sent scurrying to their history books to identify trigger events and comparable scenarios

Stress testing is becoming an essential risk management tool for asset managers. Relying on systems that only capture routine market volatility are no longer deemed sufficient; the notion that running stress tests involves nothing more than applying a shock to a portfolio or running it through a historic period has been firmly discredited.

This was particularly true after 23 June when, according to Axioma chief operating officer Ian Webster, deciding what assumptions to make post-Brexit could not be guided by precedent. "There is only one historic event that is similar in nature and that is Greenland leaving the European Union in 1985, but the magnitude of that event is not comparable to the UK leaving the EU."

Potentially comparable scenarios include the near break-up of the single European currency as a result of the Greek debt crisis or the UK exiting the European exchange rate mechanism in 1992, but analysis of these periods produces wildly different results.

Webster observes that in the run-up to the EU referendum, a stress test based on the European bond crisis (where over a period of three months the equity market fell by 24%) was highlighted. "But analysis of the ERM stress test revealed that equities rose by 18% over the following quarter, so what looked like very similar types of macroeconomic events ended up producing very different outcomes."

Damian Handzy, founder of investor analytics & global head of risk at StatPro, accepts that it was a lot easier to come up with a stress test and an estimate of how markets might react initially to Brexit than to predict the impact of the vote six months down the line as there is no single trigger event that will take place over that time period.

As it happened, risk management processes responded well to the aftermath of the referendum. "The FX and equity markets were shocked but they were orderly," observes Dr Laurence Wormald, head of research & quant investment risk at FIS. "Only in the less liquid commercial funds market did problems arise, with withdrawals having to be gated."

> **"The credit crunch gave us a good indication of how the industry would react to a collapse in liquidity"**
> DAMIAN HANDZY, STATPRO

Risk scenarios

Risk scenarios that have come to the fore include the impact of terrorism and other geopolitical instability on particular asset classes and issuers, particularly ones that have exposure to both UK and European markets. "Increased focus and emphasis on currency exposure is also being considered," adds Alpha FMC director, Greg Faragher-Thomas.

When it comes to sector-specific positioning, Webster suggests that managers are looking more closely at correlation assumptions and ensuring that they are correct, particularly if an enterprise-wide perspective is being taken rather than just a portfolio-level view.

According to Handzy, interest in sector-specific investment rose in the wake of Brexit, particularly in relation to sectors such as banking, on the back of suggestions that UK banks could be subject to less regulation.

He says there is general agreement among asset managers that a robust model for measuring liquidity risk has yet to be developed. Many regulators have focused on the number of days to liquidate as a measure, but that approach has been criticised because assets can be liquidated more quickly if the owner is willing to accept a significant haircut.

"Days to liquidate is affected by the price you are willing to accept for the asset you are trying to sell or the price someone is willing to pay," continues Handzy "The credit crunch gave us a good indication of how the industry would react to a collapse in liquidity – there was a flight to quality and holding cash."

Although equity markets are highly liquid, Webster accepts that further research is required to determine whether they have the ability to bounce back in the event of circular asset movements. "Asset managers face challenges when marketing illiquid assets in liquid funds and passive investments exaggerate some of the issues because you are turning individual assets into 100% correlated assets," he concludes.

Artemis Investment Management has appointed **Stephanie Sutton** as its new investment director, focusing on marketing US equity products in Europe. Sutton joins from Fidelity, where she was also an investment director. Sutton has been an equity analyst, fund manager and product manager in her 20-year career, including roles at Société Générale, F&C and Lehman Brothers. She has also worked as an asset management consultant consultant at Ernst & Young, which she left in 2008 to join Fidelity.

Legal & General Investment Management (LGIM) has appointed **Simon Chinnery** as head of defined contribution (DC) client solutions in a significant expansion of its team. In this newly created role, Chinnery will report to both head of institutional client management and strategy Chris DeMarco and head of DC Emma Douglas Chinnery joins LGIM from JP Morgan Asset Management, where he spent 11 years working with both clients and consultants and was latterly was head of UK DC.

Swiss investment firm **Union Bancaire Privée** has hired **Charles Anniss** from M&G to bolster its small- and mid-cap European equity coverage, the Swiss group has announced. Anniss left M&G Investments in June having been responsible for its European Select fund and European Smaller Companies fund. During his tenure, Anniss was also responsible for managing segregated global ex. US equity portfolios for institutional clients

Former Barings Asset Management chief investment officer **Ken Lambden** is to join **JO Hambro Capital Management** as group chief executive. Lambden departed Barings in May ahead of its merger with Babson Capital Management and subsidiaries Cornerstone Real Estate Advisers and Wood Creek Capital Management. He will replace Gavin Rochussen at the firm as he takes the role of group executive international at BT Investment Management, the JOHCM's Australian owner, as the investment boutique expands in the US and Asia. Before Barings, Lambden was global head of equities at Schroders for 10 years, leading the equity teams in UK, Europe, North and South America and Asia.

Invesco has appointed **Marco Peri** as senior relationship manager for institutional investors. Peri, who will report to Italy's sales manager Giuliano D'Acunti, has almost 20 years experience in wealth management and business development. Before joining Invesco, Peri worked for La Française, first as international sales manager, then as country head for Italy, taking care of the marketing and sales of the company's development and the creation of new funds. Previously, he was senior relationship manager of various international management companies, including Société Générale, ING IM, Nextra IM.

UBS Asset Management has appointed **Fekko Ebbens** as head of its its EMEA institutional business. In addition to his new role, Ebbens will continue in his responsibilities as head of Benelux and Denmark. Ebbens has been with the group since 2006, where he previously worked among others as head of Benelux & Denmark and as head of Asset Management Northern Europe. Prior to that, he covered Business Development at Lobard Odier Darier Hentsch and worked as portfolio manager at Van Lanschoot Bankiers.

BNP Paribas Investment Partners has appointed **James Dilworth** as global head of sales. He will be in charge of developing BNPP IP's business with institutional and retail investors as well as distribution networks. Based in London, he will join the executive committee and will report to Frédéric Janbon, CEO of BNP Paribas Investment Partners.

James Dilworth

Dilworth was most recently CEO Germany for Deutsche Asset & Wealth Management Investment and global head of Active Asset Management at Deutsche Bank. Formerly, he held various executive and business development roles at Allianz Global Investors and at Goldman Sachs Asset Management.

Rotterdam-based **Robeco Institutional Asset Management** has appointed **Gilbert Van Hassel** as CEO and chairman of the management board as of 19 September. Van Hassel joins from former ING Investment Management, now NN IP, where he most recently held the positins of global CEO ING Investment Management and member of the Board Insurance and Asset Management. Prior to that, he worked among others at JP Morgan, where he held a number of executive roles in Europe, Asia and the US.

Schroders has appointed **Fabrizio Bianchi** as head of institutional business at the service of Italian clients, such as pension funds, mutual funds, insurance companies, investment banks and other public and private institutions. Bianchi, who will report to country head for Italy Luca Tenani, has nearly ten years of experience in the institutional business, in Italy and abroad, in companies such as Generali Investments and Fidelity International.

Rethinking responsibilities

Regulatory compliance is pushing asset managers to both increasingly outsource non-core tasks and take on more white-label business. All parties can benefit, says *Paul Golden*, so long as rigorous oversight is applied

Asset managers, institutional investors and retail advisers are increasingly outsourcing tasks that are not at the core of their businesses. Asset managers are both outsourcing certain tasks and taking on business on a white-label basis. The most powerful motivation pushing them to outsource functions, in the current cycle, is the potential to share the costs associated with new regulations coming into effect.

Research conducted by Cerulli Associates earlier this year found that independent financial advisers (IFAs) are starting to rapidly increase their appetite for outsourcing investment management. In 2015, 41.4% of those surveyed outsourced, a figure that rose marginally in 2016 to 41.7%. However, the more striking finding was that the percentage of IFAs expecting to outsource in 2017 was 45.9%.

Cerulli found that almost two-thirds (64.4%) used discretionary fund managers, followed by multi-asset funds and multi-manager/funds of funds, each of which were used by 53.3% of the advisers surveyed. Just over one-in-three (35.6%) outsourced to platforms' model portfolios, with only 2.2% using robo-advisers.

The sheer magnitude of regulation is focusing advisers' minds on where they can contract out parts of their service to external providers at a lower cost, according to Paul Stanfield, chief executive of the Federation of European Independent Financial Advisers. This backs up a Northern Trust survey of nearly 200 investment advisers back in 2014 that found that one in four respondents contracting out investment management had improved their ability to contain the expense of compliance.

Asset manager outsourcing

Asset managers, as well as institutional investors, are similarly seeking to outsource certain tasks due to regulatory compliance. BNY Mellon's CEO of global financial institutions asset servicing, Daron Pearce, says that regulation-driven demand has already been an additional catalyst for service providers to invest in regulatory and compliance infrastructure.

Pearce divides the risk to the client associated with outsourcing into operational, client and regulatory factors. "From an operational perspective, institutions outsource the function but not the risk because they are still accountable," he says. "They need to ensure they create a good oversight structure and understand the processes and the control environment of the organisation that they have outsourced to. In turn, we need to give our clients the tools they need to see how we are performing."

> "Asset managers need to ensure they create a good oversight structure and understand the processes and the control environment of the [third-party] organisation"
> DARON PEARCE, BYN MELLON

In terms of client risk, the third-party provider will sometimes work directly for its client's underlying customers, as in the case of an asset manager taking on an outside partner to directly service a pension fund. If, in this example, it provides a white label service to the pension fund and delivers inaccurate data, it would damage asset manager's reputation.

"Finally, institutions need to ensure they have a good handle on regulatory risk," adds Pearce. "In particular, they must understand how their outsource partner is managing its business. Institutions need to ensure the service provider's approach to audit control and legal risk does not leave them exposed."

Ken Back, head of business development, UK institutional investors, at BNP Paribas Securities Services, says that Solvency II's look-through analysis requirement has demanded that asset managers either implement new systems capabilities or look to external providers for ready-made solutions.

Brinda Murty, vice president financial markets solutions at Genpact, says many engagements and ongoing discussions are focused on business-process-as-a-service and managed services offerings. "Rules and guidelines governing outsourcing have been in existence for some time now and most financial services firms have strict protocols on how they manage their third-party provider relationships," she says. "Firms have not reduced expenditure on engaging third-party providers across businesses, geographies and business functions."

Genpact offers a checklist for assessing potential outsourcing providers: its viability; its expertise and track record; its operational risk governance and control framework; its ability to contain delivery risk and quality of output; and the client's retention of oversight and monitoring of the activity within the financial institution.

Institutional investors

The head of the outsourcing practice at Alpha FMC, Olivia Vinden, says that there is increased interest in outsourcing from pension funds, particularly in consolidated records of mandates where the fund has outsourced its investment management to multiple providers.

Vinden recommends that asset owners undertake thorough due diligence on their service providers. "A full risk review is necessary to ensure that the client is comfortable with the level of operational risk and that strong controls are in place. Institutional investors tend to have a service provider oversight function that undertakes site visits and the larger outsourced service providers will have sophisticated internal compliance functions."

For pension schemes outsourcing asset allocation decisions, Aon Hewitt partner Sion Cole, says there is a need for greater transparency around fees and performance. "For fiduciary management investment solutions, performance should be assessed against the investment objectives set by the trustees, specifically in relation to the scheme's unique liabilities. Clarity on who is making decisions and who is accountable at every stage is also important."

It should be made clear from the outset which responsibilities and accountabilities remain with the trustees (for example, setting the investment strategy and any risk/return parameters or investment guidelines) and which are being delegated (manager selection, asset allocation, portfolio management and rebalancing), concludes Cole.

For asset owners, execution risk is a risk factor associated with outsourcing that has received insufficient attention, suggests Citisoft CEO, Steve Young. "There is an assumption that the large providers can do execution, but in reality there is not a universal model and as you move up the value chain providers are offering a bespoke service to each client. To drive costs down there need to be more shared services. Clients need to spend more time looking at the operations of the service provider, and the technology that underpins it, to assure themselves they can get the level of service they need."

Young adds that outsource providers have to deal with clients that want a bespoke service for utility pricing. "Asset owners need to take a long-term view of outsourcing rather than driving it on a cost basis. Providers face considerable technology challenges that will demand significant investment and partnership is required to create a sustainable operating model."

> **"There is certainly a potential risk associated with transitioning business to a new provider in the event of the withdrawal of service"**
> KEN BACK, BNP PARIBAS SECURITIES SERVICES

Contingency crucial

The FCA has raised issues regarding the ability of asset managers and other clients to replicate an outsourced service in the event of the failure of a key third-party provider. It has called on asset managers to review their outsourcing arrangements and, where appropriate, enhance their contingency plans for the failure of a service provider that provides critical activities, as well as ensuring they have the required expertise to supervise the providers.

The Investment Management Association had previously set out the key issues arising for asset managers from the regulatory regime on outsourcing, in a 2013 white paper. It noted that severe operational disruption within a service provider could leave an asset manager unable to comply with its relevant regulatory requirements, contractual obligations arising under its contracts with clients or third parties, or its broader legal obligations (for example, as a fiduciary).

"There is certainly a potential risk associated with transitioning business to a new provider in the event of the withdrawal of service by any of the large third-party administrators," says BNP Paribas' Back. "Most services can be replicated over time, but there remains a risk that transition timelines are likely to be longer the more clients need to shift supplier."

Boosting business

While solutions may be expensive to provide, it is inevitable that the client will be primarily focused on reducing costs. The key to winning more outsourced business is to keep costs low, which has encouraged service providers to invest in digital solutions, says Vinden. "One of the main focus areas is improving the exchange of data, for example to make it more real-time and interactive via self-service reports."

Managers that are looking to generate business from independent financial advisers have two main strategy options, which are not mutually exclusive according to FEIFA's Stanfield, who is also secretary general of the European Federation of Financial Advisers & Intermediaries. "They either need to provide complete portfolio solutions, for instance multi-asset funds, or sell into investment firms that provide such solutions and/or discretionary fund managers."

Asset managers may look to outsourcing as a more cost effective solution to compliance issues – as well as a means of fixing their cost base – but they cannot shift the burden of their underlying compliance risk. Managers are required to be able to demonstrate adequate oversight of the third-party administrator outsource provision, while the latter needs to provide as much information as possible in terms of dashboards and data reporting to make it easier for the asset manager or institution to be compliant.

FX examination

Asset managers are increasing their focus on best execution in FX. Advances in transaction analysis and manager knowledge are two of the key factors behind this trend, says *Paul Golden*

A survey conducted by TradeTech FX last year among heads of FX trading, CEOs and senior management from leading asset managers identified regulation and compliance as by far their most significant challenge. More than two-thirds (68%) of respondents cited reduced market liquidity as the biggest impact new regulations have had on their FX trading activity, followed by increased risk awareness and streamlined processes.

In this context, it is crucial that asset managers have sufficient understanding of FX market pricing and distribution. MiFID II will bring in new requirements for asset managers – including more specific order execution policies – and although FX spots are not covered instruments, asset managers might find themselves including them as though they were. As a result, there will be a more detailed requirement for managers to report where and why they executed on their chosen venues.

According to Jim Foster, deputy head of eFX trading at State Street Global Markets, there is increasing awareness among asset managers of how their liquidity providers are generating prices and hedging risk. "In the past, not all clients were aware that trading with us does not mean that we have already hedged the position or that we may warehouse the risk for minutes or even hours with the aim of spreading it across the wider client base," he says. "Now managers will have discussions with us on how long those positions may take to hedge to help in their trading decisions."

The FX trading teams of asset managers have had access to deep liquidity in the past – facing a large number of counterparties across all FX types – but Glen Sargeant, product manager buy-side FX at FlexTrade suggests that this approach may have to change. "The management of forward-dated exposure in compliance with MiFID requires a great deal of administration and one option for minimising this would be to reduce the number of counterparties faced for forwards."

Transaction cost analysis

Transaction cost analysis is a useful tool for asset managers reviewing the performance of their trading partners and venues, says head of FX at Traiana Jill Sigelbaum, though she also acknowledges that its value is dependent on the underlying available market data. "The FX market does not have a consolidated tape concept, so clients need to understand the specific data and methodology used by a transaction cost analysis provider. Two providers could give vastly different results on the same trade depending on the methodology and market data used."

Some asset managers continue to confuse spread with cost, according to NCFX CEO Andy Woolmer. "The problem here is that asset managers tend to have very repetitive, predictable business in both spot and forward markets, so price makers can easily guess what they will do each time they ask for a price. The price maker will then make a tight spread, but will skew the price against the manager in the knowledge of what the manager will do. These skews are built into trading systems so a machine will seek to maximise the likelihood of getting the deal and making money from it by making a tight price outside of the market."

Foster suggests that asset managers are generally one of the client segments best suited to principal trading on the basis that their trading tends to be non-correlated in the short term, making it practicable for liquidity providers to internalise their flow and show them much more aggressive pricing than is available to agency clients.

For managers not trading actively, it makes sense to use a single dealer relationship and tender the business every three years using a market rate based in independent data to ensure best execution is achieved, concludes Woolmer. "For others it may be appropriate to use a multi-dealer approach on either a principal or agency basis, but these choices can only be made once a sensible understanding of costs has been reached."

Second round of success

Global Investor/ISF hosted a roundtable to discuss whether Luxembourg can replicate its UCITS success with alternative products

PARTICIPANTS

Chair: Ceri Jones, *Global Investor/ISF*
Claude Niedner, partner at Arendt & Medernach
Marc-André Bechet, head of legal and tax affairs, ALFI
Ilias Georgopoulos, managing director, Luxembourg, global client coverage, RBC Investor & Treasury Services
Bettina Graeber, head of relationship management at Pictet Asset Services, Luxembourg
Ewald Hamlescher, managing director of GAM
Sandra Müller, managing director at MEAG

How has Luxembourg's position versus other financial centres changed over the last year? Can it repeat its UCITS success with AIFs?

Marc-André Bechet: It's fair to say that 2015 was a good year for the Luxembourg market. The growth of assets was slightly above 13%, with 72% of that coming from net subscriptions.

Growth on UCITS and AIFs together accounted for 41% of net subscriptions for the European market. Luxembourg's historical market share of UCITS is 36%, so that 41% means an increase in our market share. On AIFs we have a slightly lower market share, which is explainable by the fact that traditionally these funds are rather domestic funds, so you see countries such as France and Germany leading the pack.

I would say, yes, we can repeat the success of UCITS with AIFs, for several reasons. In terms of net sales in 2015, we had a market share of 22% for Luxembourg AIFs in Europe, which is again growing our market share.

I would not like to predict 2016 because markets are so bumpy, but last year is a good place to start. Of course, on the management company side, we have a tremendous presence of Luxembourg UCITS ManCo, and these ManCos have traditionally moved into the alternative space and transforming the licences into what we call a Super ManCo, looking at UCITS and AIFs.

What are the legal reasons for the success of UCITS and AIFs in Luxembourg?

Claude Niedner: We have to distinguish between the UCITS and the alternatives side. On the UCITS side, Luxembourg is the leading European jurisdiction, and Luxembourg UCITS are recognised as the reference for cross-border international distribution. UCITS is a more mature market, but from time to time we still see additional asset managers bringing funds to Luxembourg, either new funds, re-domiciling funds or launching new funds. Some Channel Islands funds are coming over, which have more a retail-distribution approach. Recently, we had a Danish initiative coming to Luxembourg, but it's generally a mature market.

On the alternatives side, Luxembourg can grow significantly. For me, the most important point was that the Alternative Investment Fund Managers Directive (AIFMD) created a European passport for distribution of alternative investment funds for professional investors in Europe. What created the success of Luxembourg was having European passports for distribution. We are recognised as a pan-European fund distribution centre, and even though France and Germany have quite a significant role, going forward, this international, cross-border component will become more important.

Number two on the alternatives side is that Luxembourg has recently implemented a number of initiatives, of which the most important is the Reserved Alternative Investment Funds (RAIFs), to have alternative investment funds that are manager-supervised vehicles and do not need to be authorised by the Luxembourg Supervisory Commission or the financial sector. In terms of speed and cost to market, the Luxembourg vehicle becomes much more attractive. We are an international onshore solution that is able to compete with the traditional offshore jurisdictions, such as the Cayman and Channel Islands in terms of structuring flexibility, but we are onshore with access to the European market complying with AIFMD requirements.

Ewald Hamlescher: AIFs will take time gaining as prominent a role as UCITS, which are clearly a market-dominant brand that Luxembourg has disseminated globally. But I think in the AIF space, though we have more competition, there is clear and strong potential, definitely.

What other innovations have there been in Luxembourg?

Bechet: We have always been at the forefront of innovation in terms of legal structures, covering the needs of any European asset manager, be it German or French, and more recently, the Anglo-Saxon world, because we have introduced the limited partnership and special limited partnership regimes, which are geared to asset managers in the alternative space. But we have also traditionally had umbrella funds for maximum flexibility. Other centres are copying what we're doing, but we have the lead. Maximum flexibility for asset managers and promoters is, of course, a key consideration in terms of innovation.

Ilias Georgopoulos: As Luxembourg continues to consolidate its leading position for cross-border distribution, we're seeing a rising trend occurring in the creation of third-party independent AIFMs, which are not necessarily linked to a specific asset manager, and offering the substance for asset managers that don't have a physical presence here but want to utilise the jurisdiction and its regulatory oversight to distribute through Europe, Asia, Latin America or other places. Many asset managers globally view Luxembourg as a key jurisdiction in facilitating the distribution of their UCITS, but also want to leverage its efficient regime of funds, be that private equity, real estate or the loan and debt funds that are growing right now.

Bettina Graeber: Yes, Luxembourg is well-positioned to make AIFs a similar success. We have the infrastructure in place, combined with expertise in distribution. The AIFMD passport is definitely an important element in this regard. With the introduction of limited partnership structures, in our company we have seen quite a number of AIFs being set up under this regime. This has really pushed new initiatives and accelerated developments.

Georgopoulos: The AIFM success has to be differentiated from UCITS success. From an assets perspective, it will never reach UCITS levels. I see AIFMs as a success in terms of the number of funds and in the diversity of service provision, because we are seeing a lot of differentiated projects and ongoing fund creation.

"The driver for outsourcing has been regulation. For us it made sense over the past years to seek external support in fulfilling regulatory reporting requirements"
BETTINA GRAEBER, PICTET ASSET SERVICES

Are you seeing most growth from one particular asset area?

Niedner: I suppose credit funds, because that is a domain that was not that well-known in Europe. Now with the Capital Markets Union initiative credit funds are taking off, and with Luxembourg's pragmatic and flexible approach in terms of funds being authorised to do loan origination, we have seen many of those loan origination structures coming to Luxembourg.

The interesting point, as Marc-André [Bechet] mentioned, is that we have had the partnership structure available since 2013, which is very flexible. It's more of an Anglo-Saxon type of structure. It's now very efficient to come to Luxembourg, set up a partnership doing loan origination, using a third-party AIFM, and that is a new development.

Hamlescher: This is definitely the area we've seen most growth recently.

Bechet: We have a market share in Europe of 9%. If you look at the range of structures across Europe, and funds that are geared at institutional investors, we have a market share of 30% in real estate investment funds. So that's really an area where we have built up competencies over time. Next to loan funds, which is a newer asset class, real estate is more established.

Sandra Müller: When selecting the right financial product, UCITS or AIF, the investor is at the heart of our decision process. One has to keep in mind that more than two-thirds of the asset management market is held by institutional investors. They are looking more closely at alternative strategies to improve performance and get uncorrelated returns.

In the past, we saw growth in liquid alternative assets and strong demand for multi-asset strategies under the UCITS wrapper. That may be rebalanced by AIFMD-compliant structures, as UCITS rules impose stricter investment limits to ensure adequate investor protection. Institutional investors with a longer-term horizon, such as insurance companies and pension funds, do not want the disruption of daily liquidity imposed by UCITS rules, nor do they want to have their strategy curtailed. That's why they prefer AIF solutions. They are looking for comprehensive strategies and robust risk management to underpin every investment decision.

Georgopoulos: As a depository, we also see that when asset managers are coming to set up funds. We ask why they are choosing to be AIFMD-regulated – every time their response is that it is because of their institutional investors' requirements, especially in the insurance or pension world. Many institutional investors are looking to diversify their portfolios. A significant majority are increasing their exposure to property and infrastructure in search of consistent income, as more traditional investment classes have become either too volatile or lack yield.

Do you have a view on the regulator, CSSF, relinquishing its responsibility for RAIF investment vehicles?

Niedner: We certainly do. It does not make sense to have two levels of regulation. Luxembourg has made a bold move in taking away the supervision of the fund vehicle by the regulator and insisting on the supervision of the manager. I'm sure this will be a trendsetter in Europe. The CSSF has accepted this and is likely to focus on the supervision of AIFMs.

Georgopoulos: It was a double win for the regulator towards the investor, because by doing that, he's actually putting the responsibility on the asset manager and the depository, rather than the fund itself.

Is there any impact from the economic backdrop?

Hamlescher: People seem to be sitting on the fence – there seems to be a

sense of uncertainty currently affecting investors' mood.

Bechet: We are at a crossroads. Investors have not yet decided whether they should go back into investments. There is a wait-and-see attitude across Europe. Today, something like 40% to 50% of household worth is in cash and, linking into the question on the Capital Markets Union, the European Commission has realised that we need to do everything we can to attract and unlock investment that is sitting idle. This brings us to the idea of doing more investor education, a key focus for our association and members.

Niedner: There is a political point. What type of product can you offer to what type of investor? The European Union approach is very much to say that retail products must be liquid. That is wrong, because on the alternative side there are certain AIFM products that are accessible to professional investors only, but there is room for retail investors. In this respect, the European Long Term Investment Funds (ELTIFs) regime is subject to restrictions that are excessive in terms of eligible assets, leverage and investors. It would be good to also create vehicles that could be distributed to individuals, maybe not to all retail investors, but to certain individuals, where you can unlock capital and permit them to invest in products that do not offer daily liquidity.

There is consensus on this point?

Bechet: Yes, there are some discussions about unlocking long-term illiquid investments for retail investors. We should pursue these discussions to enlarge the range of valuable vehicles for retail investors.

It seems there's confusion between liquidity and risk?

Bechet: It's not because something is complex that you cannot invest in it. It's not that something which is complex, is, by definition, illiquid. Also, the fact that you're using derivatives, which is also a feature of UCITS, does not mean that the product is not adapted to retail investors. Many misconceptions need to be clarified.

How does the amount of retail money in cash compare historically?

Bechet: In Europe, the percentage of retail assets invested in cash was 41%, according to EFAMA. In the US it's 13%. In Europe it has never been as high as over the past three or four years and, if you look at the opposite, demand of households' assets invested in funds across Europe is about 8%, compared to the US, which is above 20%, so it's a relation of one-to-three.

Georgopoulos: While we continue to live in a negative or low interest rate environment, traditional money market funds are simply not as attractive as they once were.

How well positioned is Luxembourg to act as a location to domicile, manage and service ELTIFs?

Graeber: Luxembourg has the retail expertise and the expertise in servicing non-liquid assets. But I am very transparent – we have not set up an ELTIF so far in our company. For the time being, for non-liquid strategies, existing vehicles are used.

Hamlescher: We see some interest in infrastructure vehicles, generally, but not necessarily in the context of ELTIF.

Niedner: There could certainly be a business case for a non-liquid vehicle that can be offered to retail investors. The way the ELTIF regulation was approached made it extremely difficult to use. We won't see many ELTIFs in Europe. But we will see hundreds of RAIFs.

ESMA, interestingly enough, came up with the advice on which countries should be eligible for third-country passport. I think it was a wise decision to say that the jurisdictions that are the asset manager jurisdictions are those that are ready to join, rather than the fund jurisdictions. Since the AIFMD is a manager's directive it is important to make the third-country passport available to the manager jurisdictions.

Having said that, making a US manager create a US-based AIFM that uses the Member State of Reference concept in order to passport into the EU is such a complex approach that I doubt many would use it. I think large ones would probably rather set up their own AIFM in Europe.

Hamlescher: Their own AIFM, yes. And the second point is how to deal with the private placement versus passport approach.

Bechet: It's not yet a done deal. It's a recommendation made by ESMA to the European Commission, and there are quite a few caveats.

One of the remarks made by the Commission is if you get access to the European market there should be some form of reciprocity, and that's something that we see in all discussions on trade agreements. Even though UCITS are being sold in 70 markets not all markets are open – we enter here into a door where we give market access to foreign providers. As a point of principle, the entire industry is supportive of more choice for investors. So, having non-EU AIFs offered to European investors on equal terms is by definition a good thing, mid to long-term, provided we have a level playing field in terms of market access.

Do we have a timescale for this?

Bechet: We are lagging behind in terms of timeline, but there are so many initiatives at the European level that it makes no sense to hurry. I don't think everybody's rushing, but I heard once the term 'Fortress Europe' but that is definitely not the case here. The AIFMD is by definition, something that opens a market of 500 million investors to foreign players.

In terms of US reciprocation, can that completely change the landscape?

Müller: For sure, the extension of the AIFMD passport will have implications. The trend is to try to accommodate all investor needs, ideally, within one structure. Fund managers will definitely seize this opportunity to accommodate existing investors but also those that want to invest in a more regulated structure, to diversify their investor base.

