SECURITIESLENDINGTIMES

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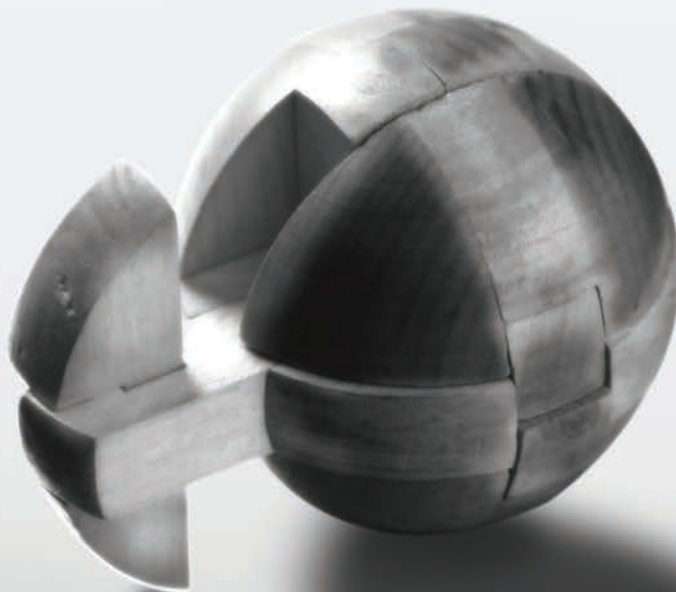

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Thirty years of support

The Risk Management Association (RMA) Conference on Securities Lending is an annual event in the US that few can afford to miss. Its mix of engaging content and rounds of golf makes for a relaxing but taxing five days, in which attendees soak up both the Florida sun and a wealth of information and opinion on securities lending.

The fact that a niche area such as securities lending has a dedicated conference celebrating its 30th birthday is a testament to the industry's relevance, importance and longevity. From the days when deals were done on a handshake, to the more recent past, when they were indemnified commensurately with the economic risk involved, to today's need for indemnifications to carry more capital under the likes of Basel III—the industry has evolved in a backdrop of booms and busts and regulatory handholding, but many will and do argue that it is more robust than ever, despite looking markedly different.

Christopher Kunkle, the RMA's director for securities lending and market risk, who started out in the business in 1993, best describes the journey that securities lending has taken in recent times: "We've gone from a volume proposition to a more intrinsic value play."

The days when securities lending was a volume business are gone, but the new normal is not necessarily a bad thing. Intrinsic value lending means securities have to be priced better in a market that was one and a half the times the size it was only five years ago. Industry players have to pay more attention to their services than ever, and many will converge on Boca Raton for the 30th edition of the RMA conference to show how they are faring and what they can do for their current and prospective customers.

Three decades since its inception, the RMA conference is the place to discuss the industry's challenges, celebrate its successes, and look forward to the future. Will we be here in another 30 years? That remains to be seen, but there is certainly one place where you'll be able to find out. See you in Boca Raton.

On Twitter? Tweet your thoughts and opinions during the conference using the hashtag '#RMASL30'.

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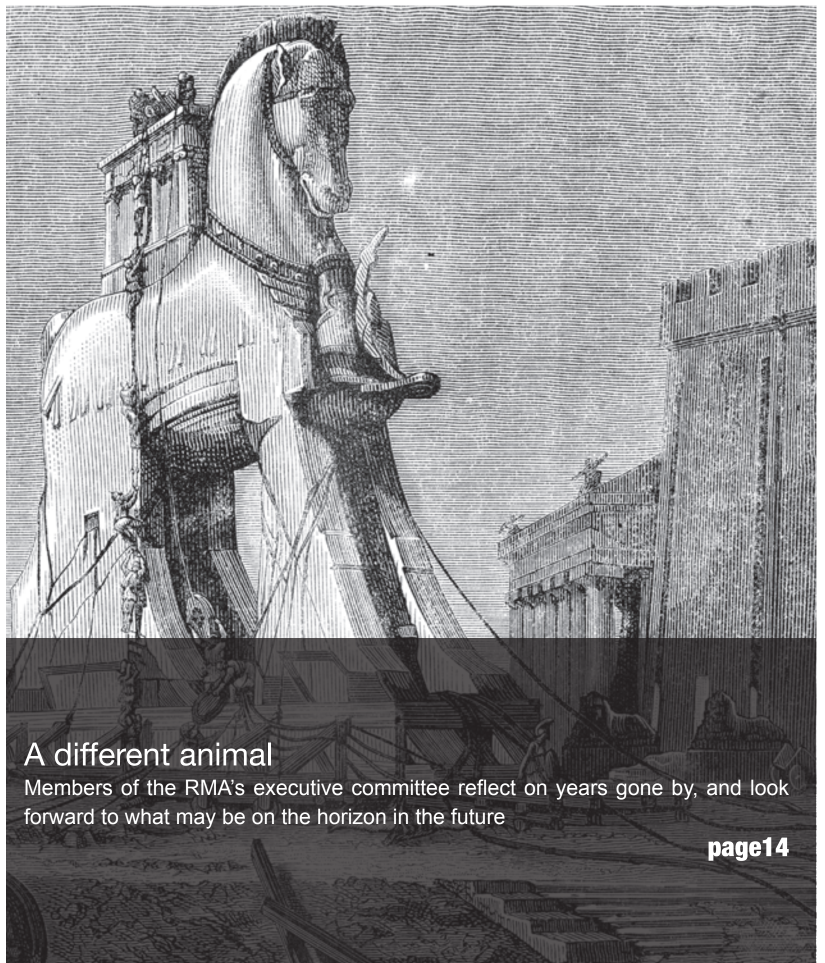