As a consequence, we expect increasing competition from non-EU AIFMs with different operating models, which might trigger further pressure on fees and expense ratios. At the same time, the passport extension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may improve the product distribution efficiency in those countries.

What about MiFID? We already operate a split between adviser types in the UK.

Hamlescher: We're reviewing our various products in terms of the need to comply and making possible adjustments.

Graeber: For new fund projects, in particular, we come across remuneration questions. How do we structure it today in view of MIFID II? How long can we keep a setup before we need to redesign the product and the flows? Right now, it's a situation with some uncertainty.

Hamlescher: Over the years many banks have developed an open architecture allowing them to provide other promoters' products. Now, with this kind of inducement regime coming through, it may likely lead us to a more closed architecture environment, because asset managers can't allow inducements and banks may need to raise their fees to compensate for the loss of certain revenue streams. In the end, they will have little incentive to promote other promoters' (non-captive) products.

Georgopoulos: This is exactly what we are discussing with several clients. MiFID II may well result in a preference for moving away from a managed account-type structure with fund-of-funds, where they attach retrocessions on the investments, in favour of creating their own structures – UCITS, mostly – for investing into their own fund ranges that are replicating either indexes or other straightforward investments. This will enable some type of remuneration, moving the remuneration from an inducement to an asset management fee.

So this somewhat counter-productive?

Niedner: I think so. MiFID II is a good example of a common theme in European directives – that they often change too rapidly and are too ambitious.

Georgopoulos: While the fundamental objective of all regulation must be investor protection, there must be some appreciation that the consequences of implementation must not outweigh the potential returns.

Hamlescher: That's the long and short of it.

Regarding service provision, what is the cost of implementing and complying with new regulations?

Müller: The fast-evolving regulatory landscape is affecting the European funds industry, with an increased focus on corporate governance. Ensuring operational compliance with these reforms continues to be at the top of our agenda and is driving up expenses for all of us. Furthermore, management fees are in the spotlight due to the growth of passive products. Beyond that, the demand for new capabilities and IT solutions necessitate investment in technologies, which is also costly and affects our balance sheets.

Institutional investors focus on managers with a critical mass of assets under management, an established brand and a profound expertise for selecting investments.

The combined effect of these trends is putting pressure on profit margins and incentivising asset managers to tightly manage cost and increase efficiencies. In this context, the cost of administration and operational compliance may be challenging for new fund managers with smaller business volumes. Beyond that, we expect consolidation among management companies without critical mass.

Do you agree there are strong barriers to entry?

Graeber: Definitely. The business case has changed over the last couple of years. A few smaller managers have disappeared for cost reasons. The cost of administration has increased a lot, and it has not always translated into a fee raise towards the fund product from the service provider. This cost increase has to some extent been absorbed by the service provider and it has changed our business model and our requirements in terms of size as well.

A few solutions can help, such as the use of a white label umbrella structure, an incubator structure for new managers that start with 'renting' one sub-fund, building up a track record and volumes without the cost of an entire standalone structure.

Hamlescher: This is similar to our model.

Is there any change in dynamic in terms of what's in-sourced and outsourced at the service provider level?

Graeber: Yes. The driver for reconsidering certain areas for outsourcing has been regulation. For example, for us it made sense over the past years to seek external support in fulfilling regulatory reporting requirements.

Hamlescher: We have opted for more outsourcing.

Would you hazard a guess of where the industry will be in two to three years?

Hamlescher: Well, relating to the cost barrier, some asset managers are having difficulty entering the market with all of the burden placed upon them. So, they go to a service provider, let's say a management company, but the management companies themselves are consolidating because their costs are already high. It's a snowball effect.

Müller: Most Luxembourg management companies follow a semi or fully-decentralised operating model, whereby some core functions are outsourced to related entities within the group or to third parties.

For example, one key benefit of outsourcing fund administration is the ability to migrate onto modern technology platforms that can scale to support growth. Risks and costs can be reduced and quality improved, via shifting to variable cost structures and a shared service model. Asset managers can focus on their core competencies and establish new product lines or access geographies quickly. To provide top quality and state-of-the-art asset management solutions we follow a flexible business model – it is the cornerstone and enabler to grow a business faster.

The design of the operating model is based on efficiently-delegated functions in different locations with a centralised oversight responsibility and a material presence in Luxembourg.

Georgopoulos: Asset managers are looking to add value for customers, and outsourcing is one of the top subjects for optimising their own internal structures. The one-stop-shop solution is the most demanded model right now, with one provider that can handle most of the services, so it's actually not only an outsourcing trend, but a consolidation drive to a long-term partner. It's a deeper relationship.

Bechet: We spoke about competition, consolidation and probably some providers disappearing from the scene. The number of AIFMs in Luxembourg has increased over the past few years and we've seen the same thing on the service provider side, especially on the custody side where you need specific competencies to service alternative investment funds.

"The one-stop-shop solution is the most demanded model right now, with one provider that can handle most of the services"
ILIAS GEORGOPOULOS, RBC INVESTOR & TREASURY SERVICES

On top of newcomers to Luxembourg for UCITS products, we have six large Chinese banks being set up here, setting up UCITS to distribute in Europe. That's a new trend.

How will Brexit impact Luxembourg?

Niedner: We view it as a way to partner with the financial institutions that are based in London and are going to face a problem in how to access Europe. The Luxembourg approach is not to try to make a pitch to get the London business to Luxembourg, because that's not going to happen. Luxembourg needs to be a gateway into Europe, or a bridgehead of London operations in Europe to be able to continue to manage products out of London.

There will be a number of consequences. First, a number of asset managers that already have their products in Luxembourg and have started UCITS management companies or AIFMs in Luxembourg, are going to slightly increase their substance, asking for a dual licence. They need to have a solution to for managed accounts for customers who are not in London but actually in Continental Europe. Luxembourg needs to be able to offer that solution.

Bechet: I will not say it's business as usual, but it's not something that is entirely new as UK-based asset managers are the second-largest group in Luxembourg. 16.6% of assets come from UK-based asset managers, so they're already using the UCITS product to sell cross-border.

Hamlescher: We've definitely seen increased interest from across the Channel. The UK's decision to leave the EU will likely benefit the Luxembourg market. The question is, of course, how we position ourselves vis-a-vis other domiciles vying for business. One downside is we lost an ally within the EU Commission in Jonathan Hill, a strong ally for the financial industry. It remains to be seen how that pans out in terms of Capital Market Union and other initiatives still pending.

Tony McDonnell is to head up sales and business development across Europe for **HSBC Securities Services**. McDonnell will report to Rafael Moral Santiago, head of securities services, Europe, and will be responsible for driving the firm's growth across all client sectors and asset servicing products. Alongside his new role, McDonnell will continue as managing director, securities services in Ireland, a role he has held since 2014. McDonnell joined HSBC in 2002, taking on his first European role as regional head of alternatives Europe, sales and business development in 2010.

Steven Dalzell, the former global head of transition management at Citi, has joined the **Abu Dhabi Investment Authority (ADIA)**. Dalzell, who spent six years at Citi and has also worked at BlackRock, will take charge of the sovereign wealth fund's transition management operations. He will be responsible for ensuring changes in the sovereign fund's asset allocation or investment management are handled efficiently, ADIA said in a statement, and will report to Salem Alblooshi, executive director of central dealing department. Dalzell has relocated from London to the United Arab Emirates.

Northern Trust has appointed **James Wright** as head of its Institutional Investor Group (IIG) in the UK, Ireland and Guernsey. In the new role, Wright is responsible for driving the strategic direction and growth of the firm's business to meet the needs of institutional investors and financial institutions across its pension, insurance, fiduciary and corporate client base. "Institutional investors, particularly asset owners, are facing significant change in light of the evolving regulatory landscape and challenging economic conditions leading to a reassessment of existing business models," said a Northern Trust statement. Wright will position Northern Trust's institutional business to support existing and prospective clients' future business needs through an extensive range of asset servicing, capital markets, liquidity and data solutions.

Investment fund software firm **Multifonds** has appointed **Keith Hale** as its new CEO, replacing former chief Oded Weiss Hale was formerly Multifonds' executive vice president for client services and business development. Since joining Multifonds in 2010, Hale has also served as its global head of transfer agency. Weiss will retain an advisory position as part of the appointment while the remainder of the management team remains unchanged.

Alexandre Zeller will be stepping down as chairman of the board of directors at **SIX** at the end of September 2016. Following the merger, Alexandre Zeller successfully honed the strategy of SIX and geared the Group to meet the new demands from the international and national markets. The current vice chairman, Dr. Romeo Lacher, will serve as acting chairman from first of October 2016 until a successor is appointed.

BNP Paribas Securities Services has appointed **David Pember** as sales manager for New South Wales and Queensland, Australia. Pember has over 20 years' industry experience, most recently as executive director, sales manager asset managers & insurance companies at JP Morgan. He was previously director of strategic alliances at Omgeo and prior to that, sales manager for Asia Pacific at Thomson Financial.

Tony Buche has joined **Pure Capital** to lead the firm's third party services offering. He will be the primary contact with asset managers looking to establish their funds in Luxembourg. Buche joins Pure Capital from KNEIP where he held a position of head of relationship management. Prior to that he worked at Societe Generale Securities Services, heading the custodian services department and as sales director in charge of SGSS Luxembourg. He also worked for Clearstream International and FRS Global.

Hazeltree, a provider of integrated buy-side treasury management solutions, has appointed **Sol Zlotchenko** as the company's chief technology officer. In this role, Zlotchenko will lead all aspects of technology direction, product development and technical support for Hazeltree's treasury solutions. He joins Hazeltree with more than 20 years of software industry experience and extensive financial technology and hedge fund expertise.

BNY Mellon has recruited former Visa innovation lead **Niamh De Niese** to head up its EMEA technology incubator. The US bank opened the hub in October with the objective of bringing together tech start-ups, developers, industry experts and researchers to work with clients on developing new products and services. The centre is BNY Mellon's sixth to open in the last three years, four of them in the US and two in India. The bank has been on the look-out for a new director for the Emea facility following the departure of former Centre head Leda Glyptis to Sapient Global Markets in January.

MUFG Investor Services has appointed **Kate Stallard** as executive director for business development in EMEA, focusing on the private equity, real estate and infrastructure business. Stallard will be responsible for promoting asset servicing solutions and supporting clients with fund administration, custody and regulatory services.

Taxing times

Regulatory and taxation changes are challenging traditional methods of borrowing and lending in Germany. *Andrew Neil* reports from the *Global Investor/ISF* Securities Finance Masterclass in Frankfurt

Securities lending revenue in Germany has taken a substantial hit since legislators in the country introduced tax changes on mutual funds and a crackdown on dividend arbitrage trades.

Alterations to the German Investment Tax Act (InvTA), adopted by parliament this year, have been the main factor behind falling fees for beneficial owners loaning out German stocks.

The revisions have had a "devastating effect" on German lending programmes, according to panelists at the fifth *Global Investor/ISF* securities finance summit in Frankfurt, with earnings slumping in the second quarter of 2016 compared to the same period last year.

Last year, Germany beat France and the UK with total lending revenues of $632m, DataLend figures show, although experts at the firm believe it is unlikely that the country will generate equivalent revenues by the end of this year. Only $225m worth of fees had been generated between January and the end of July.

"We've significantly reduced lending of German stocks held by our German clients," said Holger Genuneit, director agency securities lending, Deutsche Bank at the event. "We don't want clients to run into a fiscal disadvantage due to the tax changes."

Under the new law, mutual/retail funds face a corporate tax rate of 15% on Germany-sourced income, including dividends, income from securities lending and repos.

There are also no tax benefits for dividends unless investors meet certain requirements under the so-called 45-day rule. In practice, it means shares must be held for 45 days before and after the dividend ex-date. During that period, the beneficial owner of the shares must bear at least 70% of the economic risk for these shares.

"Germany has taken a big hit," added Mark Tidy, managing director, JPMorgan Agent Lending. "However, our portfolios are typically global in nature and other markets and transactions have compensated. Lending revenues in Korea, Japan and the UK, for example, are bright spots."

John Arnesen, global head of agency lending and BNP Paribas Securities Services, admitted conditions had been difficult in Germany, adding that there is now a greater focus on exactly how trades will be structured going forward.

"We're concentrating on developing alternative and innovative ways of generating revenue for our German clients, particularly around corporate action optimisation," he said. "Collateral also matters more than ever before, which means accepting different types of collateral and understanding the associated risks is crucial to revenue generation."

SFTR concen

In contrast to the reduced lending activity, Rudolf Siebel, managing director at BVI, the German Investment Fund Association, told conference delegates that many German funds are seeing record inflows.

"The low interest environment has forced traditional savers to become investors by creating a need to move out on the risk [curve]. As a result, more money has gone into our members' products. In that sense, we cannot complain."

Siebel claimed that the buy-side business model had not been substantially altered by regulation. However, he added that the EU's Securities Financing Transactions Regulation (SFTR) is causing concern among some members of the investment industry.

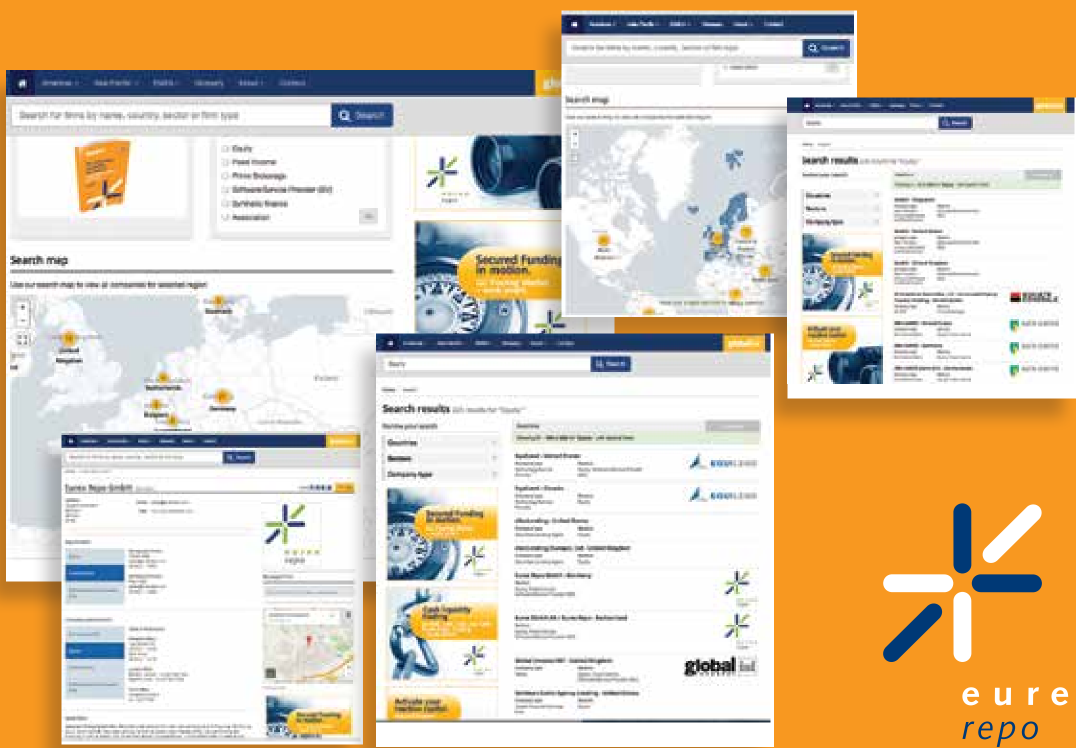
SFTR is part of European regulators' clampdown on potential risks in the shadow banking system. It is, in effect, a replication of EMIR, which forced financial institutions to report details about their over-the-counter (OTC) and exchange-traded (ETD) derivative transactions to trade repositories. SFTR forces firms to report details of their securities financing transactions (SFTs), including securities lending and borrowing as well as repos.

"Essentially SFTR is about documentation and reporting," Siebel said. "There are overlaps with EMIR. However, under that piece of legislation we know that reporting can go wrong. It is crucial, therefore, that various technical amendments are made to SFTR to ensure effective implementation."

In its response to ESMA's most recent SFTR consultation paper, BVI suggested data standards should be carefully calibrated and not be rushed. The German fund group added that the introduction of an EMIR reporting obligation should not be used as a model for SFTR as the implementation of that was very complex and burdensome due to time constraints and a lack of legal and operational certainty.

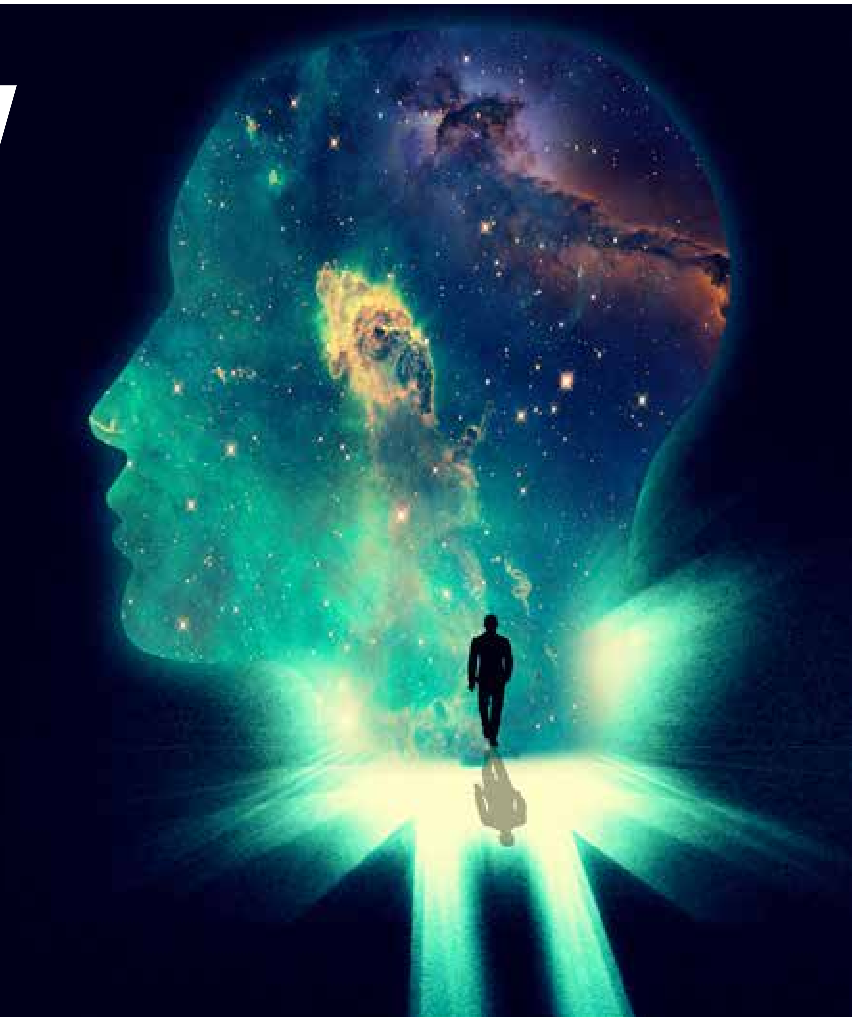
In addition, BVI noted that it might not be possible to report all relevant details, especially settlement information, on time as collateral might settle later – meaning firms won't have all settlement details available on T+1.

Photos from the event can be found at www.globalinvestormagazine.com



The new reality

The combination of new regulatory requirements and low interest rates are having a profound effect on participants' eagerness to borrow and lend securities, says *Ceri Jones*, as well as the type of trades being done



A slew of regulations has been driving uptake of collateral transformation, the service offered by banks and prime brokers to help asset managers meet margin requirements for central counterparty (CCP) transactions by exchanging less liquid assets such as corporate bonds or equities for liquid ones such as certain sovereign bonds.

Demand for evergreen and extendable structures on collateral transformation trades has grown strongly as borrowers seek relief under Basel III's liquidity coverage ratio (LCR) requirements, which require banks to hold sufficient unencumbered high quality liquid assets (HQLA) to satisfy cash outflow needs over a 30-day stress period.

The LCR reform was introduced in January 2015 and has been coming into force in steps, rising annually, so that by January 2018, firms must hold 100% of the required LCR amount in HQLA.

Data on the US tri-party repo market collated by analytics firm IHS Markit shows that growth in trading volumes for all structured types – evergreen, extendable, puttable and callable – closely coincides with the multi-year phase-in period of the reforms.

Total daily volume generally remained below $1bn before the end of March 2015, when participants were first starting to report their LCR positions, but then rose quickly to over $15bn, topping $20bn as of mid-September 2016.

For all evergreen activity, regardless of collateral type, the average number of advance days' notice given by counterparties before the closing of these trades has been consistently above the 30-day threshold for LCR, rising to just below 50 as of mid-September 2016.

Extendable structured trading activity shows a similar pattern with volumes beginning to rise after January 2015 and required days' notice before closure clustering around the 30-day mark. The average daily cash volumes for extendables have been just short of $3bn.

"There has been a strong and sustained demand for these types of transactions and in many respects they are part of the day-to-day securities finance landscape," says Alex Lawton, EMEA head of securities finance, State Street Global Markets.

"Obviously, the myriad of regulatory pressures drives this, but this demand also meets a search for incremental yield within beneficial owners. Interestingly, it is not only the widening of this demand across both tenor and collateral asset classes, but how each individual broker-dealer either interprets these regulations for their own institution or their predominant binding metric at a point in time. There hasn't been a spike in demand, *per se*, rather a steady evolution of term structures over a number of years. As January 2018 approaches I only see this evolution continuing."

January 2018 also marks the implementation of the Net Stable Funding Ratio (NSFR), another Basel reform to promote long-term resilience in banking, this time requiring banks to ensure they have stable sources of financing over a one-year time horizon based on liquidity risk factors assigned to their assets.

"For NSFR coverage, we see increasing interest for longer term financing deals – six-month evergreen or one-year evergreen, or similar extendable requests for 7-6-7 or 13-12-13 trade structures," explains Ariel Winiger, head of securities finance services, Asia Pacific, equity & derivatives, Societe Generale CIB, adding that only a limited number of clients in Asia are offering these kind of tenors whereas the liquidity out of Europe and the US is slightly better.

For the most part, banks have got to grips with LCR, but NSFR is more demanding. "While the banking industry is now dealing with the short-term focused LCR, the NSFR regulations – due to come into force from January 2018 – bring new challenges," says Alec Nelson, managing consultant at GFT.

"The inclusion of short-term money market activity in NSFR calculations, with the resulting determination of an NSFR funding cost for them, is likely to cause disruption. As well as having to manage the use of HQLAs for collateral introduced by LCR, organisations will have to deal with changes in the behaviour of both borrowers and lenders of cash due to the new cost implications."

"Relative to the use of other Fedwire-eligible collateral types, we've seen Agency MBS, CMOs and debentures and strip collateral volumes decreasing as US Treasuries increase," explains Steve Baker, director, securities finance product and consultancy, IHS Markit. "And while total Non-Fedwire-eligible collateral type volumes have been declining since mid-2015, equities volumes, which had been rising strongly and steadily since December 2011, have begun to decline since August 2015, but still hover above 7% of all collateral used."

The total daily volume for equity evergreen trades from July to September 2016 inclusive accounted for approximately 33% of all evergreen trading activity, followed by corporate non-investment grade bonds with 16% and corporate investment grade with 10%.

"In evergreens, we also see glaring contrasts between trades by collateral type," explains Baker. "For instance, the average number of advance days' notice required before trade closure for Fedwire-eligible collateral type activity has generally remained below the 30-day threshold for LCR, whereas non-Fedwire-eligible collateral type activity has always been above this mark, at around 50 days since late March 2015. The requirement for banks to hold more HQLA is clearly having an effect on these trading activities."

Risk reduction

The advent of these liquidity requirements has made financing for term more valuable and widened spreads over the course of the last 12-18 months. Basing trades on a series of staggered term transactions or an evergreen or extendable structure is also appealing to beneficial owners because it reduces the risk from sudden shocks in a volatile market.

However, the spike in collateral transformation this year has not been as sharp as predicted, according to Virginie O'Shea, research director at Aite Group. "The delays to key Basel III and OTC derivatives reforms – clearing under the European Market Infrastructure Regulation (EMIR) and uncleared margining, in everywhere but a handful of countries – have suppressed demand for collateral transformation this year," she says. "The industry expectation was that there would be much more activity than has materialised thus far but I anticipate this will change toward the end of 2016 and into 2017, as reforms progress."

> **"The appetite of beneficial owners to lend securities in the current zero interest rate environment has never been greater"**
> PAUL WILSON, JPMORGAN

Global regulations, such as the Dodd-Frank Act and EMIR, tend to push trades towards central counterparty clearinghouses (CCPs), where economies can be gained from the improved management of higher volumes of collateral, allowing participants more scale, leverage and RWA savings.

"Over time there have been mixed views but generally both the buy side and sell side see the benefits of central clearing," says James Slater, global head of securities finance, BNY Mellon. "What has not emerged are clear models that are widely embraced. The degree of margining contributed from the buy side is still to be worked out, for example."

"Banks and dealers are constrained in the new regulatory environment and are trying to optimise their activities such as by using central clearing, while the buy side are having to deal with increasing collateral demands from evolving margin rules that is forcing them to consider issues such as managing collateral, financing or raising the quality of collateral."

"The buy side has traditionally relied on the sell side for market intermediation, but is now constrained by capital rules, and how that unfolds from here is the million dollar question," adds Slater.

Many corporates have been exploring afresh the tri-party option, attracted not only by its operational efficiency but also risk mitigation, optimisation, processing and reporting. "The main players have been pushing their pricing, flexibility and improvements in their capability," says

Ralph Sutter, consultant at GFT. "Despite low, flat or even negative rates, more and more treasurers continue to choose secured lending for favourable yields pick-ups.

"As beneficial owners deal directly with tri-party agents, they deposit the cash, and it is then lent out through evergreen repo structures. Tri-party is cost effective for the buy and sell side and despite internal or external set up challenges, the benefits are tangible. For example, we can see similar approval and agreement difficulties in the equities or bond lending clearing programme via tri-party as regulations continue to drive new structures with a view on capital cost. Seen as unattractive by many participants a few years ago, we observe today a steady growth in participation. We expect tri-party repo and the three-to-six-month repo liquidity for corporates to grow further."

Historically, there has always been a greater acceptance in non-US markets of securities as collateral. Over the last few years beneficial owners have been bombarded with education about collateral flexibility, and as a result there is greater adoption of non-cash collateral.

Another boost to the use of equity as collateral in the US would be the potential change to Rule 15c3-3, which would allow US borrowers to give equities as collateral. This would be cheaper and more efficient than cash.

Across Europe, market participants are beginning to look for broader collateral schedules and asset class flexibility, such as a mix of equities, bonds and cash, to optimise their collateral usage. This widening of acceptable collateral can deliver incremental yield for beneficial owners matching broker-dealer financing asks.

Broadening of collateral in the equity space has extended from the traditional main indices, through to secondary indices, ETFs and emerging market equity collateral.

There is some appetite for higher quality emerging market equities as collateral, primarily from pension funds and sovereign wealth funds that have longer horizons and want to pledge these against either government bond or equity loan transactions. Currently however the European and US central counterparties do not cater for Asian underlyings.

Cash collateral remains popular in markets where there is significant liquidity, such as Japan and Europe, where central bank policy has been supportive. When QE ends, funding will become more expensive, as has evolved in the US over the last two years.

"We have certainly seen greater demand to use non-USD cash collateral for securities finance activities," adds Lawton. "The headwinds on short-term cash have meant that it can be cheaper to pledge cash rather than to repo in the required collateral or access a broker dealer's treasury for securities to pledge as collateral. I expect this demand to continue especially in euros and yen. The challenge will be what the agent lender can do with that cash collateral. If they only have the ability to reinvest in short dates themselves then this transposes a broker problem into a lender one. The implied rebates that a lender would have to charge to make this economically viable, would potentially reduce cash as the 'cheapest to deliver' option."

> **"While the banking industry is now dealing with the short-term focused LCR, the NSFR regulations – due to come into force from January 2018 – bring new challenges"**
> ALEC NELSON, GFT

Winiger adds: "It's true that a lack of yield has somewhat changed the way cash is re-utilised or in some cases, cash is even left idle in custody accounts if the interest rate is still 0%. It's important though to look at the interest income on a risk-adjusted basis including the collateral exchanged, if any, to determine the best way of deploying cash. It's also worth mentioning that custodians tend to pass on negative interest rates on cash long positions to their clients, which provides an incentive for the cash holder to put their money to work."

The market has also been impacted by money fund reform, as many prime fund investors have moved into the Treasury fund space. This has reduced financing for banks and dealers and impacted the costs of related transactions.

Rising costs

The European Securities Financing Transactions Regulations (SFTR) proposed reporting regime also comes into effect in 2018, and could prove another drag on activity. This requires all securities financing transactions to be reported to recognised trade repositories. ESMA has published a long and detailed technical consultation document on the subject. Additionally, many lenders face increased reporting and disclosure of SFTs as part of their prospectus and annual and half-yearly reports and accounts.

"The appetite of beneficial owners to lend securities in the current zero interest rate environment has never been greater, as they look to risk-adjusted returns from fundamental or intrinsic market demand factors rather than from reinvestment strategies," says Paul Wilson, managing director at JPMorgan. "But the regulatory impact on borrowers and banks is suppressing activity as there is greater supply to lend than to borrow.

"If you accept the dynamic of oversupply across the industry, where a lender is not making pro-active changes to their lending activities, all things being equal their revenues are going to fall. Overlaid with this is the increased costs lenders face from transaction reporting and increased disclosure whereby some may just decide it is no longer worth it. This may appear to be a negative but over the medium term the same level of revenue could be shared between fewer lenders, so they would earn more. Small mutual funds, UCITS funds and pension funds are likely to be first to reassess because the impact for them may be more material. It is likely that large pension funds and sovereign wealth funds, of say over $25bn AuM, won't be so similarly affected."

All eyes on quarter end

Rob Chiuch, Managing Director and Global Head of Equity and Fixed Income Trading, Securities Finance, BNY Mellon Markets, talks monetary policy, US regulatory reform and the impact of Blockchain

What effect is current monetary policy having on securities finance markets around the globe?

As we approach the end of the third quarter it will be very interesting to follow the impact of monetary policy around the world. This is not the first time we have witnessed divergence in monetary policy between nations. Historically there have been differences between European rates – notably those set by the ECB for the eurozone but also those in the UK – and those in North America. But what complicates the picture today is the high rate of quantitative easing (QE). Globally, QE is now running at $200bn per month, a higher rate than at any previous time. This is creating significant distortions in the markets in which it is being applied.

The $23bn 10-year Treasury auction in the US on 10 August was heavily subscribed despite the fact that its yield was the lowest point it has been for the last four years[1].

These are challenging times; the appeal of the US as a safe haven for money market investors remains considerable. Strong global demand for US Treasury securities has depressed yields across the board but even a 150bps yield, it turns out, remains attractive to today's investors.

Can you describe the forthcoming US regulatory reforms and their likely impact?

There are two upcoming near-term events to bear in mind. The first, which is already having an impact, is the impending reform of the US money market fund industry. From 14 October a new regulatory regime covering money market funds will see prime funds publish floating NAVs and introduce exit fees and gates. The changes will, for the first time, allow money market funds to 'break the buck'.

The result has been a massive flight to safety that is set to continue. By 14 October it is likely we will see the vast majority of (securities finance industry) money shift out of prime funds, which have a more open investment mandate, to funds with investments limited to government securities.

Estimates of the size of the transition vary significantly from $300bn to over $1 trn, with an estimated $500bn already having been transitioned, according to analyst reports at the time of writing. The shift to government funds will absorb large amounts of high quality liquid assets (HQLA). For the securities finance industry, the effect already observed is declining weighted average maturities and rising term fees, a shift that is already being reflected in the LIBOR rate.

This is not the only change that will affect our industry. Effective 3 October, the Fed's Overnight Bank Funding Rate (OBFR) will replace the Fed Funds Open (FFO) rate as the key benchmark for pricing and performance reporting. The OBFR is a calculated rate that, generally speaking, also includes certain euro deposits to provide a broader measure of demand.

Each of the monetary and regulatory shifts that I have described – the impact of monetary policy, the cumulative effect of QE, the effect of US money market reforms and the replacement of the FFO – are converging towards this September/ October timing. It's fair to say this will be an interesting quarter end!

What dynamics are shaping the fixed income space currently?

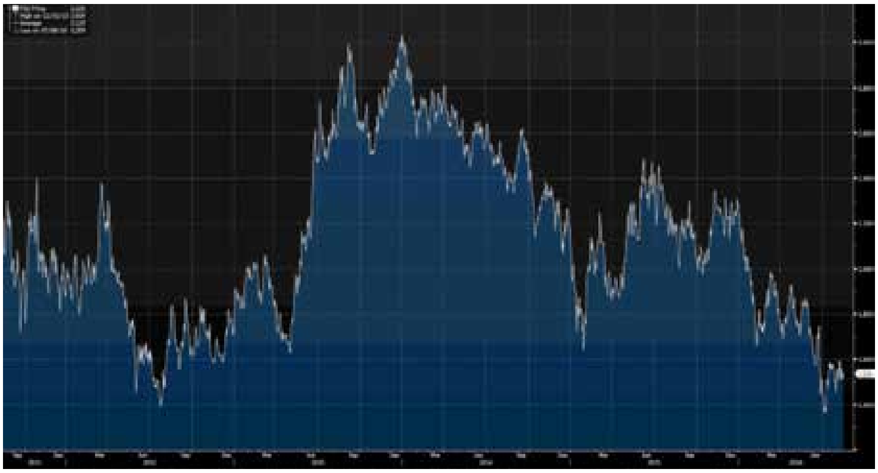
The striking trend here is the elevated demand – and elevated fees – for HQLA, especially the shorter durations. There's also evidence of fails, which are driving rates significantly higher over maturity or re-issue periods.

All this amounts to a significant shift from recent years. Until relatively recently, the government bond space was characterised by high volume, low margin general collateral trades that did not, on the whole, generate meaningful returns. Now, particularly at the shorter end of the curve, you are occasionally observing rates in excess of fail cost. Strong demand for sovereign debt isn't just a US phenomenon: the heightened demand for term-upgrade trades, and the elevated fees associated with these, is a feature of termed HQLA across Asia, Europe, Canada and the US.

Another observable trend is lower issuance in US convertible corporate bond markets. At roughly mid-year 2016, issuance was down 44% year on year[2] with a recent uptick of issuance in August. General US Corporate issuance, however, is now up 5% year over year[3]. After the Bank of England rate cut, its first in seven years, investment grade issuance surged the week of 8 August. High yield issuance also rose, with issues linked to distressed market segments such as oil.

Globally, the move by the ECB in June to extend its quantitative easing operations to include corporate bonds has provided additional challenges

Bloomberg US Government 10-year Treasury Note past five years



to liquidity. Consequently, with higher utilisation rates and higher fees, this remains a very active space, something that we expect to continue.

How far – and where – is the shift to non-cash collateral advancing and what are the implications?

The numbers are clear: the non-cash market has been growing in the US for a number of years to approaching half of the total market today. In Canada or Europe, where the shift has been in the other direction, the growth of cash collateral has been slower. But it is important to note that, within North America, Europe and Asia, the rate and scale of change differs from region to region. This is a function of varied regulatory environments and diverse market conditions.

In the US, for example, it is clear that new regulations – notably the anticipated introduction of the Net Stable Funding Ratio (NSFR) under Basel III – are driving participants towards termed non-cash transactions. Market participants are further keen to correlate their trades, meaning for instance a shift towards like-for-like when it comes to the currency component and away from mixed currency transactions.

Non-US funds enjoy certain advantages in permissible non-cash collateral acceptability versus their US counterparts. This dislocation is being addressed with the pending reviews of US rule 15c3-3 that, for instance, currently prevents US-based broker-dealers from pledging equities as collateral to agent lenders. Similar reviews are underway exploring equities as eligible collateral for ERISA and '40 Act funds.

This has obvious pricing implications of which beneficial owners should be aware. The natural instinct for borrowers is to deliver the collateral they are naturally long in, in order to most effectively contain financing costs. For example, given the recent rally in global equity markets, this means a keenness on the part of many to post equities. But there is a clear case to be made for a diversified pool of collateral: if structured correctly this can improve a lender's risk profile while earning above average returns. At the core is the underlying responsibility to operate a programme in a skillful and prudent manner and be diligent in the fees you charge.

What opportunities can blockchain provide the industry?

This is an interesting and important development, which firms should not ignore. Blockchain is coming to our industry in some form, and sooner than you think.

There is no shortage of analysis being done by the big banks, investment firms and accounting firms. Many of the large Wall Street firms are committing considerable investment dollars to maximise the opportunity and minimise the threat posed by blockchain. Approximately 50 financial firms have joined up with the R3 Distributed Ledger Group to investigate the role of blockchain technology in the financial services industry.

However, precisely what the impact will be, and how and where it will be focused, is hard to predict. Much is made of the potential for blockchain to disrupt the industry status quo. This is true, but it could equally enhance efficiencies and save costs for existing participants. If we are alert to the opportunity, the benefits could be significant and wide-ranging: in theory, blockchain has the potential to touch any process that is principally a ledger-based technology with a rule-based wrapper, across cash trading and settlement, to FX and beyond.

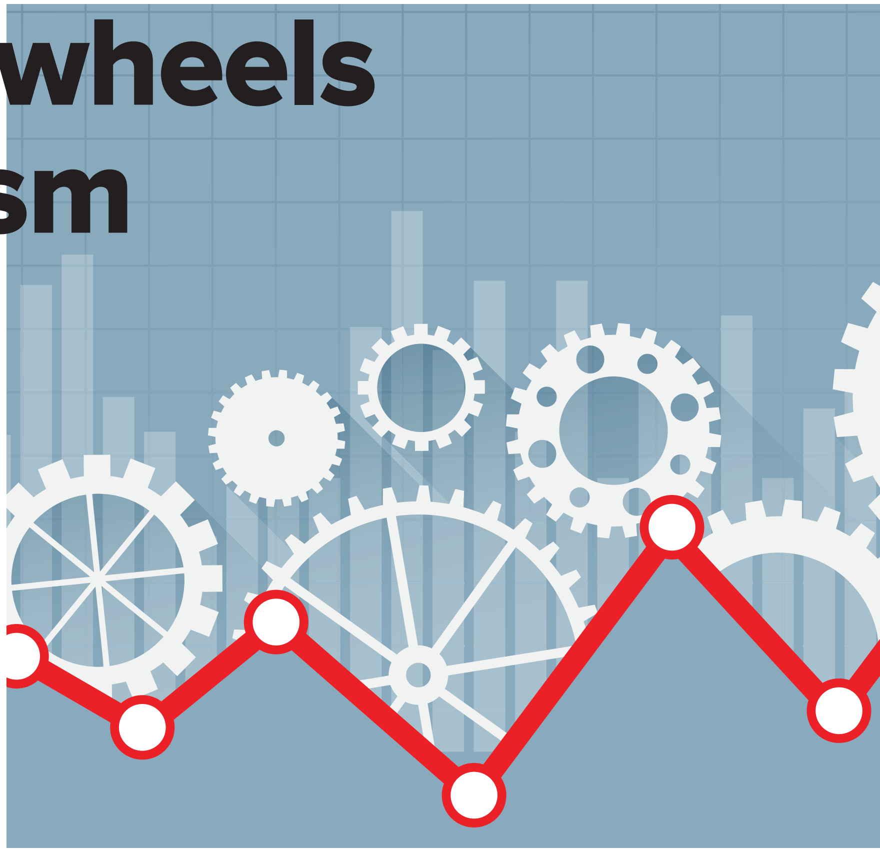
It is important to stress that we haven't seen any significant tangible impact yet – efforts are still largely in the planning stage. At first, I think that we are more likely to see piecemeal opportunities – 'rifle-shot' chances to take low-hanging fruit, for example – than single big-bang type transformations.

While there may be advantages accruing to early adopters, much work will have to be done behind the scenes before blockchain's commercial potential can be realised. Technically, users will need to grapple with how the technology can be embedded into existing processes. Blockchain raises questions, for instance, around legal and contractual considerations for privacy.

Notes

1 Bloomberg US Government 10-year Treasury bonds
2 Thomson Reuters, US Corporate Bond Issuance July 2016
3 Bloomberg US IG Bondwrap 12 August 2016

Oiling the wheels of capitalism



Securities lending could improve the liquidity of UAE capital markets but progress has been slow. With NBAD poised to launch its offering, writes *Dominic Dudley*, this looks set to change

In early August last year, the National Bank of Abu Dhabi (NBAD) became the first institution in the UAE to be handed a licence to carry out securities lending and borrowing activities within the country's capital markets. The Securities and Commodities Authority (SCA), the regulator that granted the approval, stated at the time that the move would offer several benefits, including helping to bolster the local securities industry, increasing the market's depth and encouraging more investment in the capital markets from both local and foreign institutions.

Under the system, clients temporarily transfer ownership of their securities to a borrower that can then use the shares in its market making activities. Collateral is posted to the lender, either in the form of a cash guarantee or a bank guarantee or by using other securities. The lender in turn has the chance to earn revenues from the use of their shares. The borrower is obliged to return the securities to the owner at an agreed date in the future or on demand, depending on what is agreed.

The lending of securities is a common activity in many parts of the world, including Europe, Asia and the Americas, but it is still rare in the Middle East region. It has not happened quickly in the UAE and although it is nearly a year since the first licence was granted, the process is still not quite complete.

The SCA board first set out its conditions and requirements for potential licence holders in August 2012, with decision no. 47 "concerning the regulations as to lending and borrowing securities". The country's main stock market, the Dubai Financial Market (DFM), approved the practice in January 2014 and the Abu Dhabi Securities Market (ADX) followed a few months later in May. Maryam Fekri, chief operating officer of the DFM, described the move as "an important development for the market... diversifying the range of products to be offered and increasing the UAE's attractiveness for investments."

However, it is still a work in progress. NBAD has still not yet launched the product in the market and it is keen to keep expectations in check about what sort of an impact it might have, in the short term at least.

"Eventually, this will be a product which increases the liquidity and the depth of the market and will unlock additional value in the long equity positions of many of our institutional investors, but we are just getting started," says Jonathan Titone, executive director and head of product development at the bank. "There have been a few setbacks in our journey, and it has taken a bit longer than we had hoped to start the lending and borrowing activity, but we are working very closely with the markets to launch this and they are nearly ready."

Restrictions remain

One critical factor that he points out is likely to limit the take-up of the product in the months following any launch is the ongoing restrictions on short-selling of stocks in the UAE.

"Market makers are currently the only investors to have any demand to borrow as they are the only investors that are allowed to short sell in the market,"

he says. “Other investors face pre-verification requirements by the stock exchanges whereby securities must be available in their account prior to trade execution. If the shares are not available, the trade cannot be executed. So other than short selling through market making, there is little demand or purpose to borrow shares. Because of this, we must manage expectations in terms of the limited demand and initial financial returns.”

NBAD says it has received positive interest from potential clients who are keen to explore ways to turn their long-term holdings into another source of revenue. In the longer term, the process could prove to be a handy way for some investors to hedge their positions. Other market participants say that it could also play a useful role in paving the way for other innovations in the future and to support other products.

“The implementation of securities lending and borrowing is an important development for the market because it diversifies the range of products that are up for offer,” says Mihir Kapadia, CEO and founder of Sun Global Investments, a wealth management company with offices in Dubai, London and Mumbai. “It is a key piece of market infrastructure for the development of other market products such as exchange traded funds.”

However, there are some reasons to doubt whether the product will prove quite as popular as it has in some other, more mature markets, given the nature of the region’s shareholders. In particular, some observers say there are many firms in the UAE that have no interest in doing anything with their shares other than holding on to them. It is likely to take some time to educate such investors and persuade them of the benefits of lending their shares.

“You have some clients that have large positions in firms and they may be interested, but for the most part the investor base that own the more established publicly-listed institutions don’t want to do anything with those shares outside of just hold them for dividend payments,” says one Dubai-based executive.

> **“The implementation of securities lending and borrowing is an important development for the market because it diversifies the range of products that are up for offer”**
>
> **MIHIR KAPADIA, SUN GLOBAL INVESTMENTS**

Instead, if the authorities want to improve liquidity in the market, they may be better off focusing on opening up the market to international investors. That has been gradually happening, encouraged by the MSCI upgrade in May 2014, when the UAE was included in the firm’s emerging markets index. In June last year, the UAE federal government decided to lift its ban on non-UAE investors owning shares in local telecoms giant Etisalat. The change went ahead in mid-September, with a 20% ceiling on foreign ownership. Rival telecoms outfit Emirates Integrated Telecommunications Company (Du) has been touted to follow suit by investment bank Arqaam Capital.

Predicted demand

The fact that no other licences have yet been awarded for securities lending and borrowing suggests that other institutions are at best cautious about the potential for this product. Nonetheless, Titone appears confident that there will be plenty of demand from clients wanting to lend their shares and that, in time, others will want to follow NBAD into the market. That optimism stems in part from the fact that the regulator is expected to loosen the restrictions on short-selling in the future. Whether that transpires is still a moot point, but there is optimism in the industry

“There is strong interest on the client side to lend their shares,” says Titone. “We expect other market makers to enter the market soon, and the regulator and markets are also planning to introduce short selling for investors, other than market makers, in the near term. Once this is possible, demand will increase exponentially, and we expect even more competition to enter the market. We believe there will be significant demand in the medium term.

Furthermore, says Titone, there are large institutional investors holding large blocks of very attractive securities. “These investors have no intention to sell the positions any time in the near future, and these positions can be used to generate additional yield.”

The idea of securities lending and borrowing should receive a further boost early next year from another development in the region. In early May this year, the Capital Market Authority (CMA) in Saudi Arabia announced that it will soon permit the practice for trades on the Saudi Stock Exchange (Tadawul). It is due to issue the necessary regulations during the first half of 2017. What happens in the kingdom, the Middle East’s largest economy, invariably affects other Gulf states.

Securities lending has been a long time to arrive in these countries, but once the product is available in the market it ought to find a loyal and growing following. The race is on.

SECURITIES FINANCE: APPOINTMENTS

EquiLend has appointed **Ken DeGiglio** to the newly created role of chief information officer. He is based in New York and will be responsible for aligning EquiLend's technology vision with business strategy and integrating processes with the appropriate technologies. The financial technology veteran will also lead all aspects of developing and implementing technology initiatives within the organisation. DeGiglio joins EquiLend from TD Ameritrade, where most recently he was managing director and head of Application Development.

Craig Donohue

Craig Donohue has agreed to stay on as executive chairman and chief executive officer at equity derivatives clearinghouse **OCC**. Donohue, the former head of rival CME, will remain at the helm of OCC for another three years, the firm said on Monday. The company, which acts as a CCP for derivative and stock loan trades, also announced several changes to its leadership structure at the start of the week. Michael McClain is the new chief operating officer while Scot Warren has been promoted to a new role as chief administrative officer

Phil Morgan, the head of **Nomura's** EMEA prime finance division, is leaving the Japanese investment bank. The departure of London-based Morgan, who first joined the firm in 2009, comes as the firm scales back its European equity operations, including prime brokerage. Ben Challice, now at technology firm Pirum, resigned from his role as Nomura's EMEA prime finance head in 2015, before the cuts were announced. Morgan has held the role of EMEA head of sales for the firm since January 2014 and took on Challice's duties earlier this year.

Collateral specialist **Lombard Risk Management** has appointed **Jonathan Trace** as business development manager for the Nordics and Netherlands. The new role will see Trace building the client base for both the COLLINE collateral management software and the AgileREPORTER regulatory compliance systems in Northern Europe. He will also be responsible for business development of COLLINE products in the UK and Ireland. Trace joins from FIS (formerly Sungard Financial Systems) where he was a sales account manager.

Chris Valentino, a member of **EquiLend's** New York-based sales team has left the company to join software firm Trading Apps, Global Investor/ISF understands. Valentino, who had been part of EquiLend's North American sales force since September 2012, left the company at the end of August. Prior to EquiLend he had worked at Markit and J.P Morgan.

BlackRock's former global head of securities lending has joined **Citadel** as a chief operating officer in one of the asset manager's stock-trading units. **Michael Weaver**, who left BlackRock at the end of last year, started at Citadel's Surveyor Capital equity group this month according to his LinkedIn profile. Weaver had led global securities lending at BlackRock since February 2013 and has since been replaced by Roland Villacorta.

Former Wells Fargo executive **Andrew Volz** has joined **JonesTrading Institutional Services** as head of prime services. Based in New York, Volz will be responsible for leading the expansion of the firm's prime brokerage business - focusing on alternative investment managers, institutional investors, and family offices. Alan Hill, chief executive said the appointment is a "key step" in the firm's strategic plan to build a leading institutional brokerage platform offering prime services and global outsourced trading. Volz joined Merlin Securities in 2011 before Wells Fargo acquired the business. He was appointed director of prime services sales soon after the takeover.

James Burgess has left **Macquarie Securities** in South Africa, Global Investor/ISF understands. Cape Town-based Burgess first joined Macquarie in 2009 and most recently ran the broker's treasury function. He was also a board member. Burgess previously worked for Nedbank and was appointed chairman of South Africa's Securities Lending Association (SASLA) earlier this year.

Securities lending trade body **ISLA** has appointed **Mark Hutchings** as its new chief operating officer. Hutchings spent over a decade managing AIG's securities lending operations until 2010 and served on the ISLA board during that time. The trade body, which helps shape policy and promotes best lending and borrowing practices, has also elected Zürcher Kantonalbank's Ueli von Burg and BNY Mellon's Simon Tomlinson to the board, Andy Dyson, ISLA's chief executive, confirmed to *Global Investor/ISF*.

Trading Apps has bolstered its leadership with the appointment of **Ian Cox** as chief operating offier. Cox will be based in London and report directly to Trading Apps chief executive Matthew Harrison. Prior to joining Trading Apps Cox served most recently as regional director for buy side at Fidessa.

GLOBAL INVESTOR ISF

International Securities Lending Survey

Equity lenders
Fixed income lenders
Equity borrowers
Technology vendors
Data providers

International Securities Finance survey

Innovation and emerging technology were notable themes in the 2016 ISF survey – the leading barometer of how lenders and borrowers rate each other across the globe. Analysis by *Andrew Neil*

The depth of data behind the *Global Investor/ISF* International Securities Finance survey means it is widely recognised by market participants as giving the truest picture of counterparty relationships. It is the only survey of its kind.

Once again respondents – both lenders and borrowers – were asked to rank firms across multiple service categories and three geographical regions. Participants on both sides of the equity lending trade were invited to rank the other. For the third year running, a fixed income component has been incorporated into the survey.

The survey highlights genuine achievements. Only the very highest-rated firms are presented here. Think of these tables as a roll of honour – with a winner and a shortlist of highly commended firms.

The technology survey also continues this year and has been broadened to include a software solutions award and total return swaps platform category. It was completed by both borrowers (making up 48.21%) and lenders (51.79%), with firms needing a minimum of fifteen responses to qualify overall. An abridged methodology can be found at the end of the survey and the full methodology is available online.

Equity lenders group 1

GLOBAL		
UNWEIGHTED		
Rank		Score
1	BNY Mellon	991.75
2	State Street	979.33
3	Citi	693.50
4	UBS Switzerland	490.17
5	Northern Trust	475.83
WEIGHTED BY IMPORTANCE		
Rank		Score
1	State Street	832.96
2	BNY Mellon	830.48
3	Citi	593.47
4	UBS Switzerland	395.99
5	Northern Trust	390.50

GROUP 1 RATED BY GROUP 1: GLOBAL		
UNWEIGHTED		
Rank		Score
1	BNY Mellon	706.17
2	State Street	671.00
3	Citi	533.50
4	Northern Trust	381.83
5	UBS Switzerland	318.67
WEIGHTED BY IMPORTANCE		
Rank		Score
1	BNY Mellon	589.66
2	State Street	573.50
3	Citi	457.89
4	Northern Trust	312.26
5	UBS Switzerland	256.81

GROUP 1 RATED BY GROUP 2: GLOBAL		
UNWEIGHTED		
Rank		Score
1	State Street	308.33
2	BNY Mellon	285.58
3	BlackRock	185.83
4	UBS Switzerland	171.50
5	Citi	160.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	State Street	259.46
2	BNY Mellon	240.82
3	BlackRock	158.75
4	UBS Switzerland	139.17
5	Citi	135.58

EMEA		
UNWEIGHTED		
Rank		Score
1	BNY Mellon	371.67
2	State Street	339.50
3	Citi	286.50
4	UBS Switzerland	251.67
5	BlackRock	182.17
WEIGHTED BY IMPORTANCE		
Rank		Score
1	BNY Mellon	310.86
2	State Street	290.93
3	Citi	251.79
4	UBS Switzerland	197.65
5	BlackRock	159.59

GROUP 1 RATED BY GROUP 1: EMEA		
UNWEIGHTED		
Rank		Score
1	BNY Mellon	279.00
2	State Street	237.67
3	Citi	226.83
4	UBS Switzerland	151.00
5	BlackRock	118.33
WEIGHTED BY IMPORTANCE		
Rank		Score
1	BNY Mellon	233.05
2	State Street	202.45
3	Citi	200.72
4	UBS Switzerland	117.74
5	BlackRock	104.94

GROUP 1 RATED BY GROUP 2: EMEA		
UNWEIGHTED		
Rank		Score
1	State Street	101.83
2	UBS Switzerland	100.67
3	BNY Mellon	92.67
4	Credit Suisse Zurich	68.00
5	BNP Paribas Securities Services	65.50
WEIGHTED BY IMPORTANCE		
Rank		Score
1	State Street	88.47
2	UBS Switzerland	79.91
3	BNY Mellon	77.81
4	BNP Paribas Securities Services	57.73
5	Credit Suisse Zurich	55.08

AMERICAS		
UNWEIGHTED		
Rank		Score
1	State Street	373.50
2	BNY Mellon	366.25
3	BlackRock	200.50
4	Goldman Sachs Agency Lending	168.00
5	Citi	160.67
WEIGHTED BY IMPORTANCE		
Rank		Score
1	State Street	317.60
2	BNY Mellon	309.90
3	BlackRock	173.78
4	Goldman Sachs Agency Lending	145.69
5	Citi	132.46

GROUP 1 RATED BY GROUP 1: AMERICAS		
UNWEIGHTED		
Rank		Score
1	BNY Mellon	249.00
2	State Street	244.33
3	Goldman Sachs Agency Lending	138.67
4	Northern Trust	120.67
5	BlackRock	117.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	BNY Mellon	210.73
2	State Street	210.07
3	Goldman Sachs Agency Lending	120.80
4	BlackRock	101.78
5	Northern Trust	97.06

GROUP 1 RATED BY GROUP 2: AMERICAS		
UNWEIGHTED		
Rank		Score
1	State Street	129.17
2	BNY Mellon	117.25
3	BlackRock	83.50
4	RBC Investor & Treasury Services	58.00
5	Citi	45.33
WEIGHTED BY IMPORTANCE		
Rank		Score
1	State Street	107.53
2	BNY Mellon	99.17
3	BlackRock	72.00
4	RBC Investor & Treasury Services	47.86
5	Citi	38.46

ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	State Street	266.33
2	BNY Mellon	253.83
3	Citi	246.33
4	Northern Trust	178.50
5	UBS Switzerland	144.17
WEIGHTED BY IMPORTANCE		
Rank		Score
1	State Street	224.44
2	BNY Mellon	209.72
3	Citi	209.22
4	Northern Trust	144.60
5	UBS Switzerland	119.88

GROUP 1 RATED BY GROUP 1: ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	Citi	191.33
2	State Street	189.00
3	BNY Mellon	178.17
4	Northern Trust	156.00
5	UBS Switzerland	103.33
WEIGHTED BY IMPORTANCE		
Rank		Score
1	Citi	163.16
2	State Street	160.98
3	BNY Mellon	145.88
4	Northern Trust	125.72
5	UBS Switzerland	86.08

GROUP 1 RATED BY GROUP 2: ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	State Street	77.33
2	BNY Mellon	75.67
3	Citi	55.00
4	UBS Switzerland	40.83
5	JPMorgan	38.67
WEIGHTED BY IMPORTANCE		
Rank		Score
1	BNY Mellon	63.84
2	State Street	63.46
3	Citi	46.06
4	UBS Switzerland	33.80
5	JPMorgan	32.82

State Street was rated the best overall group one (G1) lender under the weighted methodology in the 2016 survey, a feat achieved by the US bank last year. It performed extremely well for G2 borrowers, who ranked State Street in first place globally and in all three regions – EMEA, the Americas and Asia Pacific (second place weighted).

A solid second place was awarded to the firm for its work with G1 borrowers globally and in all regions. Overall, all borrower rankings combined, State Street topped the Americas and Asia Pacific tables, both weighted and unweighted, and came second globally and in EMEA. It topped the tables for collateral funding and trading capability as well as breadth of supply globally, and came second in all other service categories.

BNY Mellon climbed to the top of the global unweighted G1 lender table this year, beating its second place performance in 2015. Overall, both borrower groups combined, the custodian bank won the EMEA region, weighted and unweighted. G1 borrowers also ranked the company top globally, in the Americas and EMEA.

BNY Mellon took the top spots globally and in all regions for overall operations, in most cases with large margins. It also had the top global score for all the operations sub-categories (and many regional tables). It also dominated relationship management, winning globally, in EMEA and the Americas, and only narrowly missed out in Asia Pacific.

Citi moved up a place to third in this year's global table of G1 lenders. Once again, Asia Pacific proved a strong region for the bank, where it was ranked first place by borrowers for breadth of supply and overall operations, as well as the operations categories of trading matching & settlement as well as dividend collection/fees & billing. It was third-placed for every single global service category.

EMEA also proved to be a bright spot in general for Citi, where it secured third place overall in both the weighted and unweighted categories, compared to fourth and fifth in 2015. The firm was also voted most innovative out of all its G1 lending peers.

UBS Switzerland, highly commended last year, has received favorable scores again in the 2016 survey. Being ranked fourth overall by G1 and G2 borrowers combined on a global basis was an improvement on last year's fifth place. Strong scores from EMEA-based respondents again proved to be the deciding factor, although the firm also fared well in Asia Pacific. Globally, the bank was praised by the borrowing community in several areas, receiving highly commended scores for its collateral funding, relationship management and trading capabilities, as well as operations – overall and in all the sub-categories.

Northern Trust features heavily among this year's lists of most highly commended lenders. G1 borrowers in particular ranked the US bank highly across the Americas and Asia Pacific, resulting in a fourth place finish globally among the G1 segment and fifth when all borrowers responses were combined. Praised highly for its breadth and stability of supply, survey respondents also noted a high standard of relationship management at Northern Trust and the firm features prominently in the global operational efficiency tables.

Group 2 borrowers applauded BlackRock's lending capabilities in the 2016 survey, commending the firm on a global basis and particularly strongly in the Americas. In that region it was ranked third by all borrowers combined, weighted and unweighted. Stability and breadth of supply as well as trading capabilities were all strong areas for the company.

RBC Investor & Treasury Services picked up the award for most improved lender this year. Its performance among group 2 borrowers in the Americas and collateral funding capabilities were notable areas of success, gaining the Canadian firm greater recognition in the survey than it received in 2015.

Service categories

Unweighted scores

BREADTH OF SUPPLY		
GLOBAL		
Rank		Score
1	State Street	183.00
2	BNY Mellon	167.75
3	Citi	135.50
4	BlackRock	90.00
5	Northern Trust	73.00
EMEA		
Rank		Score
1	BNY Mellon	68.00
2	State Street	64.00
AMERICAS		
Rank		Score
1	State Street	71.00
2	BNY Mellon	60.75
ASIA PACIFIC		
Rank		Score
1	Citi	49.50
2	State Street	48.00

COLLATERAL FUNDING		
GLOBAL		
Rank		Score
1	State Street	171.00
2	BNY Mellon	166.75
3	Citi	114.00
4	UBS Switzerland	83.00
5	RBC Investor & Treasury Services	71.50
EMEA		
Rank		Score
1	State Street	62.00
2	BNY Mellon	54.00
AMERICAS		
Rank		Score
1	BNY Mellon	69.50
2	State Street	65.00
ASIA PACIFIC		
Rank		Score
1	State Street	44.00
2	BNY Mellon	43.25

RELATIONSHIP MANAGEMENT		
GLOBAL		
Rank		Score
1	BNY Mellon	179.75
2	State Street	155.00
3	Citi	96.00
4 =	Northern Trust	85.50
4 =	UBS Switzerland	85.50
EMEA		
Rank		Score
1	BNY Mellon	67.00
2	State Street	47.50
AMERICAS		
Rank		Score
1	BNY Mellon	65.50
2	State Street	60.00
ASIA PACIFIC		
Rank		Score
1	State Street	47.50
2	BNY Mellon	47.25

STABILITY OF SUPPLY		
GLOBAL		
Rank		Score
1	BNY Mellon	161.50
2	State Street	159.50
3	Citi	119.00
4	BlackRock	93.00
5	Northern Trust	83.00
EMEA		
Rank		Score
1	State Street	59.00
2	BNY Mellon	58.50
AMERICAS		
Rank		Score
1	BNY Mellon	61.00
2	State Street	58.00
ASIA PACIFIC		
Rank		Score
1	State Street	42.50
2	BNY Mellon	42.00

TRADING CAPABILITY		
GLOBAL		
Rank		Score
1	State Street	180.50
2	BNY Mellon	161.50
3	Citi	122.00
4	UBS Switzerland	86.50
5	BlackRock	81.50
EMEA		
Rank		Score
1	State Street	66.00
2	BNY Mellon	65.00
AMERICAS		
Rank		Score
1	State Street	66.50
2	BNY Mellon	55.50
ASIA PACIFIC		
Rank		Score
1	State Street	48.00
2	Citi	44.50

OVERALL OPERATIONS		
GLOBAL		
Rank		Score
1	BNY Mellon	463.50
2	State Street	391.00
3	Citi	321.00
4	Northern Trust	298.00
5	UBS Switzerland	266.00
EMEA		
Rank		Score
1	BNY Mellon	177.50
2	UBS Switzerland	156.50
AMERICAS		
Rank		Score
1	BNY Mellon	162.00
2	State Street	159.00
ASIA PACIFIC		
Rank		Score
1	Citi	128.50
2	BNY Mellon	124.00

OPERATIONAL EFFICIENCY: DIVIDEND COLLECTION AND FEES & BILLING		
GLOBAL		
Rank		Score
1	BNY Mellon	148.00
2	State Street	132.50
3	Citi	101.50
4	Northern Trust	93.50
5	UBS Switzerland	86.50
EMEA		
Rank		Score
1	BNY Mellon	57.00
2	UBS Switzerland	51.00
AMERICAS		
Rank		Score
1	BNY Mellon	52.00
2	State Street	50.00
ASIA PACIFIC		
Rank		Score
1	Citi	42.50
2 =	BNY Mellon	39.00
2 =	State Street	39.00

OPERATIONAL EFFICIENCY: TRADE MATCHING & SETTLEMENT		
GLOBAL		
Rank		Score
1	BNY Mellon	147.50
2	State Street	125.00
3	Citi	111.00
4	Northern Trust	104.00
5	UBS Switzerland	82.00
EMEA		
Rank		Score
1	BNY Mellon	56.00
2	UBS Switzerland	49.50
AMERICAS		
Rank		Score
1	State Street	51.50
2	BNY Mellon	51.00
ASIA PACIFIC		
Rank		Score
1	Citi	44.00
2	BNY Mellon	40.50

OPERATIONAL EFFICIENCY: TRADING CONNECTIVITY & AUTOMATION		
GLOBAL		
Rank		Score
1	BNY Mellon	168.00
2	State Street	133.50
3	Citi	108.50
4	Northern Trust	100.50
5	UBS Switzerland	97.50
EMEA		
Rank		Score
1	BNY Mellon	64.50
2	UBS Switzerland	56.00
AMERICAS		
Rank		Score
1	BNY Mellon	59.00
2	State Street	57.50
ASIA PACIFIC		
Rank		Score
1	BNY Mellon	44.50
2	Citi	42.00

Most innovative
Citi

Most improved
RBC Investor & Treasury Services

Equity lenders group 2

GLOBAL		
UNWEIGHTED		
Rank		Score
1	eSecLending	736.00
2	Natixis	362.67
3	Amundi	314.83
4	Societe Generale Securities Services	314.00
5	CACEIS Bank	266.50
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	622.18
2	Natixis	291.57
3	Amundi	269.90
4	Societe Generale Securities Services	264.98
5	CACEIS Bank	227.87

GROUP 2 RATED BY GROUP 1: GLOBAL		
UNWEIGHTED		
Rank		Score
1	eSecLending	542.83
2	Natixis	223.00
3	Amundi	222.83
4	National Bank Financial	213.00
5	CACEIS Bank	204.67
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	460.37
2	Amundi	189.94
3	Natixis	182.70
4	CACEIS Bank	176.71
5	National Bank Financial	175.82

GROUP 2 RATED BY GROUP 2: GLOBAL		
UNWEIGHTED		
Rank		Score
1	eSecLending	193.17
2	Societe Generale Securities Services	192.83
3	Natixis	139.67
4	BMO Global Asset Management	96.00
5	Amundi	92.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	Societe Generale Securities Services	163.10
2	eSecLending	161.81
3	Natixis	108.87
4	BMO Global Asset Management	83.48
5	Amundi	79.96

EMEA		
UNWEIGHTED		
Rank		Score
1	Amundi	259.83
2	eSecLending	243.00
3	Societe Generale Securities Services	223.67
4	CACEIS Bank	173.50
5	Natixis	173.17
WEIGHTED BY IMPORTANCE		
Rank		Score
1	Amundi	223.94
2	eSecLending	210.55
3	Societe Generale Securities Services	186.32
4	CACEIS Bank	149.43
5	Candriam	134.85

GROUP 2 RATED BY GROUP 1: EMEA		
UNWEIGHTED		
Rank		Score
1 =	Amundi	183.83
1 =	eSecLending	183.83
3	Candriam	133.17
4	CACEIS Bank	130.67
5	Aviva	105.50
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	160.16
2	Amundi	157.15
3	CACEIS Bank	113.99
4	Candriam	109.76
5	Aviva	89.26

GROUP 2 RATED BY GROUP 2: EMEA		
UNWEIGHTED		
Rank		Score
1	Societe Generale Securities Services	125.17
2	Amundi	76.00
3	Natixis	67.83
4	eSecLending	59.17
5	Nordea	43.33
WEIGHTED BY IMPORTANCE		
Rank		Score
1	Societe Generale Securities Services	103.99
2	Amundi	66.79
3	eSecLending	50.39
4	Natixis	49.73
5	Natixis Asset Management	39.01

AMERICAS		
UNWEIGHTED		
Rank		Score
1	eSecLending	257.33
2	National Bank Financial	192.50
3	Natixis	139.50
4	Sumitomo Mitsui	134.00
5	BMO Global Asset Management	112.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	216.80
2	National Bank Financial	158.64
3	Natixis	116.61
4	Sumitomo Mitsui	112.95
5	BMO Global Asset Management	95.64

GROUP 2 RATED BY GROUP 1: AMERICAS		
UNWEIGHTED		
Rank		Score
1	eSecLending	186.33
2	National Bank Financial	180.00
3	Natixis	87.67
4	Sumitomo Mitsui	79.00
5	BMO Global Asset Management	54.33
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	157.88
2	National Bank Financial	148.17
3	Natixis	73.73
4	Sumitomo Mitsui	68.18
5	BMO Global Asset Management	45.36

GROUP 2 RATED BY GROUP 2: AMERICAS		
UNWEIGHTED		
Rank		Score
1	eSecLending	71.00
2	BMO Global Asset Management	57.67
3	Sumitomo Mitsui	55.00
4	Mitsubishi UFJ Trust Int	53.00
5	Societe Generale Securities Services	52.67
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	58.92
2	BMO Global Asset Management	50.28
3	Societe Generale Securities Services	46.60
4	Sumitomo Mitsui	44.77
5	Mitsubishi UFJ Trust Int	44.08

ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	eSecLending	235.67
2	CACEIS Bank	88.00
3	Amundi	52.00
4	Natixis	50.00
5	DekaBank	36.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	194.83
2	CACEIS Bank	74.00
3	Amundi	43.17
4	Natixis	41.26
5	DekaBank	30.00

GROUP 2 RATED BY GROUP 1: ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	eSecLending	172.67
2	CACEIS Bank	70.00
3 =	Amundi	36.00
3 =	DekaBank	36.00
5	Natixis	30.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	142.33
2	CACEIS Bank	59.00
3 =	Amundi	30.00
3 =	DekaBank	30.00
5	Natixis	25.00

GROUP 2 RATED BY GROUP 2: ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	eSecLending	63.00
2	Candriam	21.00
3	Natixis	20.00
4 =	CACEIS Bank	18.00
4 =	Mitsubishi UFJ Trust Int	18.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	eSecLending	52.50
2	Candriam	17.50
3	Natixis	16.26
4	Mitsubishi UFJ Trust Int	15.57
5	CACEIS Bank	15.00

eSecLending is the global winner of group two (G2) lender category by a very wide margin for the second year running – again more than doubling the runner-up's tally. The Boston-based firm easily matched its 2015 performance, winning in the Americas and Asia Pacific overall.

G1 borrowers rated eSecLending the best performer in every region (jointly with Amundi in EMEA unweighted). Unsurprisingly, the firm dominated the services categories – it won every global table by a comfortable margin. Overall operations – including all operational efficiency sub-categories – and breadth of supply were particularly strong areas. In the Americas, eSecLending's scores were unrivaled. It also collected the award for most innovative G2 lender.

Most innovative
eSecLending

Natixis achieved second spot globally, significantly improving on its performance in last year's survey. The bank's lending capabilities were highly commended across the regions,

The growing trend of peer-to-peer SFTs

The securities financing industry has seen an increase in the number of peer-to-peer transactions in recent months, says eSecLending

Certain major pension funds and other like-minded industry participants are acting on new revenue opportunities created by the downstream effects of restrictive banking regulations. New transactions have developed in response to increased demand from these participants who wish to engage in non-traditional securities financing and repo transactions with counterparties open to such arrangements.

This interest is largely spurred by the marked pullback from banks for select credit and liquidity transactions. As capital constraints on the banking community continue to impact their businesses, peer-to-peer securities financing and repo will become more prevalent among pension plans and others looking to adjust to changing market conditions.

Peer-to-peer opportunities are not just about higher revenue; they can also serve to reduce risk and/or provide additional sources of liquidity or financing for participants. As banks and brokers pull back from providing certain short-term financing and liquidity services due to higher capital charges and/or regulatory requirements forcing them toward longer term financing, the void that is being created in the market is being filled through peer-to-peer activity.

Many of the entities entering into these peer-to-peer trades have higher credit ratings and/or a better credit profile than traditional banks, broker-dealers (borrowers) or repo counterparties. Participants can also manage risk by requiring higher margin levels than the traditional 102% or 105% applied to securities lending and repo transactions.

> "eSecLending has been willing and able to indemnify all of the peer-to-peer trades we have facilitated to date, since they are with high-quality counterparties"
> CHRIS POIKONEN

Several lending agents have tried their hand in the peer-to-peer space. Earlier this year, independent lending agent eSecLending announced the successful implementation of both a peer-to-peer reverse repurchase transaction and a peer-to-peer securities lending transaction between leading global pension plans.

Innovation

eSecLending has been at the forefront of peer-to-peer innovation, completing a pension to central counterparty peer-to-peer transaction in early 2015 and advocating peer-to-peer trades as an opportunity to create revenue or manage risk. The company's securities lending programmes have traditionally been segregated, allowing it the flexibility to create customised innovative trades to meet clients' specific needs.

"Peer-to-peer transactions and direct lending can mean many different things, and the trades can be structured in many different ways depending on a participant's motivation for the trade: cash needs, securities needs and/or risk management considerations," says Chris Poikonen, executive vice president at eSecLending.

Comparing peer-to-peer trades offered by lending agents is a difficult task. Depending on how the trade is structured, the counterparty, the type of collateral and margin agreed, and whether the agent will indemnify the transaction or not will all impact the risk/return profile.

"eSecLending has been willing and able to indemnify all of the peer-to-peer trades we have facilitated to date, since they are with high-quality counterparties," Poikonen says. "Our peer-to-peer transactions are facilitated under industry standard documentation and terms, including high-quality collateral with margin. Pension funds and industry players that have seen a marked pullback in lending revenue or financing activity due to regulatory constraints on their bank lender should explore whether a peer-to-peer solution could add value to their organisation."

particularly by G1 borrowers in the Americas and G2 borrowers in EMEA and Asia Pacific. Natixis ranked second globally for collateral funding and also finished runner-up for relationship management. Its trading capabilities also stood out, particularly in EMEA, and for operational efficiency it scored highly in every category.

Amundi equaled the global weighed third place position it achieved in last year's survey and added the unweighted prize in 2016. In EMEA it took first place, weighted and unweighted. G1 borrowers placed it third globally, joint-first in EMEA and joint-third in Asia Pacific. Amundi was also runner up by G2 borrowers in EMEA. In that region it ranked first for trading capability, relationship management and stability of supply. It was highly commended in all the six main service categories globally.

Societe Generale Securities Services improved its performance in 2016 by finishing in fourth place among its G2 lending peers. The division of the French Bank, placed fifth last year, was highly regarded by G2 borrowers in particular, which put the firm in top place of the global weighted table and the best G2 lender in EMEA. Societe Generale Securities Services was also highly commended in every service category on a global basis, improving on its performance in last year's survey. It also won the award for best collateral funding capabilities in EMEA.

CACEIS Bank finished in fifth place in both the global weighed and unweighted G2 lending tables. The company was highly commended by G1 borrowers globally, in EMEA and Asia Pacific. In Asia Pacific, CACEIS Bank finished in second place in every single service category and operations sub-category.

Borrowers ranked National Bank Financial second in the Americas this year – an improvement on the third place it achieved in 2015. It faired particularly well among group one borrowers. The Canadian firm finished runner-up in the Americas for every service category. Sumitomo Mitsui and BMO Global Asset Management were also both highly commended in the Americas. Mitsubishi UFJ was highly commended by G2 borrowers in both the Americas and Asia Pacific.

DekaBank enjoyed good scores in Asia Pacific, where it was ranked fifth place overall and joint-third by G1 borrowers.

Service categories

Unweighted scores

BREADTH OF SUPPLY		
GLOBAL		
Rank		**Score**
1	eSecLending	138.50
2	Amundi	56.00
3	Societe Generale Securities Services	54.75
4	Natixis	48.00
5	CACEIS Bank	47.50
EMEA		
Rank		**Score**
1	eSecLending	54.50
2	Amundi	47.50
AMERICAS		
Rank		**Score**
1	eSecLending	45.50
2	National Bank Financial	31.00
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	38.50
2	CACEIS Bank	15.00

COLLATERAL FUNDING		
GLOBAL		
Rank		**Score**
1	eSecLending	92.50
2	Natixis	75.00
3	Societe Generale Securities Services	60.75
4	CACEIS Bank	54.00
5	Amundi	50.50
EMEA		
Rank		**Score**
1	Societe Generale Securities Services	40.75
2	Natixis	40.50
AMERICAS		
Rank		**Score**
1	eSecLending	32.50
2	National Bank Financial	31.50
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	38.50
2	CACEIS Bank	15.00

RELATIONSHIP MANAGEMENT		
GLOBAL		
Rank		**Score**
1	eSecLending	126.00
2	Natixis	62.50
3	Amundi	53.50
4	Societe Generale Securities Services	50.50
5	CACEIS Bank	43.50
EMEA		
Rank		**Score**
1	Amundi	45.00
2	eSecLending	40.50
AMERICAS		
Rank		**Score**
1	eSecLending	47.00
2	National Bank Financial	31.00
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	38.50
2	CACEIS Bank	15.00

STABILITY OF SUPPLY		
GLOBAL		
Rank		**Score**
1	eSecLending	133.00
2	Amundi	61.50
3	Natixis	52.00
4	Societe Generale Securities Services	48.25
5	CACEIS Bank	42.00
EMEA		
Rank		**Score**
1	Amundi	53.00
2	eSecLending	45.00
AMERICAS		
Rank		**Score**
1	eSecLending	49.50
2	National Bank Financial	32.00
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	38.50
2	CACEIS Bank	15.00

TRADING CAPABILITY		
GLOBAL		
Rank		**Score**
1	eSecLending	113.50
2	Natixis	73.00
3	Societe Generale Securities Services	53.00
4	Amundi	51.50
5	CACEIS Bank	42.00
EMEA		
Rank		**Score**
1	Amundi	42.50
2 =	Natixis	40.50
2 =	Societe Generale Securities Services	40.50
AMERICAS		
Rank		**Score**
1	eSecLending	42.00
2	National Bank Financial	35.00
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	38.50
2	CACEIS Bank	15.00

OVERALL OPERATIONS		
GLOBAL		
Rank		**Score**
1	eSecLending	397.50
2	Natixis	156.50
3	Societe Generale Securities Services	140.25
4	Amundi	125.50
5	Sumitomo Mitsui	120.50
EMEA		
Rank		**Score**
1	eSecLending	145.50
2	Societe Generale Securities Services	101.75
AMERICAS		
Rank		**Score**
1	eSecLending	122.50
2	National Bank Financial	96.00
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	129.50
2	CACEIS Bank	39.00

OPERATIONAL EFFICIENCY: DIVIDEND COLLECTION AND FEES & BILLING		
GLOBAL		
Rank		**Score**
1	eSecLending	144.00
2	Natixis	48.50
3	Societe Generale Securities Services	45.25
4	Amundi	43.50
5	Sumitomo Mitsui	43.00
EMEA		
Rank		**Score**
1	eSecLending	56.00
2	Amundi	35.00
AMERICAS		
Rank		**Score**
1	eSecLending	42.50
2	National Bank Financial	31.00
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	45.50
2	CACEIS Bank	12.00

OPERATIONAL EFFICIENCY: TRADE MATCHING & SETTLEMENT		
GLOBAL		
Rank		**Score**
1	eSecLending	137.00
2	Sumitomo Mitsui	48.00
3	Natixis	47.50
4	Societe Generale Securities Services	47.25
5 =	Amundi	41.50
5 =	Mitsubishi UFJ Trust Int	41.50
EMEA		
Rank		**Score**
1	eSecLending	51.00
2	Societe Generale Securities Services	34.75
AMERICAS		
Rank		**Score**
1	eSecLending	40.50
2	National Bank Financial	32.00
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	45.50
2	CACEIS Bank	12.00

OPERATIONAL EFFICIENCY: TRADING CONNECTIVITY & AUTOMATION		
GLOBAL		
Rank		**Score**
1	eSecLending	116.50
2	Natixis	60.50
3	Societe Generale Securities Services	47.75
4	CACEIS Bank	45.50
5	Amundi	40.50
EMEA		
Rank		**Score**
1	eSecLending	38.50
2	Societe Generale Securities Services	36.25
AMERICAS		
Rank		**Score**
1	eSecLending	39.50
2	National Bank Financial	33.00
ASIA PACIFIC		
Rank		**Score**
1	eSecLending	38.50
2	CACEIS Bank	15.00

Fixed income lenders

GLOBAL		
UNWEIGHTED		
Rank		Score
1	UBS Switzerland	850.00
2	BNY Mellon	533.00
3	Clearstream	469.50
4	State Street	454.00
5	BNP Paribas Securities Services	356.00
6	Societe Generale Securities Services	348.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	UBS Switzerland	750.30
2	BNY Mellon	460.87
3	Clearstream	425.43
4	State Street	411.66
5	Societe Generale Securities Services	335.89
6	BNP Paribas Securities Services	333.24

AMERICAS		
UNWEIGHTED		
Rank		Score
1	BNY Mellon	212.50
2	State Street	189.00
3	Northern Trust	74.00
4	RBC Investor & Treasury Services	47.00
5	Desjardins	44.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	BNY Mellon	183.50
2	State Street	168.79
3	Northern Trust	63.63
4	RBC Investor & Treasury Services	42.08
5	Desjardins	40.02

EMEA		
UNWEIGHTED		
Rank		Score
1	UBS Switzerland	773.00
2	Clearstream	385.50
3	BNP Paribas Securities Services	330.00
4	Societe Generale Securities Services	311.00
5	BNY Mellon	300.50
WEIGHTED BY IMPORTANCE		
Rank		Score
1	UBS Switzerland	681.49
2	Clearstream	353.31
3	BNP Paribas Securities Services	309.50
4	Societe Generale Securities Services	300.14
5	Deutsche Agency Lending	278.90

ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	Clearstream	84.00
2	UBS Switzerland	70.00
3	Rabobank	49.00
4	Societe Generale Securities Services	37.00
5	BNP Paribas Securities Services	26.00
WEIGHTED BY IMPORTANCE		
Rank		Score
1	Clearstream	72.12
2	UBS Switzerland	60.69
3	Rabobank	43.61
4	Societe Generale Securities Services	35.75
5	BNP Paribas Securities Services	23.74

Service categories

Unweighted scores

BREADTH OF SUPPLY: CORPORATES		
GLOBAL		
Rank		Score
1	UBS Switzerland	116.00
2	BNY Mellon	70.00
3	State Street	65.00
4	Clearstream	51.50
5	Credit Suisse Zurich	40.00

BREADTH OF SUPPLY: DEVELOPED MARKETS		
GLOBAL		
Rank		Score
1	UBS Switzerland	101.00
2	Clearstream	71.00
3	BNY Mellon	69.00
4	Societe Generale Securities Services	66.00
5	State Street	56.00

BREADTH OF SUPPLY: EMERGING MARKETS		
GLOBAL		
Rank		Score
1	UBS Switzerland	120.00
2	BNY Mellon	85.50
3	Clearstream	57.00
4	JPMorgan	42.00
5 =	Credit Suisse Zurich	38.00
5 =	State Street	38.00

COLLATERAL TRADING		
GLOBAL		
Rank		Score
1	UBS Switzerland	100.00
2	State Street	64.00
3	Societe Generale Securities Services	56.50
4 =	BNY Mellon	54.00
4 =	Clearstream	54.00

OPERATIONAL EFFICIENCY		
GLOBAL		
Rank		Score
1	UBS Switzerland	99.00
2	Clearstream	65.00
3	BNY Mellon	60.00
4	State Street	55.00
5	BNP Paribas Securities Services	50.00

COLLATERAL FUNDING		
GLOBAL		
Rank		Score
1	UBS Switzerland	98.00
2	BNY Mellon	78.50
3	Clearstream	64.00
4	BNP Paribas Securities Services	55.50
5 =	Societe Generale Securities Services	51.00
5 =	State Street	51.00

STABILITY OF BORROWS		
GLOBAL		
Rank		Score
1	UBS Switzerland	96.00
2	Deutsche Agency Lending	53.00
3	State Street	51.00
4	Clearstream	49.00
5	BNP Paribas Securities Services	47.00

TRADING CONNECTIVITY		
GLOBAL		
Rank		Score
1	UBS Switzerland	120.00
2	State Street	74.00
3	BNY Mellon	70.00
4	Clearstream	58.00
5	Societe Generale Securities Services	44.00

UBS Switzerland is the 2016 winner of the fixed income survey with a dominant score of 850. Respondents placed the firm at the top of the EMEA table and second in Asia Pacific to Clearstream (weighted and unweighted in both regions). Every service category was won by UBS Switzerland, with particularly strong scores for breadth of supply in emerging markets and trading connectivity. It also scored very highly for corporates and won the operational efficiency category by a large margin.

Clearstream came third in the global fixed income table, an improvement on the fifth place it achieved in 2015. This year the company also collected first prize in Asia Pacific with both its unweighted and weighted scores, having previously finished runner-up. Owned by Deutsche Borse, the firm scored highly in the breadth of supply for developed markets service category and was also in second place for operational efficiency. Clearstream was also voted most innovative out of all of the fixed income award entrants.

BNY Mellon finished top of the Americas fixed income tables, weighted and unweighted, for the second year running and was runner-up on a global basis. The firm performed strongly across multiple service categories, including breadth of supply for corporates, emerging markets and collateral funding.

State Street secured second place in the Americas – resulting it also being highly commended for its global fixed income lending capabilities. The US bank's collateral trading functions, trading connectivity and stability of borrows were praised by survey respondents.

Strong scores in Asia Pacific and EMEA saw BNP Paribas Securities Services feature among the top ranked fixed income lenders on a global basis. In EMEA, the firm finished in third place, behind UBS Switzerland and Clearstream. It scored highly in

Most innovative
Clearstream

the operational efficiency, stability of borrows and collateral funding service categories. Senior fixed income trader Olivier Zemb was praised by one London-based respondent not only for his engagement, availability and professionalism but also for his talent at generating innovative and efficient trade ideas.

Societe Generale Securities Services, highly commended globally, also scored well for its EMEA and Asia Pacific and fixed income capabilities. Trading connectivity, collateral funding and trading and breath of supply in developed markets were singled out as strong points.

Borrowers group 1

GLOBAL

Rank	UNWEIGHTED	Score
1	Morgan Stanley	1,030.00
2	Bank of America Merrill Lynch	891.25
3	UBS	813.33
4	Goldman Sachs	651.42
5	Barclays	585.17

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	882.39
2	Bank of America Merrill Lynch	746.32
3	UBS	697.02
4	Goldman Sachs	566.61
5	Barclays	492.46

GROUP 1 RATED BY GROUP 1: GLOBAL

Rank	UNWEIGHTED	Score
1	Morgan Stanley	766.83
2	Bank of America Merrill Lynch	673.00
3	UBS	648.83
4	Goldman Sachs	494.67
5	Barclays	425.00

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	660.11
2	Bank of America Merrill Lynch	566.16
3	UBS	557.39
4	Goldman Sachs	430.25
5	Barclays	356.77

GROUP 1 RATED BY GROUP 2: GLOBAL

Rank	UNWEIGHTED	Score
1	Morgan Stanley	263.17
2	Bank of America Merrill Lynch	218.25
3	Societe Generale CIB	205.17
4	UBS	164.50
5	Barclays	160.17

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	222.29
2	Bank of America Merrill Lynch	180.16
3	Societe Generale CIB	174.58
4	UBS	139.63
5	Goldman Sachs	136.36

EMEA

Rank	UNWEIGHTED	Score
1	Morgan Stanley	377.00
2	Bank of America Merrill Lynch	370.33
3	UBS	305.17
4	Goldman Sachs	301.58
5	Societe Generale CIB	204.33

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	324.72
2	Bank of America Merrill Lynch	312.40
3	Goldman Sachs	266.90
4	UBS	263.45
5	Societe Generale CIB	172.93

GROUP 1 RATED BY GROUP 1: EMEA

Rank	UNWEIGHTED	Score
1	Morgan Stanley	264.50
2	Bank of America Merrill Lynch	257.67
3	UBS	220.33
4	Goldman Sachs	214.50
5	Barclays	144.67

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	226.11
2	Bank of America Merrill Lynch	219.02
3	UBS	191.25
4	Goldman Sachs	189.15
5	Barclays	120.67

GROUP 1 RATED BY GROUP 2: EMEA

Rank	UNWEIGHTED	Score
1	Bank of America Merrill Lynch	112.67
2	Morgan Stanley	112.50
3	Societe Generale CIB	110.33
4	Goldman Sachs	87.08
5	UBS	84.83

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	98.60
2	Societe Generale CIB	94.34
3	Bank of America Merrill Lynch	93.39
4	Goldman Sachs	77.75
5	UBS	72.20

AMERICAS

Rank	UNWEIGHTED	Score
1	Morgan Stanley	334.50
2	Bank of America Merrill Lynch	270.50
3	Barclays	210.83
4	UBS	210.00
5	Goldman Sachs	203.83

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	281.47
2	Bank of America Merrill Lynch	228.12
3	UBS	176.88
4	Barclays	175.56
5	Goldman Sachs	174.78

GROUP 1 RATED BY GROUP 1: AMERICAS

Rank	UNWEIGHTED	Score
1	Morgan Stanley	233.00
2	Bank of America Merrill Lynch	199.33
3	UBS	171.33
4	Goldman Sachs	152.00
5	Barclays	133.00

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	198.65
2	Bank of America Merrill Lynch	168.61
3	UBS	143.46
4	Goldman Sachs	131.84
5	Barclays	109.32

GROUP 1 RATED BY GROUP 2: AMERICAS

Rank	UNWEIGHTED	Score
1	Morgan Stanley	101.50
2	Barclays	77.83
3	Bank of America Merrill Lynch	71.17
4	Societe Generale CIB	62.33
5	Citi	53.33

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	82.82
2	Barclays	66.24
3	Bank of America Merrill Lynch	59.51
4	Societe Generale CIB	50.55
5	Citi	46.29

ASIA PACIFIC

Rank	UNWEIGHTED	Score
1	Morgan Stanley	318.50
2	UBS	298.17
3	Bank of America Merrill Lynch	250.42
4	Barclays	189.33
5	Societe Generale CIB	146.83

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	276.20
2	UBS	256.69
3	Bank of America Merrill Lynch	205.79
4	Barclays	160.82
5	Societe Generale CIB	128.11

GROUP 1 RATED BY GROUP 1: ASIA PACIFIC

Rank	UNWEIGHTED	Score
1	Morgan Stanley	269.33
2	UBS	257.17
3	Bank of America Merrill Lynch	216.00
4	Barclays	147.33
5	Goldman Sachs	128.17

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	235.34
2	UBS	222.68
3	Bank of America Merrill Lynch	178.53
4	Barclays	126.78
5	Goldman Sachs	109.26

GROUP 1 RATED BY GROUP 2: ASIA PACIFIC

Rank	UNWEIGHTED	Score
1	Morgan Stanley	49.17
2	Barclays	42.00
3	UBS	41.00
4	Bank of America Merrill Lynch	34.42
5	Societe Generale CIB	32.50

Rank	WEIGHTED BY IMPORTANCE	Score
1	Morgan Stanley	40.86
2	Barclays	34.04
3	UBS	34.01
4	Societe Generale CIB	29.68
5	Bank of America Merrill Lynch	27.26

Morgan Stanley emphatically won the 2016 award for best global group one (G1) borrower, following on from its success in last year's survey. The bank comfortably beat its 2015 scores and, when votes from both G1 and G2 lenders were combined, appeared top of the charts in every region. It missed out on winning the G2 lender-rated EMEA (unweighted) table by a slim margin, finishing second this year, but ranked first elsewhere on the leaderboards generated by considering G1 and G2 lender responses separately. The company also picked up the award for most innovative borrower.

Globally, Morgan Stanley received top spot for breadth of demand, stability of demand, collateral funding, relationship management, trading capability and the operations category of trading connectivity & automation. Lenders in the Americas deemed the firm to have the best operations overall, as well as trade matching & settlement capabilities. In EMEA, it topped the tables for its trading capability and relationship management. In Asia Pacific the investment bank won four service categories.

Bank of America Merrill Lynch moved up a place to finish global runner-up in this year's survey of G1 borrowers. When combined, votes from both sets of lenders placed the firm second overall across EMEA and the Americas and third in Asia Pacific. In EMEA, G2 lenders put the firm in first place. Also in EMEA it was the highest-rated G1 borrower for collateral funding, overall operations, stability of demand. In the Americas it was also highly commended in every service category bar one, as well as winning the dividend collection/fees & billing category.

UBS improved its position globally in 2016 among G1 borrowers, finishing third in both weighted and unweighted tables, up from fourth last year. Its highest regional position was second in Asia Pacific, with third or fourth place finishes for the Swiss bank in EMEA and the Americas. Lenders praised the firm's trading capability by placing it second in the global table and first in Asia Pacific. It was highly commended in every other category in Asia Pacific.

Goldman Sachs was very well regarded globally according to the combined lender scores, with G1 lenders particularly enthusiastic. EMEA and the Americas were strong areas for the bank. It featured on the leaderboard in eight of the nine service categories. On a global basis, Goldman Sachs received particularly strong praise for its collateral funding as well as breadth and stability of demand, and featured in all global service category tables.

Barclays equaled the fifth place finish it achieved last year and remained firmly on the list of highly commended G1 borrowers in the 2016 survey. The Americas proved to be the strongest region for Barclays, where it finished third unweighted and fourth weighted. In Asia Pacific it finished fourth. The bank scored well for its relationship management, overall operations and demand, both breadth and stability. It was ranked second in the Americas for the operations category of trading connectivity & automation.

Societe Generale CIB also appears in this year's list of highly commended G1 borrowers in EMEA and Asia Pacific. G2 lenders ranked the firm third in EMEA. Societe Generale CIB was also singled out for its trading capabilities, for which it was highly commended globally and in EMEA. It also drew praise for its dividend collection/fees & billing globally.

Service categories

Unweighted scores

BREADTH OF DEMAND		
GLOBAL		
Rank		Score
1	Morgan Stanley	190.50
2	Bank of America Merrill Lynch	158.25
3	UBS	142.50
4	Goldman Sachs	128.00
5	Barclays	96.50
EMEA		
Rank		Score
1	Morgan Stanley	72.00
2	Bank of America Merrill Lynch	69.00
AMERICAS		
Rank		Score
1	Morgan Stanley	56.50
2	Bank of America Merrill Lynch	49.00
ASIA PACIFIC		
Rank		Score
1	Morgan Stanley	62.00
2	UBS	52.00

COLLATERAL FUNDING		
GLOBAL		
Rank		Score
1	Morgan Stanley	152.00
2	Bank of America Merrill Lynch	150.00
3	UBS	120.00
4	Goldman Sachs	102.50
5	Barclays	91.50
EMEA		
Rank		Score
1	Bank of America Merrill Lynch	67.00
2	Morgan Stanley	53.00
AMERICAS		
Rank		Score
1	Morgan Stanley	50.50
2	Bank of America Merrill Lynch	39.00
ASIA PACIFIC		
Rank		Score
1	Morgan Stanley	48.50
2	UBS	45.00

RELATIONSHIP MANAGEMENT		
GLOBAL		
Rank		Score
1	Morgan Stanley	196.00
2	Bank of America Merrill Lynch	153.50
3	UBS	137.50
4	Barclays	105.50
5	Goldman Sachs	95.50
EMEA		
Rank		Score
1	Morgan Stanley	72.00
2	Bank of America Merrill Lynch	58.00
AMERICAS		
Rank		Score
1	Morgan Stanley	65.00
2	Bank of America Merrill Lynch	48.50
ASIA PACIFIC		
Rank		Score
1	Morgan Stanley	59.00
2	UBS	47.50

STABILITY OF DEMAND OVERALL		
GLOBAL		
Rank		Score
1	Morgan Stanley	180.00
2	Bank of America Merrill Lynch	152.50
3	UBS	143.50
4	Goldman Sachs	129.00
5	Barclays	103.50
EMEA		
Rank		Score
1	Bank of America Merrill Lynch	66.50
2	Morgan Stanley	65.50
AMERICAS		
Rank		Score
1	Morgan Stanley	56.00
2	Bank of America Merrill Lynch	44.50
ASIA PACIFIC		
Rank		Score
1	Morgan Stanley	58.50
2	UBS	53.50

TRADING CAPABILITY		
GLOBAL		
Rank		Score
1	Morgan Stanley	182.00
2	UBS	158.00
3	Bank of America Merrill Lynch	135.50
4	Societe Generale CIB	123.00
5	Goldman Sachs	107.00
EMEA		
Rank		Score
1	Morgan Stanley	68.00
2	Societe Generale CIB	59.00
AMERICAS		
Rank		Score
1	Morgan Stanley	57.50
2	Bank of America Merrill Lynch	45.00
ASIA PACIFIC		
Rank		Score
1	UBS	61.00
2	Morgan Stanley	56.50

OVERALL OPERATIONS		
GLOBAL		
Rank		Score
1	Bank of America Merrill Lynch	424.50
2	Morgan Stanley	388.50
3	UBS	335.50
4	Barclays	276.50
5	Goldman Sachs	268.25
EMEA		
Rank		Score
1	Bank of America Merrill Lynch	164.50
2	Morgan Stanley	139.50
AMERICAS		
Rank		Score
1	Morgan Stanley	147.00
2	Bank of America Merrill Lynch	133.50
ASIA PACIFIC		
Rank		Score
1	Bank of America Merrill Lynch	126.50
2	UBS	117.50

OPERATIONAL EFFICIENCY: DIVIDEND COLLECTION AND FEES & BILLING

Rank		Score
GLOBAL		
1	Bank of America Merrill Lynch	135.00
2	UBS	108.50
3	Morgan Stanley	107.00
4	Citi	87.00
5	Societe Generale CIB	79.00
EMEA		
1	Bank of America Merrill Lynch	54.00
2	UBS	45.50
AMERICAS		
1	Bank of America Merrill Lynch	44.00
2	Morgan Stanley	41.00
ASIA PACIFIC		
1	Bank of America Merrill Lynch	37.00
2	UBS	34.50

OPERATIONAL EFFICIENCY: TRADE MATCHING & SETTLEMENT

Rank		Score
GLOBAL		
1	Bank of America Merrill Lynch	146.50
2	Morgan Stanley	135.50
3	UBS	108.50
4	Barclays	92.50
5	Goldman Sachs	90.75
EMEA		
1	Bank of America Merrill Lynch	55.00
2	Morgan Stanley	47.50
AMERICAS		
1	Morgan Stanley	52.00
2	Bank of America Merrill Lynch	46.50
ASIA PACIFIC		
1	Bank of America Merrill Lynch	45.00
2	UBS	40.00

OPERATIONAL EFFICIENCY: TRADING CONNECTIVITY & AUTOMATION

Rank		Score
GLOBAL		
1	Morgan Stanley	146.00
2	Bank of America Merrill Lynch	143.00
3 =	Goldman Sachs	118.50
3 =	UBS	118.50
5	Barclays	108.00
EMEA		
1	Morgan Stanley	56.00
2	Bank of America Merrill Lynch	55.50
AMERICAS		
1	Morgan Stanley	54.00
2	Barclays	43.50
ASIA PACIFIC		
1	Bank of America Merrill Lynch	44.50
2	UBS	43.00

Most innovative
Morgan Stanley

Most improved
Jefferies

Borrowers group 2

GLOBAL

Rank		Score
UNWEIGHTED		
1	Scotiabank	734.83
2	SEB	554.08
3	Natixis	520.67
4	ABN Amro	498.17
5	Jefferies	487.00
WEIGHTED BY IMPORTANCE		
1	Scotiabank	616.96
2	SEB	461.15
3	Natixis	438.84
4	ABN Amro	428.18
5	Jefferies	410.11

GROUP 2 RATED BY GROUP 1: GLOBAL

Rank		Score
UNWEIGHTED		
1	Scotiabank	581.00
2	SEB	430.00
3	Jefferies	390.67
4	ING	374.67
5	ABN Amro	371.67
WEIGHTED BY IMPORTANCE		
1	Scotiabank	487.34
2	SEB	354.98
3	Jefferies	326.72
4	ABN Amro	316.67
5	ING	305.92

GROUP 2 RATED BY GROUP 2: GLOBAL

Rank		Score
UNWEIGHTED		
1	Natixis	228.00
2	Scotiabank	153.83
3	Credit Agricole CIB	149.50
4	ABN Amro	126.50
5	SEB	124.08
WEIGHTED BY IMPORTANCE		
1	Natixis	187.38
2	Scotiabank	129.62
3	Credit Agricole CIB	125.74
4	ABN Amro	111.51
5	SEB	106.17

EMEA

Rank		Score
UNWEIGHTED		
1	SEB	330.25
2	ABN Amro	292.50
3	Natixis	285.00
4	Scotiabank	275.67
5	Jefferies	203.17
WEIGHTED BY IMPORTANCE		
1	SEB	273.23
2	ABN Amro	251.30
3	Natixis	239.16
4	Scotiabank	232.04
5	Jefferies	173.42

GROUP 2 RATED BY GROUP 1: EMEA

Rank		Score
UNWEIGHTED		
1	SEB	238.33
2	ABN Amro	213.67
3	Scotiabank	180.00
4	Natixis	176.00
5	Jefferies	164.67
WEIGHTED BY IMPORTANCE		
1	SEB	195.01
2	ABN Amro	181.84
3	Scotiabank	150.78
4	Natixis	149.04
5	Jefferies	139.74

GROUP 2 RATED BY GROUP 2: EMEA

Rank		Score
UNWEIGHTED		
1	Natixis	109.00
2	Credit Agricole CIB	101.67
3	Scotiabank	95.67
4	SEB	91.92
5	ABN Amro	78.83
WEIGHTED BY IMPORTANCE		
1	Natixis	90.12
2	Credit Agricole CIB	85.79
3	Scotiabank	81.26
4	SEB	78.22
5	ABN Amro	69.47

AMERICAS

Rank		Score
UNWEIGHTED		
1	Scotiabank	205.83
2	ING	181.42
3 =	Jefferies	180.17
3 =	Wells Fargo	180.17
5	Fidelity Prime Services	178.67
WEIGHTED BY IMPORTANCE		
1	Scotiabank	169.13
2	Fidelity Prime Services	153.58
3	Wells Fargo	152.39
4	ING	149.66
5	Jefferies	148.15

GROUP 2 RATED BY GROUP 1: AMERICAS

Rank		Score
UNWEIGHTED		
1	Scotiabank	164.33
2	National Bank Financial	155.67
3	Wells Fargo	139.00
4	ING	138.00
5	Fidelity Prime Services	127.33
WEIGHTED BY IMPORTANCE		
1	Scotiabank	135.46
2	National Bank Financial	127.77
3	Wells Fargo	118.84
4	ING	111.59
5	Fidelity Prime Services	109.36

GROUP 2 RATED BY GROUP 2: AMERICAS

Rank		Score
UNWEIGHTED		
1	Natixis	63.50
2	Jefferies	57.83
3	Fidelity Prime Services	51.33
4	ING	43.42
5	ABN Amro	41.67
WEIGHTED BY IMPORTANCE		
1	Natixis	49.95
2	Jefferies	49.72
3	Fidelity Prime Services	44.21
4	ING	38.07
5	ABN Amro	36.68

ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	Macquarie	257.33
2	Scotiabank	253.33
3	Natixis	152.17
4	ING	130.00
5	SEB	117.33
WEIGHTED BY IMPORTANCE		
Rank		Score
1	Macquarie	220.74
2	Scotiabank	215.79
3	Natixis	133.57
4	ING	109.27
5	SEB	96.88

GROUP 2 RATED BY GROUP 1: ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	Macquarie	238.67
2	Scotiabank	236.67
3	ING	117.00
4	SEB	106.33
5	Jefferies	103.67
WEIGHTED BY IMPORTANCE		
Rank		Score
1	Macquarie	203.86
2	Scotiabank	201.10
3	ING	97.54
4	Jefferies	88.55
5	SEB	86.71

GROUP 2 RATED BY GROUP 2: ASIA PACIFIC		
UNWEIGHTED		
Rank		Score
1	Natixis	55.50
2	Macquarie	18.67
3	Scotiabank	16.67
4 =	Credit Agricole CIB	15.50
4 =	UniCredit	15.50
WEIGHTED BY IMPORTANCE		
Rank		Score
1	Natixis	47.31
2	Macquarie	16.88
3	Scotiabank	14.69
4	Nordea	13.10
5	Credit Agricole CIB	12.81

Scotiabank cemented its place as the best G2 borrower in the 2016 survey, winning by a considerable margin for the second year running. G1 lenders ranked the firm in first place overall – top in the Americas, runner-up in Asia Pacific and third in EMEA. Impressively, Scotiabank finished in first place in every one of the service categories on a global basis. Regionally, it performed strongly in the Americas and Asia Pacific – where it was at least highly commended in every service area.

Nordic bank SEB climbed to second place globally in this year's poll of G2 borrowers, up from third in 2015. The firm took the top spot (weighted and unweighted) in EMEA, after finishing runner-up in the region last year. It was also highly commended by G1 and G2 lenders combined, and G1 lenders separately, in Asia Pacific. SEB's stability of demand was praised in EMEA, as was its trading capability and overall operations in the region. It featured in the leaderboard for every category globally.

After finishing fifth in last year's survey of G2 borrowers, Natixis improved its standing in 2016 by moving to third overall. The firm's borrowing capabilities in EMEA and Asia Pacific were highly commended by lenders combined. When looking at the responses from G2 lenders alone, Natixis was ranked first place in every region. It also claimed the prize of most innovative G2 borrower. In addition, the bank finished joint-second globally in the trading capability service category, third for collateral funding and fourth overall for relationship management. Globally, it received praise in all of the service areas.

ABN AMRO again features prominently in this year's survey. The firm was ranked second in EMEA overall and fourth globally among its G2 borrower peers. Both G1 and G2 lenders highly commended its offering in EMEA. It won top spot for dividend collection/fees & billing in EMEA and also ranked first for stability of demand within the region.

US investment bank Jefferies made its way onto the list of highly commended G2 borrowers on a global basis this year, finishing fifth overall. The bank achieved its best result (joint-third) in its home region, but was also highly commended in EMEA.

Jefferies won the overall operations award for the Americas and claimed first place, jointly with Fidelity Prime Services, for breadth of demand in the Americas. Jefferies also leads the relationship management table for the region, in which Fidelity came a close second.

Despite not making the top five G2 borrowers globally, Macquarie dominated Asia Pacific in 2016 finishing comfortably in first place overall across the region – weighted and unweighted. G1 lenders placed it at the top of the list in Asia Pacific, G2 lenders rated it second. Macquarie was also at least highly commended in every service category in Asia Pacific, winning four: stability of demand, breadth of demand, collateral funding and relationship management.

Wells Fargo was ranked joint-third with Jefferies in the Americas by the combined groups of lenders – matching its performance in 2015. The bank also received a significant amount of praise for its stability of demand in the region.

Service categories

Unweighted scores

BREADTH OF DEMAND		
GLOBAL		
Rank		Score
1	Scotiabank	125.50
2	SEB	95.50
3	ABN Amro	92.00
4 =	Jefferies	88.50
4 =	Natixis	88.50
EMEA		
Rank		Score
1	SEB	52.50
2	ABN Amro	51.50
AMERICAS		
Rank		Score
1 =	Fidelity Prime Services	34.00
1 =	Jefferies	34.00
ASIA PACIFIC		
Rank		Score
1	Macquarie	47.50
2	Scotiabank	46.00

COLLATERAL FUNDING		
GLOBAL		
Rank		Score
1	Scotiabank	127.50
2	SEB	95.75
3	Natixis	82.50
4	Jefferies	77.50
5	ING	75.75
EMEA		
Rank		Score
1	SEB	57.75
2	Natixis	46.00
AMERICAS		
Rank		Score
1	Scotiabank	42.50
2	National Bank Financial	32.50
ASIA PACIFIC		
Rank		Score
1	Macquarie	44.50
2	Scotiabank	42.00

RELATIONSHIP MANAGEMENT		
GLOBAL		
Rank		Score
1	Scotiabank	122.00
2	SEB	92.50
3	Jefferies	88.00
4	Natixis	87.00
5	ING	79.50
EMEA		
Rank		Score
1	SEB	54.50
2	Scotiabank	51.00
AMERICAS		
Rank		Score
1	Jefferies	33.50
2	Fidelity Prime Services	32.00
ASIA PACIFIC		
Rank		Score
1	Macquarie	46.00
2	Scotiabank	43.50

STABILITY OF DEMAND OVERALL

Rank		Score
GLOBAL		
1	Scotiabank	127.50
2	ABN Amro	93.50
3	SEB	92.00
4	Natixis	91.00
5	Jefferies	83.50
EMEA		
1	ABN Amro	54.50
2	SEB	54.00
AMERICAS		
1	Scotiabank	36.50
2	Wells Fargo	31.50
ASIA PACIFIC		
1	Macquarie	48.00
2	Scotiabank	45.00

TRADING CAPABILITY

Rank		Score
GLOBAL		
1	Scotiabank	123.00
2 =	Natixis	88.00
2 =	SEB	88.00
4	ING	85.50
5	ABN Amro	79.00
EMEA		
1	SEB	56.50
2	ABN Amro	50.50
AMERICAS		
1	ING	34.50
2 =	National Bank Financial	33.50
2 =	Scotiabank	33.50
ASIA PACIFIC		
1	Scotiabank	44.00
2	Macquarie	43.50

OVERALL OPERATIONS

Rank		Score
GLOBAL		
1	Scotiabank	328.00
2	ABN Amro	291.50
3	SEB	271.00
4	Natixis	251.00
5	ING	242.50
EMEA		
1	SEB	165.00
2	ABN Amro	154.50
AMERICAS		
1	Jefferies	108.50
2	Scotiabank	106.00
ASIA PACIFIC		
1	Scotiabank	98.50
2	Macquarie	83.50

OPERATIONAL EFFICIENCY: DIVIDEND COLLECTION AND FEES & BILLING

Rank		Score
GLOBAL		
1	Scotiabank	105.00
2	ABN Amro	103.00
3	Natixis	87.00
4	SEB	78.00
5	ING	77.50
EMEA		
1	ABN Amro	56.00
2	Natixis	47.00
AMERICAS		
1 =	Jefferies	33.50
1 =	Scotiabank	33.50
ASIA PACIFIC		
1	Scotiabank	30.50
2	Macquarie	25.00

OPERATIONAL EFFICIENCY: TRADE MATCHING & SETTLEMENT

Rank		Score
GLOBAL		
1	Scotiabank	112.00
2	SEB	96.00
3	ABN Amro	93.50
4	ING	87.00
5	Natixis	84.50
EMEA		
1	SEB	55.50
2	ABN Amro	49.00
AMERICAS		
1	Scotiabank	37.50
2	Jefferies	36.00
ASIA PACIFIC		
1	Scotiabank	33.50
2	Macquarie	29.00

OPERATIONAL EFFICIENCY: TRADING CONNECTIVITY & AUTOMATION

Rank		Score
GLOBAL		
1	Scotiabank	111.00
2	SEB	97.00
3	ABN Amro	95.00
4	Natixis	79.50
5	ING	78.00
EMEA		
1	SEB	63.00
2	ABN Amro	49.50
AMERICAS		
1	Jefferies	39.00
2	Scotiabank	35.00
ASIA PACIFIC		
1	Scotiabank	34.50
2	Macquarie	29.50

Most innovative
Natixis

Lifetime achievement award: Mohamed Moursy

Mohamed Moursy, managing director of ABN AMRO Markets (UK), was recognised with the Lifetime Achievement Award in the 2016 *Global Investor/ISF* International Securities Finance Awards, on 23 September at the Cumberland Hotel in London. Moursy has more than 30 years of broad experience in the securities industry, and is on the board of directors for the International Securities Lending Association (ISLA).

Prior to joining ABN AMRO (then Fortis) in 2002, he held various senior positions with the Bank of New York Capital Markets, Fleet Securities, Paine Webber and Lehman Brothers. Moursy has helped oversee some of the biggest and substantial changes in the securities finance space. Colleagues have praised his character and commitment to the industry – and gave him a standing ovation on the night. A full interview will appear in the next issue of *Global Investor/ISF*.

Technology survey

The technology survey was completed by both borrowers (making up 48.21%) and lenders (51.79%), with firms needing a minimum of fifteen responses to qualify overall.

Data providers

ALL RESPONDENTS		
GLOBAL		
Rank		Score
1	DataLend	5.97
2	Markit Securities Finance	5.58
EMEA		
Rank		Score
1	DataLend	5.73
2	Markit Securities Finance	5.55
AMERICAS		
Rank		Score
1	DataLend	6.28
2	Markit Securities Finance	5.64
3	FIS Astec Analytics	5.44
ASIA PACIFIC		
Rank		Score
1	DataLend	5.96
2	Markit Securities Finance	5.58

BORROWER RESPONDENTS		
GLOBAL		
Rank		Score
1	DataLend	5.97
2	Markit Securities Finance	5.58

LENDER RESPONDENTS		
GLOBAL		
Rank		Score
1	DataLend	6.19
2	Markit Securities Finance	5.60

FIXED INCOME RESPONDENTS		
GLOBAL		
Rank		Score
1	DataLend	5.69
2	Markit Securities Finance	5.34

ALL RESPONDENTS SERVICE CATEGORIES		
BREADTH COVERAGE		
Rank		Score
1	DataLend	6.02
2	Markit Securities Finance	5.60
3	FIS Astec Analytics	4.82
CLIENT SERVICE		
Rank		Score
1	DataLend	6.01
2	Markit Securities Finance	5.79
3	FIS Astec Analytics	5.50
INNOVATION		
Rank		Score
1	DataLend	5.94
2	Markit Securities Finance	5.57
3	FIS Astec Analytics	4.96
RELIABILITY OF DATA		
Rank		Score
1	DataLend	5.98
2	Markit Securities Finance	5.40
3	FIS Astec Analytics	5.36
SPEED FREQUENCY		
Rank		Score
1	DataLend	5.86
2	FIS Astec Analytics	5.79
3	Markit Securities Finance	5.56

DataLend emerged as the global winner of the data vendor survey for the third consecutive year, scoring 5.97, winning by a comfortable margin of 0.39 and beating its tally of 5.79 achieved in 2015. Both lenders and borrowers rated the securities finance data business highly and the firm topped the rankings in all three regions, EMEA, Asia Pacific and the Americas, where the company achieved its highest regional score.

The division of EquiLend was also the winner of every single service category. Breadth of coverage and client service were particular strong points while the business also scored highly for innovation and reliability of data.

"DataLend has made a point of consistently and proactively developing new analytics to market to trading desks on a global scale," said one EMEA lender, who also praised the firm's servicing team as "exceptionally knowledgeable and responsive to questions, concerns and general feedback." Another EMEA-based survey respondent commented on the reliability and accuracy of data, praising the ease of use of DataLend's platform and excellent customer service and assistance when needed.

Markit Securities Finance came runner-up globally, scoring 5.58 overall and surpassing its 2015 total of 5.5. It also qualified second in every region, coming closest to achieving the winning score in EMEA (missing out by a margin of just 0.18). Its highest score regionally was in the Americas.

The data vendor also came second in four out of five service categories, narrowly missing out on victory for client service. "Client service, speed of replies on queries and the effort to resolve them is always impressive," noted one EMEA-based lender. "A high level of expertise, forward-thinking and user-focused," added an Asia-based survey respondent.

FIS Astec Analytics qualified solely in the Americas, where the firm achieved a respectable score. It came second globally for speed frequency and surpassed the five-point mark for client service and reliability of data. "Good solid data," said one respondent, based in North America. "Daily transactions are informative and the variance reports are very useful."

Technology vendors

SOFTWARE SOLUTIONS		
EMEA		
Rank		Score
1	Trading Apps	6.83
2	4sight/Broadridge	6.00

TRS PLATFORM		
GLOBAL		
Rank		Score
1	EquiLend Swaptimization	5.23
EMEA		
Rank		Score
1	EquiLend Swaptimization	5.09
AMERICAS		
Rank		Score
1	EquiLend Swaptimization	5.38
ASIA PACIFIC		
Rank		Score
1	EquiLend Swaptimization	5.13

POST-TRADE SERVICE		
GLOBAL		
Rank		Score
1	Pirum Systems	6.28
2	EquiLend/BondLend Post Trade Suite	5.40
3	FIS Securities Finance	4.31
EMEA		
Rank		Score
1	Pirum Systems	6.13
2	EquiLend/BondLend Post Trade Suite	4.99
AMERICAS		
Rank		Score
1	Pirum Systems	6.49
2	EquiLend/BondLend Post Trade Suite	5.72
3	FIS Securities Finance	4.31
ASIA PACIFIC		
Rank		Score
1	Pirum Systems	6.37
2	EquiLend/BondLend Post Trade Suite	5.39

POST-TRADE SERVICE: SERVICE CATEGORIES

Rank		Score
CLIENT SERVICE		
1	Pirum Systems	6.50
2	EquiLend/BondLend Post Trade Suite	5.78
3	FIS Securities Finance	4.50
EASE OF INTEGRATION AND CUSTOMISATION		
1	Pirum Systems	6.41
2	FIS Securities Finance	5.50
3	EquiLend/BondLend Post Trade Suite	5.18
INNOVATION		
1	Pirum Systems	6.39
2	EquiLend/BondLend Post Trade Suite	5.26
3	FIS Securities Finance	3.50
MARKET CONNECTIVITY		
1	Pirum Systems	6.22
2	EquiLend/BondLend Post Trade Suite	5.43
3	FIS Securities Finance	4.50
PROPORTION OF STP		
1	Pirum Systems	6.38
2	EquiLend/BondLend Post Trade Suite	5.51
3	FIS Securities Finance	5.50
RECONCILIATION ABILITY		
1	Pirum Systems	6.45
2	EquiLend/BondLend Post Trade Suite	5.24
3	FIS Securities Finance	3.50
ROI COST EFFICIENCY		
1	EquiLend/BondLend Post Trade Suite	5.67
2	Pirum Systems	5.64
3	FIS Securities Finance	3.50
USER INTERFACE		
1	Pirum Systems	6.34
2	EquiLend/BondLend Post Trade Suite	5.36
3	FIS Securities Finance	4.00

SBL TRADING PLATFORM: SERVICE CATEGORIES

Rank		Score
CLIENT SERVICE		
1	EquiLend/BondLend	6.43
2	FIS Securities Finance	5.75
EASE OF INTEGRATION AND CUSTOMISATION		
1	EquiLend/BondLend	5.91
2	FIS Securities Finance	5.25
FOOTPRINT		
1	EquiLend/BondLend	5.90
2	FIS Securities Finance	4.00
INNOVATION		
1	EquiLend/BondLend	5.99
2	FIS Securities Finance	2.75
ORDER MANAGEMENT		
1	EquiLend/BondLend	6.01
2	FIS Securities Finance	4.00
RELIABILITY OF PLATFORM		
1	FIS Securities Finance	6.75
2	EquiLend/BondLend	6.31
ROI COST EFFICIENCY		
1	EquiLend/BondLend	5.62
2	FIS Securities Finance	4.00
USER INTERFACE		
1	EquiLend/BondLend	6.00
2	FIS Securities Finance	5.25

SBL TRADING PLATFORM

Rank		Score
GLOBAL		
1	EquiLend/BondLend	6.03
2	FIS Securities Finance	4.72
EMEA		
1	EquiLend/BondLend	5.80
2	FIS Securities Finance	4.88
AMERICAS		
1	EquiLend/BondLend	6.20
2	FIS Securities Finance	4.56
ASIA PACIFIC		
1	EquiLend/BondLend	6.29
2	FIS Securities Finance	4.88

Pirum Systems took the post-trade provider top spot this year with a global score of 6.28, surpassing its 2015 result of 5.80. The company was ranked first place in each of the regions: EMEA, Asia Pacific and the Americas, where it achieved its highest regional score.

The firm also won seven of the eight post-trade service categories. Client service and reconciliation ability were ranked highly by respondents, while it scored well for ease of integration and customisation as well as innovation. It finished runner-up for ROI cost efficiency, missing out on first place by a wafer-thin margin of 0.03.

Survey respondents voted EquiLend/BondLend as the best securities borrowing and lending (SBL) trading platforms with a global combined score of 6.03. The platforms won in every

region and every service category.

EquiLend/BondLend's client service score was its highest. User interface, innovation and footprint were also strong points for the platforms.

"They are ahead of the curve in terms of what the street needs," said one North American-based borrower, who added that the firm's experts were always in contact with front office teams to ask for ways to improve existing technology and develop new solutions.

FIS Securities Finance was runner-up in the SBL trading platform category, qualifying in all regions and achieving a global score of 4.72. The company scored highly on reliability – winning the reliability of the platform service category with a score of 6.75. It also surpassed the 5-mark for client service, user interface and ease of integration & customisation.

EquiLend's Swaptimization – a new service designed to make the total return swaps (TRS) market more efficient – was the only qualifier for the TRS platform category, scoring 5.23 despite only launching this summer.

"They actively reach out for feedback and are making regular improvements. I see their scores consistently going up in the coming years," said a North American-based borrower. Another survey respondent added: "I think the usability and depth of information that this platform provides is impressive. Incorporating SBL data into the system makes it stand out. I definitely see value in using it."

Trading Apps claimed the top spot in the software solutions category with a strong score of 6.83. The securities finance software firm was praised by one North American-based lender for the adaptability of its technology and innovation. 4sight/Broadridge was the runner-up with a score of 6. "The speed of bringing new functionality to all users and their level of market knowledge was a strong point," a European-based borrower noted.

METHODOLOGIES

EQUITY LENDING SURVEY

The equity lending survey highlights excellence in the industry. Respondents – lenders and borrowers – are asked to rank their counterparties in each of the eight categories, separately for each region. A global entity is asked to rate its counterparties for every relevant geographical region: EMEA, the Americas and Asia Pacific. The region is defined by where the underlying securities are listed.

Overall scores combine all category scores. Global scores combine scores from all regions. All entities that meet the qualification criteria are included in the appropriate tables regardless of whether they helped to promote the survey. Results of winners and a select group of runners-up are published, calculated by the total amount of points firms accumulate. Therefore, results for only the highest-regarded firms are published.

Only the largest borrowers and lenders are eligible to rank and be ranked. Group one consists of the largest 15 counterparties and group two the remainder *(see lists online)*. Groups one and two fill out an identical survey. All respondents are asked to rank seven group one and seven group two counterparties for each category. However, the rankings provided by group two respondents have a lower weighting than those of group one (*see unweighted)*.

A global entity can rank its top counterparties once in each category, for each region. Multiple responses are resolved by the global head of the business. Respondents are encouraged to rank as many as possible but no minimum is required. Responses are not permitted if they are submitted via a counterparty; IP addresses are checked.

Unweighted

All respondents are asked to rank their top seven counterparties for each category in each region, for both groups. The rankings are then inverted to provide scores (i.e. a number one rank produces a score of seven). Being ranked by a group one respondent results in a full score; being ranked by a group two counterpart results in 50% of the inverted score being added to the total. These scores are then added and the firm with the highest total score is declared the winner.

Weighted by importance

Respondents are asked to rank the categories according to how important they consider that attribute to be. These ranks are combined to provide weightings theoretically between 0 and 2 for each category. These weightings are applied on a global basis to unweighted scores.

Categories & operations sub-categories

Respondents rank across eight categories including three operations sub-categories. The three operations categories are combined into one operational efficiency category when creating the overall tables.

Voting categories

Respondents are also invited to nominate individuals for our lifetime achievement award and most innovative awards.

FIXED INCOME LENDING SURVEY

This survey is designed to identify excellence and complement the longstanding equity lending survey. Borrowers are invited to rank their lending counterparties in each of the categories separately, for each region. Regions are defined by where the underlying securities originate. The methodology and validation process is identical to that of equities lender survey.

DATA PROVIDER SURVEY

Respondents scored securities lending data vendor(s) while completing the above surveys. The scores are calculated across five categories, between one for unacceptable to seven for excellent.

Minimum qualification requirements: regional tables, seven for EMEA and the Americas and five for Asia Pacific; global tables, qualification in two regions; category tables, qualification in two regions.

TECHNOLOGY SURVEY

Both borrowers and lenders are asked to rate four types of technology provider: SBL trading platform, TRS trading platform, post-trade service and software solution. Respondents are asked to rate these providers between one and seven across eight service categories. The responses of borrowers and lenders are combined. Firms need a minimum of seven responses to qualify for the regional tables. Firms need a minimum of fifteen responses and must also qualify in a minimum of two regions to qualify globally.

The above methodologies are abridged. Full methodologies can be found at www.globalinvestormagazine.com.

Transaction reporting in post-crisis Europe

Irene Mermigidis, managing director at REGIS-TR, a joint venture launched by Iberclear and Clearstream, says centralised reporting can help alleviate the regulatory burden facing derivative market participants

The financial crisis has spurred lawmakers to create a raft of new regulations with the key aim of promoting market stability and transparency. These efforts are grounded in the reform objectives of the G20. Regulations since 2008 have come thick and fast. This is particularly clear in the context of European regulations. The scope of the European financial regulatory framework has been and still is in the process of being broadened and made more granular, as regulators are increasing the range of markets, instruments and market participants targeted, as well as the volume of data to be provided.

The current reporting landscape that market participants face is no longer solely limited to one regulation. New regulations on the radar include the implementation of MiFIR and SFTR in 2018. Similar regulatory initiatives also exist outside the EU, for example via the Financial Market Infrastructure Act (i.e. FinfraG) in Switzerland or the Dodd-Frank act in the US.

Aside from the obvious case of MiFID I evolving into MiFID II/MiFIR, even existing regulations are subject to a high level of amendment and iteration. Take for example EMIR; following its implementation in February 2014 several new requirements have been introduced by ESMA, known as Level 1 and 2 validations. Further revised technical standards for EMIR are expected in 2017, which will further seek to improve standardisation and data quality.

"As regulations are subject to modifications and amendments, it is crucial for firms to continuously monitor for regulatory updates"

In parallel, ESMA is seeking to improve reconciliation conducted between trade repositories via the implementation of a centralised portal, which should help to facilitate data aggregation and analyses conducted by National Competent Authorities. In addition, the European Commission recently announced that it plans an entire EMIR review, expected by early 2017, aiming to safely reduce regulatory reporting burdens.

Unprecedented requirements

The iterative approach we have seen with EMIR will likely be mirrored in the other reporting regulations, as regulators seek to build on previous experience and align, where possible, the different regulatory regimes. That regulatory reporting is an organic process can be considered the new norm. Given their size, scope and complexity, MiFIR and SFTR in particular are proving to be a catalyst for participants to re-evaluate their existing reporting arrangements and opt in favour of a strategic and holistic approach across the multiple jurisdictions and asset classes.

The scope of required reporting is unprecedented and places a significant operational and financial onus on a wide array of market participants. Firms will need to navigate their way through the various reporting obligations and their technical differences, which will be a complex task for many. There is an overarching need for more information and stricter governance. Firms need to make sure that they have the resources and skills to meet all their regulatory obligations on a cross-regulatory and jurisdictional basis. This may also create significant cost challenges for market participants (e.g. IT development and maintenance costs), especially for non-financial firms, which do not tend to have the same infrastructure in place for such efforts, compared to banks. Furthermore, as regulations are subject to modifications and amendments, it is crucial for firms to continuously monitor for regulatory updates and understand the business as well as IT implications resulting from such changes.

One solution for market participants seeking to alleviate regulatory burden is to centralise reporting through a specialist provider that can cover all of their reporting needs. A definite prerequisite must be the reliability of data.

REGIS-TR is a one-stop-shop solution, where clients can use products and services to meet their EMIR, REMIT and similar Swiss regulatory energy reporting requirements (i.e. StromVV). In the near future, REGIS-TR customers will also be able to benefit from FinfraG TR, MIFIR and SFTR services.

Harmonisation headache

Chris Bender, director of regulatory advisory at Chatham Financial, looks at the progress and remaining obstacles towards achieving a cohesive harmonious cross-border OTC derivatives regulatory framework

Imagine a scenario where a New York based real estate fund wants to hedge the foreign currency exposure arising from an investment in an Australian property using a derivative purchased from a European bank. Prior to the 2008 financial crisis, this fairly typical derivatives transaction would be subject to little, if any, regulation. Following the financial crisis, this same transaction would potentially be required to comply with three separate regulatory regimes.

Because of the global nature of many derivatives transactions, regulators recognised the need to develop a coordinated, harmonious regulatory framework. While the G20 nations demonstrated a remarkable level of coordination in developing this framework, the actual implementation of OTC derivatives regulation has not achieved the same level of harmonisation.

In fact, the implementation of OTC derivative regulation across regulatory regimes has been plagued by inconsistent and sometimes conflicting requirements, and inconsistent implementation dates – each imposing increased burdens on market participants. These results can be attributed to the fact that different regulatory philosophies, rule-making processes and competing priorities exist in each country. These differences have also contributed to the creation of a regulatory maze for market participants, increased costs and, according to some market observers, fragmentation of liquidity pools.

A couple of recent examples help to illustrate these points. First, in March 2015, the BCBS and IOSCO released a framework to impose margin on OTC derivatives. This regulatory structure would form the baseline of a harmonious set of cross-border margin rules that would be implemented globally beginning on 1 September 2016.

The intent did not come to fruition due to the fact that there are several significant differences between the rules both in terms of the scope of coverage and within the rules themselves. More importantly, not all of the regulators were able to implement the rules on time. The margin rules went into effect on 1 September 2016 in the US, Canada and Japan. However, these rules did not go into effect in the EU, Australia, Switzerland, Singapore and Hong Kong, among others. Market observers have noted that this implementation delay has led to a refusal of banks in these jurisdictions to trade with US, Japanese and Canadian banks to avoid having to post margin on their trades.

Substituted compliance

A second example is the mechanism designed to promote harmonisation across borders: substituted compliance. Broadly speaking, substituted compliance, or equivalence as it is referred to in Europe, is the principle that if a market participant complies with one regulatory regime's requirements, it will be deemed to have complied with a second jurisdiction's requirements. The goal is to minimise the regulatory burdens associated with trading OTC derivatives. However, two conflicting theories exist on how substituted compliance determinations should be made; through an outcome-based approach or a requirement-by-requirement approach.

The tension between these competing philosophies has slowed the pace of substituted compliance determinations and can be most clearly seen in the negotiations between the US and Europe regarding clearinghouse rules. These negotiations dragged on for over three years because of technical differences over the calculation of margin under the clearinghouse rules – differences that had competitive implications. The negotiations were only recently finalised as a regulatory deadline approached, which would have imposed significantly increased costs on European banks using US clearinghouses.

While significant obstacles currently exist to the development of a cohesive, harmonious cross-border regulatory framework, much progress also has been made. Regulatory discrepancies were inevitable but, early on, regulators recognised the need for increased harmonisation. Through the work of cross-border regulatory groups, such as the OTC Derivatives Regulators Group, progress has been made toward increased harmonisation of these rules. This work must continue in the upcoming years in order to create a more harmonious cross-border regulatory framework for market participants.

Bender is a director of regulatory advisory on Chatham Financial's global regulatory solutions team where he serves as an advisor and expert on global derivatives regulatory regimes, including Dodd-Frank and EMIR. He leads Chatham's participation in ISDA working groups responsible for providing industry feedback to regulators and developing industry standards in response to new regulation.

One ID doesn't fit all

ESMA's application of ISIN identifiers for all OTC derivatives does not adequately support risk management, says Sapient Global Markets' *Joshua Satten*

The adoption of OTC clearing and the subsequent use of clearinghouses has created the need to mandate standardised OTC derivatives identifiers (IDs), in order to enhance the movement of trades and manage market and price risk while also supplying transparency for regulatory oversight requirements. However, we're seeing this occur in broad strokes in a globally fragmented manner.

ESMA, despite vocal industry opposition, has reaffirmed the use of the International Securities Identification Number (ISIN) as the standard identifier for reporting derivatives under MiFID II. The International Standards Organization (ISO) just finished reviewing initial industry working group recommendations by asset class.

Why would the creation of a standard ID, supported by ESMA along with IOSCO and ISO, if so required for the efficiency of the OTC market, be an issue? Because the discussion has morphed into a product-agnostic, geographically-specific need related to one type of regulatory reporting, losing sight of the fact that ID standards are a global operational support issue.

Standards should, where applicable, be sought as universal on a product level and then brought to fruition, driven primarily to alleviate operational issues facing the entire industry. Indeed, the initial debate focused on a method to provide optimised operational support for the matching, settlement, pricing, clearing, collateralisation and portability of bilateral and cleared OTC derivatives, as well as enabling the most accurate regulatory reporting to mitigate and proactively manage risk. ESMA is taking the industry down a road where the effective assumption is that, for every product, one-size-fits-all.

The ISIN would be unnecessarily robust for some products, as you'd end up with blank or unnecessary characters, and it wouldn't be robust enough for others. There's also the issue of a lack of uptake, as some other financial products with standard IDs do not use the ISIN structure.

Attempting to lasso the entire OTC market with a single standard is neither practical nor the best approach for risk mitigation support, either now in the future. Establishing a standard is about the value of that process and the value of the information you're receiving in that process. It's about reporting information the right way from day one, and working in such a way that the identifier gives insightful information to market participants and regulators to reduce risk and avoid institutional and market collapses.

> **"Attempting to lasso the entire OTC market with a single standard is neither practical nor the best approach for risk mitigation support, either now in the future"**

We need the largest buy and sell-side firms to collaborate and agree on standards and submit those for consultation with the various regulatory bodies in a coordinated manner. For each combination of asset class and product type, with sufficient liquidity and maturity, a unique standard should be created and driven to adoption. Previous successful examples of these include OPRA codes for listed equity options, or RED codes for credit default swaps.

Beyond the ISIN, other options include Bloomberg's FIGI (Financial Instrument Global Identifier) and the International Swaps and Derivatives Association (ISDA) proposal to adopt a Universal Transaction ID (UTI) in combination with a Universal Product ID (UPI). Outside of currently low utilisation and industry adoption, the FIGI benefits from being free and more flexible, as well as from Bloomberg's desire to evolve the offering based on industry feedback and grow adoption. The ISDA taxonomy makes sense in application to bilateral trades and bilateral reporting.

This is important to understand; with cleared trading and reporting we have the advent of standard contracts and compression methodologies that result in many transactions attributed to a single position and related opportunities for collateral and portfolio optimisation through the portability of trades between FCMs and CCPs. While this positional ID for cleared trades could have a transactional ID as a suffix so as to align with the bilateral structure, it should be inclusive of whatever the position is and specific to whatever the product is.

Ultimately, multiple new ID formats are needed. Each should differ in structure, given the uniqueness of the OTC market and the adaptability of asset classes and imaginable products therein. The OTC market is bespoke so it can provide infinite ways of allowing financial institutions to hedge their risk in special ways for unique client portfolios. This will not decrease in time as our world is only getting more complex and investment vehicle options and managers will become increasingly diverse.

Joshua Q Israel Satten is director of business consulting at Sapient Global Markets, based in San Francisco

Unfinished business

Financial market reforms continue to reshape and strengthen the global OTC derivatives market although several unintended consequences still need to be addressed, finds *Andrew Neil*

Overall, "good progress" continues to be made across the OTC derivatives reform agenda, according to the Financial Stability Board's (FSB's) latest update. It is the eleventh report on regulatory progress since the G20 leaders committed to a fundamental overhaul of the global financial system in 2009.

The FSB's brief summary of the recent work highlights that trade reporting requirements for OTC derivatives and higher capital requirements for non-centrally cleared derivatives (NCCDs) are mostly in force. Central clearing frameworks and, to a lesser degree, margining requirements for NCCDs have been, or are being, phased-in, while platform trading frameworks are relatively undeveloped in most jurisdictions.

These changes continue to fundamentally alter the structure of the OTC derivatives markets, significantly impacting the business models, profitability, legal entity structures, operations, data and technology of financial institutions' derivatives businesses. And, this is all having to be done while keeping the original objectives in mind – improving transparency, mitigating systemic risk and protecting against market abuse.

"Much has been achieved objectively, across jurisdictions and on a global basis. The US, Europe and some Asia Pacific countries such as Japan and Australia are at advanced stages," says Gaspard Bonin, deputy head of derivatives execution and clearing at BNP Paribas CIB. "Another big step recently has been progress around global consistency. Mutual recognition of CCPs, for example, between the US and Europe is a welcome development.

"However, there's a general question mark hanging over the market, industry and regulators," Bonin adds. "How will the market work in the long-term? How sustainable is it with the new regulatory framework and how will it adapt? The next step for the market, broadly speaking, will be to digest the changes and understand the real outcomes once the dust settles."

Nicholas Veron, co-founder and senior fellow of the European economic think-tank Bruegel and a visiting fellow at the Peterson Institute for International Economics in Washington DC, agrees with Bonin that is it too soon to judge the G20's ambitious reforms of OTC derivatives markets.

Unforeseen consequences

However, he does note some unforeseen consequences of the G20-fostered move toward more central clearing, including the possibility of market fragmentation across currency areas, and the concentration of systemic risk in derivatives clearinghouses. Separately, Veron says the reporting of OTC derivatives transactions to trade repositories is far from delivering on its promise to help supervisors assess developments of relevance for financial stability.

"Perhaps unsurprisingly, the success or lack thereof of G20 financial regulatory reforms is strongly correlated with the strength of the corresponding global institutional framework," he explains in a recent research note 'Financial Regulation: The G-20's Missing Chinese Dream'. "In particular, the long-established cooperation of the world's main central banks through the BIS and its various committees has generally resulted in decent effectiveness of reforms within their remit, such as Basel III.

"By contrast, cooperation among securities regulators is of a more ad hoc nature, and IOSCO has generally found it difficult to agree on strong common standards and ensure their general adoption, as is illustrated by the G20's failure on financial accounting standards convergence."

Veron adds that one of the reasons for the "lopsided design" and implementation of OTC derivatives reforms is the awkward overlap of responsibilities in this area between central banks with a financial stability mandate (represented in CPMI) and securities regulators with a market-integrity mandate (represented in IOSCO).

To illustrate Veron's point, trade reporting requirements covering over 90% of OTC derivative transactions were in force at the end of June 2016 in 19 out of 24 FSB member jurisdictions. By the end of 2017, 23 of these jurisdictions expect to have such requirements in force.

However, authorities have recently raised concerns that restrictions on trade repositories reporting complete datasets

to them reduces its usefulness to them when carrying out their regulatory mandates, including monitoring and analysing systemic risk and market activity. For example, eight jurisdictions (Argentina, Hong Kong, India, Indonesia, Korea, Mexico, Russia and Saudi) do not currently permit reporting to foreign trade repositories in at least some circumstances.

When it comes to capital and margin requirements, higher capital requirements for exposures to NCCDs are largely in force (with 20 jurisdictions having requirements in force that apply to over 90% of OTC derivatives transactions) although less progress has been made in the implementation of margin requirements for NCCDs.

Furthermore, around half of the member jurisdictions do not appear on track to have implemented variation margin requirements in accordance with the second and final phase, set for March 2017. "Such jurisdictions should urgently take steps to implement these reforms," the FSB urged in September.

"Certainly there has been incredible complexity foisted onto the market," explains Luke Zubrod, director, strategic initiatives at Chatham Financial. "There are a multiple new intermediaries – clearinghouses, trading facilities, swap data repositories as well as numerous regulatory bodies and multiple jurisdictions."

Zubrod recalls that in the immediate aftermath of the financial crisis there was an overwhelming public perception that derivatives were weapons of mass destruction, financial instruments capable of bringing economies to their knees. "In our discussions with policymakers and regulators in Washington DC and elsewhere, we thought it was important early on to tell the other side of the story – about commercial end-users that use derivatives as simple risk-reducing business transactions and that do so in quantities that are not systemically risky.

"That said, I do think the original G20 objectives were fair. AIG's systemically-risky use of derivatives, for example, impacted taxpayers due to the resulting bailout, revealing a link between derivatives and the systemic health of financial markets. Therefore, the public urge to bring regulatory scrutiny and solutions to the derivatives market was appropriate. Clearly, a number of endeavors touching other areas of the financial market were also appropriate and reasonable."

"The public urge to bring regulatory scrutiny and solutions to the derivatives market was appropriate"
LUKE ZUBROD, CHATHAM FINANCIAL

Zubrod acknowledges there's now good cause to think markets are safer than they were. Although some questions remain, for example: Was every policy and rule completely necessary? Are there areas where regulations can now be calibrated more finely in order to mitigate the effects of excessively onerous rules?

Since September 2015 there have only been a small number of additional regulatory steps taken by jurisdictions. This, according to the FSB, reflects the fact that most FSB member jurisdictions have already largely introduced regulatory reforms to require trade reporting of OTC derivatives.

In Argentina, the development of reporting infrastructure and associated reporting requirements is proceeding, but specific reporting requirements are not currently in force for OTC derivatives. Reporting requirements are in force for certain FX and interest rate OTC derivative transactions in Hong Kong; rules on reporting requirements with respect to the next phase of reporting (effectively covering all five asset classes) have been enacted and will have effect when reporting commences in mid-2017.

In South Africa, consultation has been undertaken to introduce reporting requirements across all asset classes – requirements are expected to be adopted by the end of 2016 and in force by mid-2017. In Switzerland, trade reporting requirements will phase-in once the first repository is licensed or recognised by the relevant Swiss authority. In Turkey, various phases of consultation have been undertaken since September 2015; rules are expected to be in force in 2017.

The regulatory cycle

According to Chatham Financial's Zubrod, who also participates on the CFTC's Market Risk Advisory Committee, any new rules will be an extension on existing requirements rather than new standalone requirements.

However, in the US at least, much will depend on the outcome of the US election. Hillary Clinton, for example, is calling for the strengthening of regulation to prevent bailouts and protect taxpayers by restoring the so-called swaps pushout rule, which requires banks to conduct swaps trading via separate affiliates with higher capital requirements. She is also proposing to fully fund the regulators of Wall Street and has Garry Gary Gensler, former CFTC chairman from 2009 to 2014, in her corner.

A victory for Trump, on the other hand, would see financial markets entering uncharted territory due to what can only be described as an absence of clear financial policies. Citi's chief economist William Buiter stated recently that he sees possible tailwinds to growth coming from policy changes after the election, no matter which candidate wins.

Life on the margins

Margining rules for OTC derivatives have at last come into effect, following an eight-year gestation. *Dave Simons* reports on how participants are dealing with the impacts

When they convened in late 2009, leaders of the G20 nations were the first to admit that the market they were intent on regulating – OTC derivatives – was basically beyond their comprehension. Nonetheless, within two years the Basel Committee on Banking Supervision, along with the International Organization of Securities Commissions, began laying the groundwork for a set of new rules covering both variation and initial margining of non-cleared derivatives products, under the guise of the Working Group on Margining Requirements (WGMR).

The moment of truth has finally arrived. Beginning on 1 September, entities with the largest derivatives exposures began exchanging both initial margin (IM) and variation margin (VM) on non-cleared derivatives trades; posting of IM will be progressively phased in until 2020 (in decreasing levels of derivative exposure), while all participants will be required to post VM starting on 1 March 2017.

Not only will the rollout last a full four years, but regional nuances regarding acceptable collateral, transactions included under IM/VM as well as entities deemed exempt could make the onboarding process that much trickier. Still, in the early stages participants seemed up to the task: on the day the new regime went live, Japan, Canada and the US were already posting both IM and VM. According to Diven Chatrath, EMEA head of middle office outsourcing for SS&C GlobeOp, a provider of fund administration and financial-technology products and services, it was a good day on many counts.

"The first of September marked the first day that the buy side submitted trades and had a consistent calculation across different sell-side banks, all using the ISDA's Standard Initial Margin Model," says Chatrath. "The bottom line is that this is promoting a very good standard, whereby both sell-side and buy-side firms are equally responsible for knowing that the information being reported is good, accurate and sensible."

And, unlike eight years ago when an era of unbridled opacity brought the financial world to its knees, says Chatrath, "this time participants have the metrics to properly measure and manage, should another significant downturn occur".

> **"1 September marked the first day that the buy side submitted trades and had a consistent calculation across 27 different sell-side banks"**
> DIVEN CHATRATH, SS&C GLOBEOP

The arrival of bilateral margin requirements has served as a tailwind for clearing volumes of eligible OTC derivatives, remarks Daniel Maguire, global head of rates and FX derivatives, LCH. The company's ForexClear service continues to see significant growth – including a record $152bn in FX non-deliverable forwards in August – as has SwapClear, LCH's interest-rate derivatives clearing service.

"There has been a tremendous rise in the number of market participants on-boarding and commencing clearing, and current members and their clients are clearing a larger proportion of their trades," says Maguire. "We anticipate this trend will continue to be driven by these regulations, other pending capital and liquidity requirements, as well as the European mandate for clearing interest rate derivatives. As such, LCH will continue to work with its members to assist with transitioning to the new regulatory framework."

Help for the buy side

While the staggered implementation approach is intended to allow dealers and large active derivatives users to set the pace for the rest of the industry, smaller buy-side organisations that only dabble in derivatives and pledge nominal amounts of margin may find it challenging to wade through the myriad compliance, oversight and legal nuances, especially if they don't have a dedicated derivatives specialist to turn to for assistance.

"There may be a few people in-house whose job is to periodically keep tabs of derivatives activity, and suddenly they're being called upon to determine their organisation's legal status, register with regulators as well as ensure they have all the proper documentation in place," says Jud Baker, product manager for derivatives and collateral management at Northern Trust in Chicago.

"It's a concern for these organisations, which may have to engage in legal negotiations with their dealers, who themselves only have a limited number of lawyers to call upon."

Fortunately, there are a wealth of tools that allow dealers to coordinate with their counterparties on the buy side in order to help them amend documents, calculate exposures as well as ensure adequate collateralisation. Even so, the new margining rules represent a significant operational burden for a number of players, who may ultimately benefit from a third-party intermediary.

"For instance, there are numerous providers that offer software solutions for helping firms comply with the new regulations, either through the cloud or on an installed basis," says Baker. "Or if a company would rather avoid the integration costs altogether or keep its staff from getting involved, it may elect to completely outsource the responsibilities – which is where a custodian can come in and take over on behalf of the client."

Northern Trust has witnessed an uptick in outsourced activity in recent years, particularly as the industry continues to evolve and regulation becomes more pervasive. "In general, larger firms have tended to stay on top of collateralisation and maintain streamlined processes," says Baker. "However, even these companies sometimes reach a tipping point where they've grown tired of ticking all these extra boxes and keeping staff tied up, and therefore eventually decide to outsource, or at least seek a more efficient platform."

Collateral call

The goal of any operation should be to ensure that the front office is free to trade however it wants, concurs Ted Leveroni, chief commercial officer, GlobalCollateral. "Without the requisite level of collateral, trading may have to be altered and that is a situation that should be avoided," says Leveroni.

"The way to prevent that is to streamline operations to the point that you are able to mobilise enough collateral to support increased call volumes. You also have to ensure that you can source the collateral effectively and use it more efficiently. Having to tell a portfolio manager who has traded a large number of derivatives that there isn't sufficient liquidity to cover it will be viewed negatively. So not only is there an operational aspect to this, but a liquidity factor as well. And they go hand in hand."

In order to protect themselves in both respects, clients need to take a broader look at their total collateral obligations. "Because there is more collateral required now, which necessitates greater visibility into one's collateral pools, firms are looking to further automate and streamline their collateral processes," says Leveroni. "Collateral movement is part of a lifecycle that begins with the execution of a trade – therefore, timing issues upstream resulting from a lack of automation can dramatically impact the collateral process. Similarly, increased volumes, along with reduced settlement times, have put greater emphasis on automation downstream as well."

> **"The collateral and derivatives lifecycle has changed tremendously over the years and now spans many different entities"**
>
> **TED LEVERONI, GLOBALCOLLATERAL**

While both buy-side and sell-side firms have, in general, been diligent about preparing for this latest round of regulations, some came into it better equipped than others. "There are companies that already had some degree of automation in place which ostensibly makes the transition much smoother," says Leveroni.

"What's a little surprising is that there are some larger firms whose upstream processes and timings are posing a challenge to their compliance effort. While previously the timing and automation of those didn't matter as much – they now find themselves having to play catchup while other firms with much less complex operations are ready to go."

Leveroni has also seen an enormous amount of collaboration among industry associations on both sides of the Atlantic, from the Securities Industry and Financial Markets Association (SIFMA) in the US to the European Securities and Markets Authority (ESMA). "Particularly over the past six months these groups have worked tirelessly to define what needs to be accomplished in order to bring the industry up to speed," observes Leveroni.

From a product standpoint, not only have traditional vendors upped their game, but there's also been significant cooperation between utilities, quasi-utilities as well as community-based solutions that didn't previously exist to manage collateral.

"Not only is it out of necessity, but there's also an understanding that the collateral and derivatives lifecycle has changed tremendously over the years and now spans many different entities, each with their own set of linkages and standards covering custodian banks, clearing banks, CCPs and other counterparties. Firms leveraging community-based standards and solutions are better equipped to accurately track and process collateral efficiently."

Taking the long view

For companies chagrined by the arrival of yet another major regulatory hurdle, taking the long view may be helpful, asserts Jon Anderson, global head of middle office outsourcing for SS&C GlobeOp. "While it may seem like an unreasonable amount of regulation coming from many different directions all at once, the reality is that this conversation began back in 2008 with the realisation that further transparency into the derivatives market was needed in order to avoid another financial crisis," says Anderson. "So from that perspective, we really have moved in a very steady manner."

There is the premise that if you know your trade, you also need to know the extent of your exposures, whether it be buy-side to sell-side, one sell-side firm to another, in order to help quantify systemic risk within the system, says Anderson.

"So while there has been some frustration resulting from the extra time and effort around the new margining rules, as a company we are able to help firms reduce their workload using tools that can facilitate management oversight, thereby allowing companies to know where their exposures are and whether the data they're reporting is accurate."

Eternal vigilance

The increasing volumes being attracted to CCPs mean that they have become systemically important institutions. Efforts are now focused on ensuring they do not become the next point of failure for the financial system. *Andrew Neil* investigates

Replacing a "complex, opaque and fragile web of ties" between banks with "simple, transparent and robust" links between a resilient CCP and its member banks was how FSB chairman Mark Carney recently described the move away from bilateral towards central clearing, a key element in global regulators' agenda for reforming OTC derivatives markets to reduce systemic risks.

Since 2009, when G20 leaders agreed that all standardised derivatives contracts should be funnelled through CCPs, central clearing has rapidly evolved. So much so that by 2014 more than half of the notional amount outstanding of derivatives transactions was centrally cleared, Bank of International Settlements (BIS) statistics show, almost double the percentage of 2009.

Further clearing obligations in Europe are also set to boost the volumes of centrally cleared trades. A recent study by the FSB suggests there is ample room for the further expansion of central clearing, particularly for most of the basic interest rate contracts. Even larger increases could potentially take place for other contracts such as credit default swaps, for which the centrally cleared volume is relatively low globally at 34% at the end of December 2015.

Systemic risk

However, as the range of banks and other financial institutions that channel their transactions through CCPs continues to broaden, the growing interconnectedness is raising more and more questions as to whether CCPs themselves might spread losses in the case of default. They may simply alter where systemic risk is concentrated, rather than reduce it.

> **"The recovery and resolution of CCPs has become an important and complex debate, touching upon such tail situations that are difficult to anticipate and properly frame"**
> GASPARD BONIN, BNP PARIBAS

"By their nature, CCPs are deeply interconnected with large financial companies and potentially with other CCPs," says Hester Peirce, director of the Financial Markets Working Group, a diverse group of 17 economists focusing on the causes of financial crises and their potential solutions.

"CCPs have direct relationships with clearing members and settlement banks, which tend to be large firms, and indirect relationships with clearing members' customers, which may also be large firms," says Peirce, who has worked on financial regulatory reform since the crisis and has been involved in the oversight of Dodd-Frank Act implementation. "The intricacy of these relationships makes it difficult for market participants and regulators to get a good understanding of the risks associated with CCPs."

Piece cited the University of Houston's Craig Pirrong in a 2016 research journal: he said clearing has turned out to be the "mother of all interconnections" due to every big financial institution being linked to all big CCPs, and because "pretty much everyone has to funnel the bulk of their derivatives trades through clearinghouses".

The authorities, trade bodies such as ISDA and the CCPs themselves are fully engaged; they are well aware of the issues and are continuing with international workstreams related to CCP resilience, recovery and resolution. In April 2015 a workplan was agreed by the chairs of the BCBS, CPMI, FSB Resolution Steering Group and IOSCO. Two reports

have been published so far, setting out the progress made in implementing the workplan and the timelines for what can be expected in 2017, which includes the development of more granular guidance for a CCP rescue scenario and analysis of central clearing interdependencies.

"The resilience of CCPs is back on the agenda," says Philip Whitehurst, head of service development for SwapClear, LCH's interest rate swap clearing platform. "However, there are perhaps some misplaced concerns as I would argue that a cleared environment is a much safer place than a bilateral world. That said, LCH fully supports efforts to strengthen the resilience of CCPs."

Skin in the game

An LCH research paper published last year concluded that initial margin must remain the first and most important defence and must be sized, along with default funds, to ensure that sufficient resources are available to manage the risk of a member default.

"We're firm advocates of the defaulter-pays model," adds Whitehurst. "Our default waterfall is also set up so that if default losses are not fully absorbed by the defaulter's own resources, the CCP's capital takes the first hit before any losses are borne by non-defaulting members."

Mariam Rafi, managing director, Americas, head of OTC derivatives clearing at Citi, agrees that a defaulter-pays model is the appropriate away to manage risk in CCPs. "By that we mean the clearinghouse should cover risk via initial margin, as opposed to guaranteed fund amounts that are socialised [covered by members]," she says.

"By their nature, CCPs are deeply interconnected with large financial companies and potentially with other CCPs"

HESTER PEIRCE, FINANCIAL MARKETS WORKING GROUP

"Generally speaking, margin levels have been calibrated to be very conservative and tend to be higher than what was historically collected in the bilateral space. The leverage in the system has gone down. There's a larger margin posted against transactions, making them safer."

However, Rafi suggests more consideration should be given to the "skin in the game" of CCPs. "I think that they need to be dynamic and risk-based," she adds. "A lot of clearinghouses have significant cleared activity but their own contributions remain fairly small and static. I don't think that is appropriate considering they are commercial entities and are responsible for overseeing the risk in their CCP. Incentives should be aligned to keep clearinghouses as conservative, and based on a defaulter-pays model, as possible."

Gaspard Bonin, deputy head of derivatives execution and clearing at BNP Paribas, says the work around CCPs, much like other areas of reform, is intricate and will be time consuming. "There's a general question mark across market, industry and regulators. How will the market work in the long term, i.e. how safe and sustainable is it with the new regulatory framework and how will it adapt? The recovery and resolution of CCPs has become an important and complex debate, touching upon such tail [risk] situations that are difficult to anticipate and properly frame."

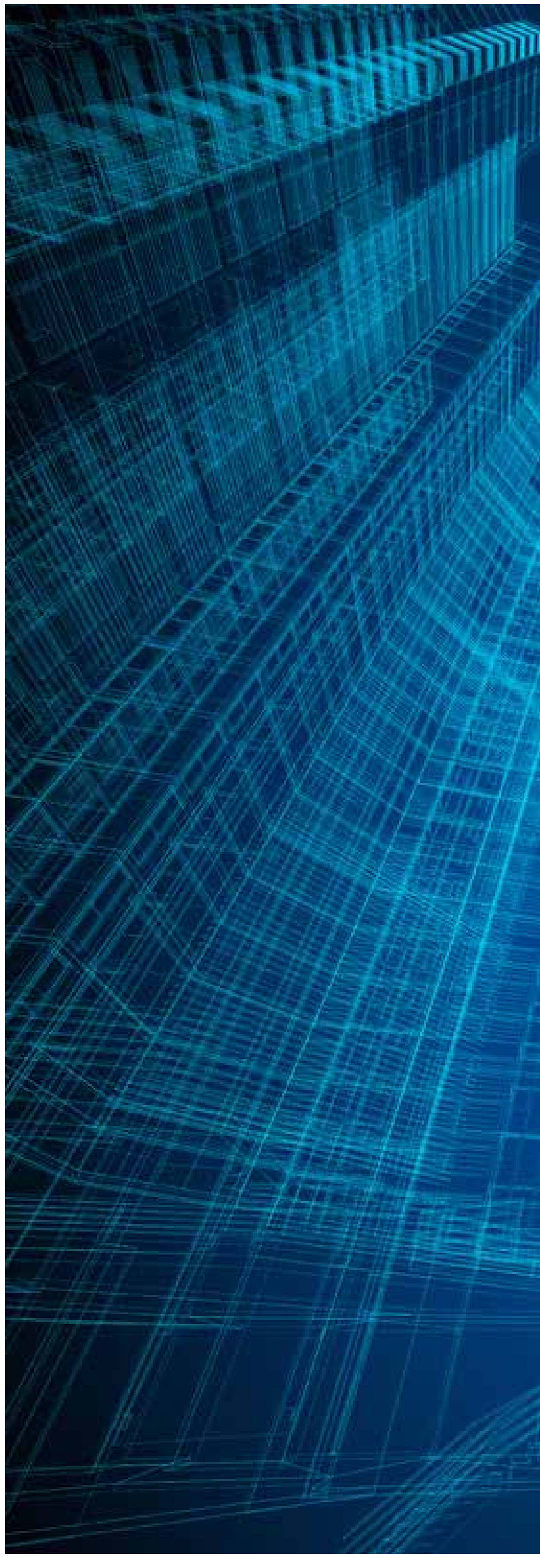
LCH's paper also acknowledges the significant work being done by banks to strengthen their own balance sheets, adding that CCP recovery and resolution cannot be considered in isolation from the recovery and resolution regimes that have already been introduced for clearing members.

"CCP resilience has benefited greatly from the general strengthening of banks' balance sheets and the introduction of bank recovery and resolution regimes," adds Whitehurst. "That said, there remains a pretty sharp incentive on us to make sure we have collected sufficient margin. If we haven't, we're next in line, and 25% of our capital goes into this skin in the game layer."

The latest progress report on CCP resilience from the FSB and other regulators, published in August, asserts that the CCPs have made "important and meaningful progress" in implementing arrangements consistent with the financial risk management and recovery standards of the Principles for Financial Market Infrastructure (PFMI) rules.

Some gaps and shortcomings have nevertheless been identified. In the area of recovery planning, in particular, a number of CCPs have not yet put in place the full set of recovery rules and procedures envisaged in the PFMI. In the areas of credit and liquidity risk management, others have yet to put in place sufficient policies and procedures to ensure that they maintain the required level of financial resources on an ongoing basis, including adequate arrangements to ensure a prompt return to the target level of coverage in the event of a breach. Moreover, some do not include sufficient liquidity specific scenarios in their liquidity stress tests. For such CCPs, the report concludes these are serious issues of concern that should be addressed with the highest priority.

Remodelled by regulation



Derivatives market participants are re-evaluating strategies and products as a result of increased costs, *Ceri Jones* finds, with many considering new and innovative approaches

The costs of derivative trading are set to rise sharply, forcing providers to reconsider their market positioning and users to find alternative ways of implementing their strategies.

The Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO) margin requirements for non-cleared OTC derivatives will be a major challenge for businesses. Any firm with non-cleared OTC derivatives will need to comply with new variation margin rules by March 2017 and those with over $8bn in non-cleared exposures must comply with initial margin requirements by 2020.

"A combination of zero thresholds, gross margining, reduced minimum transfer amounts and gross initial margin means an increase in the number of calls by up to five times today's levels," estimates Nick Nicholls, principal consultant at consulting group GFT. "This translates directly to an increase in operational costs – including settlement, transaction, corporate actions and fails costs. Initial margin, which needs to be segregated, will need to be covered with securities, rather than fungible cash, adding to the cost of borrowing or buying eligible high quality liquid assets.

"ISDA protocols for amendments to existing ISDA/CSAs try to limit the impact on repapering to accommodate the new rules," he adds. "However, this repapering is an additional burden to support functions within an organisation, where 1,000s of such agreements may exist."

The increase in margin call volumes could overwhelm current operational processes and system infrastructures, warns Michael Shipton, chief executive officer at GlobalCollateral, and will require huge investment in technology and an overhaul of the settlement, exceptions management and dispute resolution processes in place today.

Restraining growth

Deloitte estimated back in 2014 that €15.5bn ($17.5bn) could be added to costs in the OTC derivatives market in the EU once various reforms to margin and capital requirements are fully implemented. The jump in costs for non-centrally cleared transactions is expected to reach €13bn annually, compared with €2.5bn for those that fall under the clearing obligation.

Since Deloitte's report was published, the persistent low rate environment has exacerbated the impact of new regulations on derivative pricing, further damaging what has been major growth area for banks. Derivative revenues

have expanded at a compound annual rate of around 30% through the 2000s, according to a Berenberg analyst note in July 2016. Economic volatility even continued to boost demand for Delta 1 derivatives and synthetic finance during 2015, lifting derivatives' contribution to US banks' equity revenues to 16.3%, up 2% on 2014.

To date, the lack of return on cash

"As costs per transaction rise we may find a move away from hedging by smaller buy-side firms and pension funds, which may mean a higher proportion of risk maintained on their own balance sheets"
NICK NICHOLLS, GFT

collateral has not curtailed trading, but the Royal Bank of Scotland's announcement in August that it is passing on the cost of negative rates to around 70 large clients that use cash as collateral when trading derivatives processed through clearinghouses such as LCH Swapclear, is yet another sign of growing pressure.

"We expect a raft of new costs to emerge over the next five to ten years," says Andy Nybo, global head of research and consulting at TABB Group. "Due to the spectre of these increased costs, banks are picking and choosing sectors they want to trade in, with some leaving the market altogether since they have become much more expensive to trade.

"The regulatory framework, such as the pressure capital requirements have placed on banks, has forced them to re-evaluate what business the banks want to be in and it has also absolutely impacted their relationship with clients. Each bank is having to look at its sweet spot."

Standardised products

Banks have already been moving away from capital intensive non-cleared products and focussing more on standardised ones. More than half of all outstanding derivatives are now centrally cleared, almost twice the percentage of 2009, according to the UK Department for Business, Innovation and Skills (BIS).

Some banks may launch more capital efficient products, and some large dealer banks may take a defensive position to protect the cream of their client base and higher-margin services.

On the other side of the trade, many derivatives users are already becoming more relaxed about buying less perfect hedges via standardised OTC derivatives in place of bespoke non-cleared arrangements. There is a wide choice of instruments for funds; they can short stock, buy on margin, use an OTC instrument, use a listed option on an equity, or a future on an equity index.

"At the end of the day, investors and other end-users will use an instrument providing the lowest cost for the exposure that meet the demands of their strategy," explains Nybor. "They may use ETFs, futures or other listed products to effect exposure requirements and avoid the increased costs of using swaps. Some end users may choose to make a customised bilateral agreement with a broker-dealer to use the most cost-efficient solution in each case.

"Changes in behaviour are more related to how end-users trade, risk factors and existing trade processes. Often, however, when they need to exit the trade liquidity will be their biggest concern."

"We would highlight the fact that reduced liquidity has led some asset classes such as credit to become buy-and-hold investments, with portfolio managers having to use new issuance rather than the secondary markets to turn over their portfolios," says Colin Graham, chief investment officer, multi-asset solutions, BNP Paribas Investment Partners. With volatility expected to be higher on average over the next few years, he anticipates more price shocks as the ability of producers to warehouse risk during periods of market stress is reduced.

"Due to the spectre of increased costs banks are picking and choosing sectors they want to trade in, with some leaving the market altogether"
ANDY NYBO, TABB GROUP

Competition from ETFs

ETF providers see the cost increases and strained liquidity of derivatives as opportunities to grow their market, particularly as futures investors have faced a significant increase in roll costs.

Vincent Denoiseaux, head of passive quant strategy at Deutsche Asset Management, says that clients across the range of funds of funds, hedge funds and more recently pension funds and insurance companies are using ETFs to replace core futures exposures on large equity indices such as the Eurostoxx and S&P 500.

"While the cost of providing a future or a swap has increased for investment banks because they need to reflect the increased cost of capital use on their balance sheets, ETFs over the same period have become cheaper. Management fees and bid/offer spreads have both compressed quite massively."

When an investor is looking for exposure for the medium term, perhaps from three months and above, ETFs become more efficient and cheaper, according to Denoiseaux.

"According to our calculations, over the last five years an ETF on the EuroSTOXX or DAX would have been cheaper by 30-50bps per year than buying an equivalent fully-funded future or swap. In the context of an active manager this may look like a small amount, but in the index replication landscape it translates into a much bigger figure.

"Some futures investors have used liquid futures, say DAX, EuroSTOXX and SPX, to replicate MSCI World, owing to the lack of liquidity of its futures. Some are now using MSCI World ETFs to gain exposure to this index, while country ETFs enable investors to take a more specific exposure, such as MSCI World ex a particular country," Denoiseux explains.

GFT's Nicholls adds that demand for OTC derivatives has seen quite a steady decline in the move towards clearing. "It's not certain that clearing brings the best price. Transacting through central clearing may not be cheaper than non-cleared derivatives, when all costs are taken into account, even after the onset of IOSCO/BCBS261, as a recent study by the Office of Financial Research showed."

"As costs per transaction rise we may find a move away from hedging by smaller buy-side firms and pension funds, which may mean a higher proportion of risk maintained on their own balance sheets, which in turn has potentially serious repercussions for local economies."

With increasingly tough capital constraints against trading book exposures, and the cost of collateral increasing with demand, whether cleared or non-cleared the cost of each derivative transaction is likely to increase further. These costs will need to be priced in.

Operational costs need to be controlled and the best way to do this is through the industrialisation of process, according to Nicholls. "Buy-side firms unable to assist their sell-side counterparties in becoming willing automated counterparties will find these costs also priced in – eventually."

Containing costs

"There may well be a two-tier market for derivatives in the medium term, one where compliance through an automated route and sympathetic to sell-side banks costs see preferential rates, versus a manual settlement route with unfavourable terms for the banks' capital or liquidity receiving a worse rate. Those firms are likely to be smaller or less able to meet technical requirements to ensure best price."

New collateral optimisation solutions should help mitigate additional costs, such as GlobalCollateral, a joint venture between DTCC and Euroclear. "Regulation will mean that market participants must adopt a best practice approach to collateral management that will deliver wider benefits," says Ted Leveroni, GlobalCollateral's chief commercial officer.

"For example, for the sell-side, greater efficiency of collateral processes means banks can make their liquidity work harder by maximising their balance sheet and optimising their use of collateral. For the buy side, an efficient collateral process will ensure that the front office is not held back by inefficient processes managed by the middle office and risks of running out of collateral. Improved collateral processes also provide increased transparency for the buy side, giving firms greater risk management capabilities and control."

Responding to the regulatory rollout

Global Investor/ISF hosted a roundtable in London to examine the current state of the OTC derivatives market and how firms are adapting to a complex regulatory environment

PARTICIPANTS

Chair: Pádraig Floyd, *Global Investor/ISF*
David Beatrix, business development – market and financing services, BNP Paribas Securities Services.
Tim Harris, head of alternatives & derivatives operations, Hermes Investment Management
Erik Vynckier, board member, Foresters Friendly Society
Clément Phelipeau, business development, derivatives middle office & collateral management solutions, Societe Generale Securities Services

For what purposes are clients using OTC derivatives? What is persuading them to choose alternative instruments in other areas?

David Beatrix: If we consider FX forwards as a derivative – which is the case if we read MiFID – they are used by nearly all financial and non-financial institutions. OTC derivatives can be used by firms for hedging purposes, but also to execute specific portfolio strategies, or build specific investment vehicles that could not be achieved through the use of typical instruments such as bonds, equities, etc. In many circumstances, firms looking for a particular profile of payoff will use derivatives, as the bespoke and customised nature of these instruments imply a greater flexibility than through listed instruments.

Tim Harris: We are seeing very little change in how our clients use derivatives or the restrictions being applied within segregated mandates. We are predominately managing category three accounts or pension funds utilising the pension exemption and the requirement to change is minimal.

Erik Vynckier: OTC derivatives have a true home in asset-liability management. We are looking for matching hedges with a precise definition so as to minimise basis risk and capital requirements. Additionally, we are looking to trade long-term solutions in size in one trade – inflation, interest rates, cross-currency swaps and equity derivatives. By comparison, futures are standardised market-direction instruments that carry significant basis risks in asset-liability management and need to be rolled on a monthly or quarterly basis. That is not an attractive prospect in comparison to a 30-year swap.

For asset-liability management, OTC is still the way to go. If anything, the question is between OTC and funded instruments – such as long loans or long-term bonds – rather than between OTC and futures.

Clément Phelipeau: The notional amount of outstanding contracts, which fell by 11% according to the BIS report, is mainly explained by trade compression, which allows financial institutions to reduce the size of OTC derivatives notional exposures and the number of line items in a portfolio, minimising their capital requirements, leverage ratio reduction, and removing the periodic payments to be calculated and settled. It will also be very useful for the buy side once market infrastructures provide such services.

What has been the effect of the regulatory changes on this market and those operating within it?

Phelipeau: Regulatory changes bring standardisation into the OTC derivatives market especially with clearing that should lead to a harmonisation of market prices, further reinforced by the application of MiFID II. OTC derivatives clearing is also an opportunity for the sell side to significantly decrease capital requirements compared to non-cleared OTC derivatives transactions without CSA, i.e. not collateralised either way. We see a lot of clients that are willing to start clearing CDS as soon as possible to benefit from substantial savings on execution prices.

Beatrix: Both buy and sell-side participants are concerned about the costs implied by those regulatory changes. OTC derivatives will receive a direct impact from EMIR and similar local regulations throughout the world – clearing mandate, bilateral margin rules, etc. – but also a strong Basel III effect – increased capital requirements for counterparty risk, leverage ratio and LCR.

Most of these regulations will impact the bank's return on equity (ROE) and affect the end-users' costs of trading. Some players may exit from certain services, such as OTC clearing. Buy-side firms such as asset management companies are crossing these rules with other regulations such as AIFMD, UCITS rules and other ESMA guidelines that have direct impacts on collateral and the options available to source it. These firms are trying to find the best solutions to navigate in this complex environment.

"As more flows go through CCPs, they should increasingly propose netting and compression services to their clients"
CLÉMENT PHELIPEAU, SOCIETE GENERALE SECURITIES SERVICES

Harris: The changes, while vast, have been relatively easy to adopt. Many of the regulatory requirements were already being accomplished and just needed to be adapted. There is an obvious increase in the transaction reporting that now takes place and this has evolved with our organisation moving to dedicated regulatory reporting teams.

Vynckier: EMIR provisions for clearing are coming on-stream for level two institutions currently. But Basel III and CRD IV will also impact OTC derivatives.

What are the instruments and which institutions are covered? And, how do we identify who has an exemption and who applies it?

Beatrix: The clearing obligation in the EU has been set for interest rate swaps (IRS) and credit default swaps (CDS) and will soon affect most of EU-based financial institutions qualified under EMIR as financial counterparties. Non-financial counterparties using derivatives for hedging purposes are not in the scope of the clearing obligation. Among the financial counterparties, there is a temporary exemption that has been given to pension schemes, until 2018 at the latest.

Harris: Instruments are IRS – basis, fixed to-float, FRAs & overnight index swaps – and credit - index CDS – and coverage is pretty much everyone on a phased approach. The key for us was working with all existing and new clients closely to ensure each party's classifications and roles and responsibilities are defined and documented appropriately. The monitoring of categories and classifications is an ongoing exercise carried out intermittently throughout the year.

Vynckier: Not to be cleared are inflation swaps and OTC options – swaptions [options on swaps] and OTC equity options – with technical reasons being quoted for this treatment. For instance, the need to agree on volatility surfaces – proprietary since dependent on broker trading exposures, essentially how their books are axed – for determining a valuation to clear against.

Exchange-traded futures have always been cleared, i.e. settled and reset daily. Since futures are overwhelmingly short term speculative or hedging instruments permitting relatively coarse bets on market direction, this has not bothered the market and has historically limited the amount of speculative leverage taken on by institutions. Overextended institutions tended to be caught fairly quickly because of the daily reality check to be provided in cash. But the OTC market has been structured, and developed and utilised, quite differently from the futures market – by different institutions and for different purposes.

To what extent is the current OTC market structure no longer fit for purpose? Can it hold its ground in the face of cheaper alternatives, such as futures and exchange traded funds (ETFs)?

Beatrix: The OTC market structure still responds to specific requirements to execute specific hedging or portfolio management strategies that cannot be replicated on the physical markets, due to the absence of the payoff profiles or the lower liquidity that exists on some segments of the physical markets. Moreover, OTC derivatives are also useful to execute some strategies on some foreign markets, for which physical access could be difficult. How the different players will adapt to the regulation and cost increases is still an open question.

Phelipeau: Hybrid products such as deliverable swap futures have appeared on the market, offering interest rate swap exposure with the margin efficiency i.e. futures-style margining with risk offsets, approximately 50% lower than cleared interest rate swaps, and the simplicity of a standardised futures contract and the automatic netting of positions. They blend the advantage of trading both futures and OTC derivative instruments in a single package. Those products are not broadly traded yet, but the market structure could hold its grounds by continuously innovating sophisticated OTC products that could not be imitated in a cleared environment.

Vynckier: There is to some extent a return to funded investing by insurers and pension funds purchasing long term loans such as fixed-rate infrastructure loans and fixed-rate mortgages to get equivalent fixed-rate, receiver, exposure. However, there is a shortage of paper for the insurance and pension fund industry in most currencies. Only the long-dated US dollar corporate debt market offers adequate credit spread and sufficient scale for the long maturities – these instruments then require cross-currency hedging or more complicated structuring with rolling forward forex hedges to cleanly finish the asset-liability management.

Harris: I firmly believe the OTC market remains fit for purpose and, while there will be evolution in the way we transact, I see these instruments being a key part of our portfolio management. I believe listed products will provide alternatives and we will certainly use these as and when appropriate.

What will be the impact of clearing and the potential for competition between different clearinghouses?

Harris: Clearing is a bit of double-edged sword, it brings with it definite efficiencies from an operational and risk point of view. However, it does come at a cost. To get the most from clearing we would need to reverse-engineer typical operational processes to bring them closer to the point of best execution and cash management. One size does not fit all accounts, so I fully expect us to have a wider range of operating models.

Vynckier: One would hope for competition to be effective in cutting costs as well as increasing innovation and service quality but there is the opposing trend to try to increase the effectiveness of netting sets across the complete derivatives books supporting a business, optimising required initial margin (IM) and variation margin (VM), if one clearinghouse clears all OTC derivatives of a given type or even multiple types and asset classes. It remains to be seen how this will pan out.

Phelipeau: Clearing will reduce the cost of capital compared to non-cleared trades and most likely impact liquidity, as most vanilla OTC derivatives should be cleared by central counterparties. There could be significant price gaps on a given product whether it's cleared or not. As more flows go through CCPs, they should increasingly propose netting and compression services to their clients in order to reduce the leverage ratio and offset positions as much as possible. Competition over the range of currencies and products CCPs are able to handle is also very likely and, as this competition should also impact clearing fees, we may also witness alliances to cope with declining margins.

"The big question is whether the higher costs of the regulations will be prohibitive and possibly harm the global liquidity of the OTC derivatives markets"

DAVID BEATRIX, BNP PARIBAS SECURITIES SERVICES

What are the challenges for the buy side regarding collateral management?

Beatrix: The clearing obligation on interest rate derivatives – soon a reality for many buy-side players – will create a dual model, where cleared IRSs will be collateralised under an ISDA FIA with a clearing member, and the other instruments will still be collateralised through the legacy CSAs. When the rules on non-cleared derivatives come into force in 2017, there will be a need to revisit existing CSAs and possibly renegotiate part of these on a bilateral basis or through adherence to the ISDA VM protocol. The model will become more complex and put pressure on the players as the margin call settlement would need to occur on a same-day basis, while collateral in most of ISDA CSA settle on the next day.

Firms that decide to remain active in OTC derivatives will have no choice but to adapt their processes and systems – possibly a costly solution – or outsource the management of their collateral agreements to a servicer.

Phelipeau: For most buy-side firms, the major challenge will be implementing new collateralisation processes against central counterparties (CCPs) for the portion of centrally cleared OTC derivatives and against bilateral counterparties for the non-cleared portion of their derivatives book. This has to be done at an affordable cost, either internally or by outsourcing those functions to a collateral management provider. For some fully-invested funds, the challenge will be more complex, requiring more sophisticated collateral optimisation with embedded transformation features.

Accurately assess the funding cost of the collateral and potentially review the investment strategy accordingly. If for any reason no solution can be found, the last but least acceptable option would be to stop trading OTC derivatives, thus also impacting the investment strategy, which in any case will impact FO decisions.

Vynckier: The physical posting or receiving – operations management – can be outsourced. The biggest impact for the buy-side is on asset allocation. Buy-side firms need to hold sufficiently eligible collateral for initial margin (IM) and sufficient, defensive, cash positions for an unknown future requirements. Since cash yields nothing – or less – buy-side firms need to identify sources of cash for clearing from their existing asset allocation.

Harris: The biggest challenge is to be operating at an optimal level when you have both bilateral and cleared activity. We currently outsource collateral management to an appointed provider and are working closely with them on the development of the operating model. I believe some of the activities could move back in-house from an outsourced service provider.

What are the implications for non-centrally cleared margins obligations?

Phelipeau: For categories 1 & 2 in EMIR, 2017 will be the kick-off year for the collateralisation of non-centrally cleared derivatives for both IM and VM. Start dates are not completely fixed yet. Category 1 could start exchanging IM & VM in March 2017 or a little earlier, in January, for example. But VM will be mandatory for all categories in March 2017, meaning that even small buy-side firms will have to post VM with the related operational and financial issues.

There is a specific case for margins on FX forwards – IM doesn't apply and VM should only start in January 2018 for the non-exempted contracts.

"I firmly believe the OTC market remains fit for purpose and while there will be evolution in the way we transact, I see these instruments being a key part of our portfolio management"
TIM HARRIS,
HERMES INVESTMENT MANAGEMENT

Harris: Delays in this area are very frustrating. It becomes increasingly difficult to plan and budget for change when the goalposts keep moving. The principles are clear and manageable, however the devil is in the details of the EMSA text, especially around multi-manager agreements. Ultimately, we will see an increase in the use of cash/assets for trading non-cleared OTCs and the challenge is how to optimise how we trade and use the assets of the accounts.

Beatrix: The misalignment of the rules – in terms of date of entry into force – has created some concerns about the competitive advantage this would create for EU banks, which are not yet subject to the mandate of posting IM on non-cleared derivatives.

Vynckier: I see limited downside to any delay in non-centrally cleared margin posting. VM is already being posted and received between most buy-side firms and their brokers/investment banks.

If there were an immediate crisis involving some catastrophic bankruptcies of OTC counterparties, IM might help cover some losses. However, the overwhelming attitude at buy-side firms is that they would rather forego such IM posting as the potential occasional benefits in deeply distressed markets are not worth the encumbrance and the cost across the full cycle.

How does the industry address the IM challenge?

Beatrix: The industry – through the ISDA – has issued the Standard Initial Margin Model (SIMM) giving industry participants a common methodology framework with a view to, among other things, limit disputes and provide fast calculations. There is also a requirement to segregate those margins to prevent their reuse and many custodians have deployed specific services to allow this segregation mechanism.

Though these IMs directly affect the dealers, there is a side-effect for the whole industry – including the dealer's clients, as the non-reuse clause implies a direct funding cost incurred by the dealers, depending on the risk profile of the hedging portfolios with each counterparty. This cost – known as margin valuation adjustment, which also exists for cleared trades, is already – or will soon be – a component of the price of an OTC derivative transaction.

Vynckier: The IM is in fact the easier 'known' enemy. The big uncertainty for the buy-side is VM. This is essentially a stochastic exposure and few houses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have a good potential future exposure (RFE) tool for the full life, or run-off, of the derivative book and with open businesses more positions need to be traded continually.

For the sell-side, holding a balanced book and sitting in the middle, clearing amounts to transferring cash from one cleared account to the next, thus IM seems the largest issue. But for the buy-side the impact of market moves is material, as the buy-side by intent does not hold a balanced book but rather a market-directional book of derivatives.

We would like a better understanding of how clearinghouses value derivatives trades – discount curve, market data used, etc. – how they value collateral, and how they set margin requirements. Better disclosure and analytical clarity on the methodology and data should be encouraged.

Phelipeau: There are two ways of computing IM – either with the standardised IM schedule determined by BCBS-IOSCO or with an IM model – SIMM – compliant with the regulatory requirements. The SIMM is less margin-intensive than the standardised schedule.

Major EU and US banks have addressed the challenge with a market initiative called Blazer to create market standards around IM computation using a SIMM and how it will be exchanged. The current trend is that market participants will exchange IM through tri-party agents to address segregation, collateral velocity and asset protection.

Harris: We will address this in the same way we have for other regulatory requirements by learning from each other and working as groups. The buy side has built up very effective working groups to build out guidelines and opinions.

What will be the liquidity impact on derivative products from an increasingly fragmented market?

Beatrix: The market will be split between a significantly cleared, and sometimes

"Hopefully the OTC market will continue to be open to buy-side institutions, in particularly life insurance companies and pension funds"
ERIK VYNCKIER, FORESTERS FRIENDLY

electronically executed, market and a bilateral one. Although expensive and complex, bilateral has harmonised rules for all the other types of instruments that cannot be cleared or will be exempted from the clearing rule, such as physically-settled FX forwards and swaps. The bigger question is whether the higher costs of the regulations will be prohibitive and possibly harm the global liquidity of the OTC derivatives markets, or if the firms will adapt and remain active in this market given rules will tend to better harmonisation.

Harris: It is very difficult to tell how this will look in normal or stressed conditions. We have looked very closely at the liquidity exposure for our funds applying a variety of scenarios and feel comfortable in our approach.

Phelipeau: There may be a transitional period where fragmentation could appear given the range of currencies and products that are eligible to clearing and between jurisdictions – i.e. CCP risk models could diverge – but in the long term markets shouldn't be that fragmented because only exotic derivatives should remain in the bilateral world. All those eligible for clearing will go there.

Vynckier: Hopefully the OTC market will continue to be open to buy-side institutions, in particular life insurance companies and pension funds. The OTC market has permitted unique ways of implementing tightly-matching asset-liability management, where, unlike for speculative hedge funds, futures will simply not do the right job.

If this proves impossible because of cost or illiquidity triggered by market fragmentation, certain businesses – annuities, with-profits, pensions buy-outs, long-term care insurance – will have to be closed for new sales and put into run-off. A reduction of choice for the retail consumer and savings markets would be the outcome. Those least prepared to carry the risks of outliving their savings or requiring income support to deal with invalidity etc. would no longer be able to access the insurance market to purchase fitting cover at an affordable price.

How must the industry adapt to this rapidly changing market?

Vynckier: The first issue is the interaction of EMIR and Brexit. It is fairly likely the EU will repatriate clearing of euros and EU currencies to sites under direct regulatory control, i.e. eurozone or EU jurisdictions. The same debate might be replayed in other contexts – the ability of non-EU entities to offshore bilateral trading in euro in non-EU jurisdictions. The same could happen for non-US entities in the dollar. I suspect the regulators will heavily intervene to force such trading to jurisdictions in their full regulatory control.

Harris: I like to look at the positives and with the market changes comes new opportunities in how we become more operationally efficient and decrease our operating cost ratio. It is crucial to have the right service providers that can deliver solutions quickly and be effective in their business model as they will often be the first party we look to assist with change.

JSE not yet settled

The Johannesburg Stock Exchange's switch from T+5 to T+3 hasn't stemmed capital outflows yet, writes *Matt Smith*

South Africa's shorter settlement period for share trading has failed to stem the outflow of foreign money from the Johannesburg Stock Exchange (JSE) this year and further reforms are required to diversify the market, according the consensus view of fund managers.

In mid-July, the JSE – Africa's largest bourse – switched from T+5 to T+3 (trimming the total settlement period from six to four days). At the time, bourse officials said the move would attract more foreign investors, which currently account for about a third of trading, and reduce risk because there would be fewer outstanding trades and increased liquidity.

Average daily trading is worth about ZAR25bn ($1.8bn) so the move to T+3 will release ZAR50bn into circulation, Dr Leila Fourie, JSE executive director said in a statement. "We could potentially be looking at a 7-10% increase in liquidity, depending on current markets and other macroeconomic factors," she added.

Turnover has indeed increased. To 9 September, the JSE traded ZAR4.16trn ($290bn) of shares this year, bourse data shows. This is up 26% year-on-year, while volumes rose 17% over the same period to 55.8 billion shares.

Negligible effect

However, the shorter settlement period does not appear to be a factor. Up to 8 July, the last week before T+3 was introduced, the JSE's year-to-date turnover was up 32% versus the corresponding period of 2015.

Foreign investors have also been net sellers this year, to the tune of ZAR84.6bn. "Since moving to T+3 we haven't seen a noticeable shift in foreign ownership," says Grant Pitt, joint head of institutional client services at Allan Gray, which manages $35bn in client assets across Africa.

"Foreign ownership is more likely to be driven by changes in relative valuations and sentiment towards emerging markets, rather than due to a change in settlement days. I haven't seen any indication to suggest T+3 will make South Africa a more desirable destination for investment. Given time we might see an improvement in liquidity and a boost to trading and turnover levels, but there's no clear evidence of that yet," says Pitt.

"The trend globally is to reduce settlement cycles and South Africa was an outlier at T+5. While they have just reduced the cycle to T+3, the developed world is moving to T+2 so we could expect a further move in time," says Doug Blatch, global head of dealing, Investec Asset Management in Johannesburg. Aside from changing the settlement period, the JSE should also seek to broaden its equity listings, with the top five stocks accounting for about 40% of market capitalisation, while the top 40 stocks represent around 80%, Pitt estimates. "A larger local investment universe in South Africa would create more opportunities for investors," he says. "This is particularly relevant considering South African retirement funds are restricted in terms of how much they can invest outside of our borders."

The JSE a relatively concentrated market, more so than other bourses. "What would assist in increasing the investment opportunity set is having more secondary listings or GDRs [global depository receipts]," says Pitt.

The main all-share index gained 8.6% in the 12 months to 9 September, while over the past few years the index has been moving sideways from 46,000-55,000 points. However, that masks considerable intra-market volatility.

Market heavyweight Naspers is up about 45% in 12 months and trades at a price-to-earnings (PE) ratio of around 100, while brewer SABMiller has gained about 39% over the same period despite a post-Brexit sell off and has a PE of 35. Together, this pair account for about a quarter of the index weighting and have helped lift the combined PE to around 24, Pitt estimates, roughly double the historical average, which is a likely major factor in the foreign investor sell-off.

"There has been a lot of disparity in the market, which is great for us an investment manager," says Pitt, whose firm is overweight on the financial sector. On a four-year time span he tips some local banks to provide double-digit nominal annual returns, while inflation is around 6%. "For the broader market I would certainly be less confident."

Play it again

Casablanca is preparing to overhaul its underperforming stock exchange with the aim of revitalising its capital markets, writes *Paul Melly*

Under the umbrella of a wide-ranging new stock exchange law, Morocco is about to launch a comprehensive package of reforms designed to boost its sluggish capital markets, opening up new avenues for investment and rejuvenating the Casablanca bourse as a vehicle for financing an entrepreneurial private sector.

Despite its acknowledged success in creating an increasingly diverse economy with a growing high tech sector, the kingdom has lagged behind in the development of capital markets to match. "There is a shortage of investors, especially from outside the country, reflecting a lack of appetite for Moroccan assets and opportunities," says Stéphanie Mery, analyst for Moroccan banks at S&P Global Ratings. "Most of the indices categorise the country as a frontier rather than an emerging market."

A number of factors explain this reticence, including wider economic or financial challenges beyond the investment arena. For example, the exchange regime is not entirely open and flexible and the range of investment options has up to now been limited. "There is a lack of depth in the markets and 90% of funds' investments are concentrated in fixed income assets," notes Mery. "Only 8-9% is in equities."

Potential investors have also been discouraged by problems at two prominent companies, the Alliances real estate group and the refinery Samir. The latter had piled up more than MAD43bn ($4.4bn) in debts and its judicial liquidation was confirmed by the Casablanca commercial appeal court in June. Such episodes have shaken foreign investors' confidence in the Moroccan business environment and the manner in which it is overseen by the state.

However, Morocco also has considerable strengths. The royal investment vehicle SNI pursues a strategy aimed at promoting diversification. "SNI intends to gradually reduce its stake in big establishment entities, as demonstrated by the recent sale of its share in large food industry groups," Mery notes. "Instead, it is playing a strategic role by investing in key new sectors."

Moreover, the government is now pressing forward with reforms to stimulate a more dynamic investment culture. S&P's Mery points to the scope for development of conventional product lines such as exchange traded funds (ETFs), socially responsible funds and the major banks' so-called coordinated funds under the new reforms. The centrepiece of these is the new stock exchange law, approved unanimously by the upper house of parliament in August.

Refreshed framework

The Casablanca Stock Exchange index has lost more than 20% of its value over the past five years and the broad political support for the new law reflects recognition of the need for a refreshed regulatory framework that encourages the development of a wider range of funding options for business – and thus of attractive investment options for both local and foreign investors.

Potentially the reform could transform the bourse into a much more dynamic economic actor – a point made by financial commentator Afifa Dassouli, of La Nouvelle Tribune: "The financial market should at last play its lead role as a financier of the economy – whereas, up to now, it has mainly served as a means of establishing the worth of some companies."

Delegate budget minister Driss El-Idrissi underlined the significance of what is the first major overhaul of bourse legislation in two decades: "It aims to relaunch the stock exchange and reinforce the role of the capital market."

The law bolsters the independence of the regulator, the *Autorité Marocaine des Marchés de Capitaux* (AMMC) and the instruments it can use, and splits the bourse into a principal market and an alternative platform reserved for smaller businesses. It will provide frameworks for trading in collective vehicles, particularly ETFs and real estate funds. The new rules will also permit the listing of foreign companies.

The confidence of local personal investors should be reinforced by a tighter regulation of investment advisers, while the finance minister will chair a permanent capital markets commission to oversee the future development of the sector. Meanwhile, Morocco has also created a regime for offshore activity, the Casablanca Finance City, with its own regulator. If all goes to plan, it stands to win over once-sceptical investors.

Shared prosperity

The IFC's Tomasz Telma says private investors stand to benefit from participating in the ambitious infrastructure plans of Eastern Europe and Central Asia

Over the past several years, countries in Eastern Europe and Central Asia (ECA) have suffered from slow growth and faced political challenges. Yet, there remain opportunities for private investors in a host of sectors, from financial markets to agriculture and infrastructure development.

With continuing economic uncertainty, companies across the region need better access to finance. This growing demand opens new business opportunities for financial institutions and investors. We see investment opportunities in supporting regional and local banks, microfinance institutions, and leasing companies, with a focus on the least-served segments of society: small and medium-sized enterprises, women-owned businesses and farming.

As a member of the World Bank Group, IFC is committed to fighting poverty and boosting shared prosperity. We believe the best way to do that is by unleashing the creative forces of the private sector in these key industries.

Financial markets are critical. About 60% of IFC's long-term investments in ECA this fiscal year were directed to financial markets. In particular, we made a €150m ($168m) equity investment in Greece's four main banks to help steady the country's financial sector.

We invested $70m in two Armenian banks, helping to boost their capacity to lend to local enterprises. We provided financial resources to micro-lender Kreditimi Rural to expand access to finance to farmers in Kosovo. To help Romanian banks clear their portfolios of non-performing loans and resume lending, we provided $97m to debt collection and recovery company Kruk.

We also supported the first ever green bond issue in the region through Turkish bank TSKB, helping the lender attract institutional investors to finance a portfolio of green projects.

Climate-smart solutions

This brings us to another area were we see growing potential for private investments; a recent IFC study found that Eastern Europe, Central Asia, the Middle East, and North Africa could support up to $1trn of commercially-attractive climate-related investments by 2020.

Climate-smart opportunities exist in many sectors. One area especially primed for growth is renewable energy. Countries across the region set ambitious targets for wind, solar, and hydroelectric power generation and they will need private sector investment to get there. Investors can also find opportunities in eco-friendly construction and in helping cities prepare for changes in climate, as growing urban population creates a pressing need for basic infrastructure services such as water and sanitation. There are great opportunities in climate-smart financial solutions.

Not surprisingly, every third dollar of our programme last fiscal year in ECA went to climate-related projects. In particular, we invested over $230m in green buildings projects in Turkey, Bulgaria and Georgia, helping to reduce water, heat and energy consumption in commercial buildings. In Turkey, we significantly increased our presence with equity investments in the energy sector, especially in renewables. IFC became a shareholder in UNIT energy, invested $100m in Akfen Energy, and provided a $44m loan for the construction of the Karaca hydropower plant.

A particularly important theme for IFC was sustainable cities, as we focused on developing modern, energy-efficient urban infrastructure, including public transport, water treatment, and solid waste management, through state-of-the-art projects and public-private partnerships (PPPs).

The region is becoming home to a greater number of PPPs, with the IFC supporting development of several flagship PPPs through its advisory services, including the 66km Almaty ring road in Kazakhstan and the 280-megawatt Nenskra hydro power station in Georgia.

One of IFC's goals in Eastern Europe and Central Asia has been to protect the gains the region has made during the last decade and lay the foundation for continued economic growth. To do that, we have focused on supporting private sector projects in less developed countries through targeted investments in areas where IFC can have a catalytic effect, facilitate employment and economic growth, improve access to critical infrastructure, increase energy and resource efficiency, and expand access to finance for private companies. Overall, IFC's long-term commitments in fiscal year 2016 reached $2.8bn in support of 57 projects across Eastern Europe and Central Asia.

The future for Eastern Europe and Central Asia is bright. But in order for the region to live up to its potential, private sector investors must lead the way.

Tomasz Telma is director for Eastern Europe and Central Asia at the International Finance Corporation (IFC)

The frontier effect

Nigeria has been the only West African market to excite international investors, writes *Paul Melly*, but this may well change when the eight WAEMU countries become frontier markets

November will be a big month for the Bourse Régionale des Valeurs Mobilières (BRVM), the electronic stock market serving the Ivory Coast and the seven other members of the West African Economic and Monetary Union (WAEMU). The exchange will join the MSCI Frontier Markets Index, a key indicator of international credibility.

For the past two years, MSCI has been providing its data subscribers with a standalone index for the union, of which all members share the euro-pegged CFA franc. The inclusion of the BRVM in the MSCI index should help to convince foreign portfolio investors that the francophone African capital market is worth taking seriously.

This is a major breakthrough for the exchange created in 1998 to serve eight economies that were mostly too small to sustain national bourses of their own. There is now a solid economic rationale for adding the BRVM to global frontier market indices. At a time when growth has slowed in many developing countries the IMF predicts the Ivory Coast will notch up a real GDP rise of 8.5% this year, while overall growth for the WAEMU bloc is estimated to be 6.6%.

West Africa as a whole largely escaped the impact of the 2008-10 global financial crisis. It has even sustained growth, albeit at a slower pace, following the oil price slump that hit Nigeria (which is outside WAEMU). Last year the region's real GDP rose by 3.1%. Yet, up to now, local capital markets have not been a motor of economic activity.

Misfiring markets

"There is a lot of debate about the relationship between economic growth and capital market development. In Nigeria in particular the capital markets really look like they have some catching up to do," says Temi Popoola, chief executive of Renaissance Capital's operation in West Africa's largest market.

But the picture is complicated by the nature of West African growth, which does not always take forms that can be easily translated into portfolio investment and capital market development. "West Africa has seen massive investment in trade as well as a commodity boom. But how much of this feeds through to the real economy?" asks Popoola. "Growth is very sector-specific."

> "Companies will issue more and more new capital on the market, so I am confident"
> SEYDINA TANDIAN, WEST AFRICAN RATING AGENCY

Meanwhile, local private investors often prefer to diversify out of the region or even Africa altogether, he points out, while corporations actually tend to be net importers of capital.

Gregory Kronsten, head of economics at FBN Capital, the investment banking arm of FBN Holdings – one of Nigeria's largest banking groups – points out that the market capitalisation of the Lagos Stock Exchange is only about $30bn, compared with a total national GDP estimated at $410bn after the recent devaluation of the local currency, the naira. "If you want the stock exchange to drive the economy you [need to] be looking at a ratio of 50% of GDP."

The situation is only a little better in francophone West Africa, where the total capitalisation of the BRVM is equal to only 15% of the combined GDP of the WAEMU countries. However, the managing director of the bourse, Edoh Kossi Amenounve, believes that this can change. He says the BRVM is "the world's only example of a totally integrated stock market belonging to eight countries" and is well suited to today's environment. "Across Africa economic integration projects are underway. And, if I take the example of ECOWAS [the 15-country West African economic zone] there is already an entirely positive trend in terms of economic integration. It is entirely normal that financial integration should

accompany this trend."

Certainly the trend towards listing on the BRVM appears to be accelerating; Societé Ivoirienne des Banque led the way with an announcement in July, and other expected Ivorian debutants include Versus Bank, Nsia Banque, Orange CI and Sucrivoire.

WAEMU regulator CREPMF has approved an October market launch for Burkina Faso-based bank Coris, which wants to raise new equity capital rather than simply putting a slice of existing shares up for sale. While big banking and telecom stocks, such as Senegal's Sonatel, will always be predominant, the BRVM is creating separate market sections for SMEs and for mining.

Lagos lags behind

The Nigerian market also faces the challenge of broadening of the range of listed stocks. "The last major new entrant to the Lagos market was the oil company Seplat several years ago. Nigerian companies see no need to list or only float small slices of equity. For example, in the case of Dangote Cement a mere 5% was listed, well short of the theoretical norm," notes Kronsten.

Some big international names, such as GlaxoSmithKline, are actually buying back all or some of their locally listed stock, to keep more of their Nigerian profits for themselves. This further narrows the market.

But Kronsten points out that the government could exert pressure to get more companies to list – by making a stock market listing a precondition for bidders for oil acreage, internet bandwidth or – in future – buyers of the gas and onshore oil assets of NNPC.

Some companies are wary of the requirements for information disclosure that public listing requires. The Nigerian financial environment also poses serious competitive challenges, such as crowding out by government bonds. "Driven by the high levels of borrowing by the federal government, short-term interest rates are around 20%. So, to rival that attraction to investors, a potential investment in equity needs to offer a rate of return around 30%," explains Popoola. "Also, it's easier to lend to the government – it's a known level of risk – rather than doing all the work required to understand equities."

"At its high point the proportion of federal Nigerian government bonds that was foreign held was 15%. Now it's 1%"
GREGORY KRONSTEN, FBN CAPITAL

Moreover, Popoola notes, pension fund managers are under close supervision by regulators that monitor their performance very closely, even daily in some cases. This puts them under pressure to seek short-term returns.

Nigeria's regulated pension funds have NGN5.8trn ($19bn) under management. But they were badly burnt when the stock market entered a rough patch in 2007. "Today," says Kronsten, "the funds have only 9% of their managed assets in equities – compared with 59% in federal government treasury bonds and a further 10% in federal treasury bills and 8% in money market funds."

Moreover, he says, "federal bonds, with maturities ranging up to 20 years, offer the capacity of a planned return over the long term, which is of course a major attraction for the pension funds. Lagos state is also a well-regarded issuer."

But most bond investors are local. The slump in the oil price created a shortage of foreign exchange in Nigeria, hindering the transfer of payments overseas, and putting a damper on foreign appetite for Nigerian government paper. "At its high point the proportion of federal government bonds that was foreign held was 15%. Now it's 1%," says Kronsten.

He believes foreign confidence will eventually recover, following a recent devaluation that has eased the currency shortage. But the process will be slow; the naira has not yet settled at a genuine market value and forex is not yet freely available.

The WAEMU area is spared Nigeria's problems, because of its peg to the euro, and a regional bond market is developing. But the bloc has a reputation for sometimes over-bureaucratic regulation that imposes a significant cost burden on investors. Among international investors considering West Africa, it is Nigeria that remains the overwhelming draw, says Popoola.

"Investors in frontier markets worldwide generally stick to those that are included in the standard indices for this category, such as MSCI. The BRVM francophone West African exchange will be admitted to the index in November, but up to now the Lagos Stock Exchange has been the only West African market included, weighted at 8% of the index," he explains.

There is, says Popoola, a second group of people who seek to invest specifically in Africa, excluding South Africa. These investors will consider a small number of sub-Saharan markets, notably Nigeria and Kenya; around 95% of their exposure to West Africa will be Nigerian.

The chief executive of West African Rating Agency, Seydina Tandian, remains optimistic about the prospects for market growth. "States will do more and more issues in local currencies and companies will issue more and more new capital or sell more and more capital on the market. So I am very confident."

EMERGING MARKETS: APPOINTMENTS

The Abu Dhabi based financial services firm **ADS Securities** has announced two executive promotions at its corporate headquarters. **Ryan Lemand** has been appointed as their new head of asset management & wealth management, while **Marcelo Vasques** has been named head of global markets, Abu Dhabi.

Since 2015 Lemand has led the establishment of exclusive relationships with international funds and spearheaded the development of the firms' managed accounts platform in his role as head of managed solutions & business development, asset management. He began his career at Fortis Investments, working across London and Paris as a credit default swap trader.

Vasques, meanwhile, began his career as a Credit Analyst with Meryll Lynch before becoming a trader at Citibank and BankBoston, where he was a specialist in local market government treasury notes, bonds and export notes. Prior to this, he was executive director, trading & sales at ABN AMRO Bank, spending over 17 years working across Sao Paulo, New York, Amsterdam and London.

London Stock Exchange Group has appointed of **Waqas Samad** as chief executive of fixed income & multi-asset benchmarks for the group's information services division. In this newly created role, Samad will lead FTSE Russell's continued global growth into indexes measuring fixed income and other multi-asset classes, with responsibility for building a global team to support this growth. He will work with FTSE Russell clients and the firm's sales, service, product development and research areas to assess partner needs and develop new solutions to meet growing demand in the marketplace, grow the firm's client base and strengthen its product offering.

BNY Mellon, the global leader in investment management and investment services, has appointed **David Cruikshank** as chairman of its Asia Pacific region. Cruikshank succeeds Stephen Lackey, who has been Asia-Pacific chairman since 2011 and will take on the vice chairmanship of the company's Pennsylvania region in addition to a new strategic client management role within the Global Client Management group. Cruikshank joined BNY Mellon in 2003 and leads the corporates and public finance market segment team within global client management, one of the four key segments served by the company. Prior to this role, he served as chief executive officer of treasury services at BNY Mellon, setting the strategic direction and leading business execution for the company's global payments, trade finance and cash management business.

Custom House Global Fund Services has expanded operations in China with a new office in Shanghai and hired **Sunny Huang** as a relationship manager. This is Custom House's second office in mainland China. According to the hedge fund administrator, the move comes as a response to increasing investor appetite to access global markets through regional financial centres. Huang will be responsible for developing new business and for collaboration with new clients. Previously, she was a client advisor assistant at UBS in Hong Kong, where she managed onboarding of clients and updates to portfolios. In her new role, she will report to Allen Li, director of the Hong Kong office.

Unigestion has appointed **Edouard Merette** as non-executive chairman of the Unigestion Asia board. With more than 25 years of corporate management experience, Singapore-based Merette will work with Unigestion's senior management team to lead the firm's growth strategy in Asia. He joins from Caisse de Depot et Placement du Quebec, one of Canada's largest fund managers, where he worked as managing director for the Asia Pacific region.

Lombard Risk Management has appointed **Tracey Adams** to head the development and implementation of the firm's COLLINE platform in the APAC region in a newly created role. Adams joins role from FIS where she worked as a senior sales and account executive for collateral and securities finance, working closely with the FIS Collateral Management team to direct their EMEA sales strategy. The web based COLLINE system is a collateral and inventory management, clearing and optimization solution which allows clients to consolidate their collateral management onto a single platform by supporting multiple asset types.

Standard Bank's **Juanita Taylor** is the new chair of South Africa's securities lending body **SASLA**. The appointment follows the departure of James Burgess from Macquarie Securities earlier this month. Burgess had taken on SASLA chairman duties in March but has relinquished his role as part of the move away from Macquarie. Johannesburg-based Taylor is head of securities lending at Standard Bank, a position she has held since 2013.

Matthew Milne, vice president of prime finance at Deutsche Bank in South Africa, is moving to **ABSA Capital**. Milne, who currently heads up Deutsche Bank's equity finance team in Johannesburg, is expected to join ABSA in December as a senior equity financing trader. He joined Deutsche in 2010 and has since built up the firm's hedge fund client base and expanded the securities lending, balance sheet optimisation and financing solutions.