A different animal

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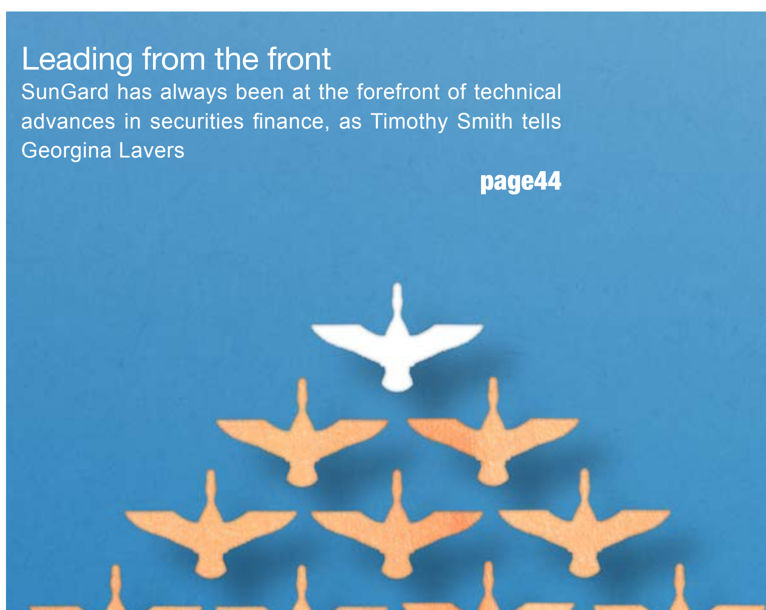

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The big 3-0

The 30th RMA Conference on Securities Lending leads Christopher Kunkle and Mark Dugdale to look at what was, is and may well be in store for the business

When did you begin working with the RMA, and since then, how has securities lending held up during various crises?

My first dealings with the Risk Management Association (RMA) were in 1994. The RMA chair at that time hired me for the management team at Bankers Trust in 1993 and I later joined the RMA legal tax and regulatory sub-committee.

During my time in the industry and at the RMA, I've noticed, in very simple terms, that there's always a good thing and a bad thing, and the latter does not necessarily have to be 'bad', but you have to keep an eye on it. It's all very cyclical—the markets have ups and they have downs. In the 1990s, there was a reinvestment crisis, as some banks hadn't invested as prudently as they thought. When 1 January 2000 arrived, everything worked smoothly, despite there being some very worried people out there. Three years later, there was an empty voting story, but that turned out to be false. Then 2007 saw the liquidity crisis hit, because of a major default and bank policy at the time. While it affected securities lending, all 2(a)-7 investments felt the effects. We managed our business in a fiduciary manner, so we rode the waves.

We have our hiccups periodically, but we have our great times too. The whole idea is to minimise the effect of a hiccup. Indemnification works for securities lending, and so do default mechanisms.

What was everyone feeling like at the RMA Conference on Securities Lending following the default of Lehman Brothers?

Well, we were all in a situation where a major primary dealer failed just a few months after a major primary dealer was saved. That was Bear Sterns, which was then purchased by J.P. Morgan. Nobody was really expecting Lehman Brothers to fail. But then everyone saw the announcement on Sunday, that the bank had indeed failed, and we all spent the rest of our Sundays in our respective offices.

The subsequent RMA Conference on Securities Lending, when we were in San Antonio, Texas, was very reactive. We were walking through how it all happened, while running our desks back home, making sure everything was okay. Also, about a third of attendees didn't show up to the conference. It was fairly Spartan given that it was the 25th anniversary. We wanted to focus on more creative topics, but we had to check that all of our clients were okay.

We were all thinking about liquidity and borrower default, and what needs to be done to prevent Lehmans from ever happening again. In our discussions, we had to move a little bit and change the views on reinvestment, because Lehman Brothers paper and structured investment vehicles were in classic money market investments, including short-term durations such as money market funds that you or I invest in. It was very concerning, so everyone was talking on those points.

Then we just wanted to show the industry and the clients that the default mechanisms and indemnification worked following the crisis. When Lehman Brothers went down, the automatic recall notices went out the next day, because in the event of a default, agreements stipulate that securities must be returned. Most US agent lenders received all of their fixed income securities, particularly government bonds, within a day or two. Within three to five days, they had their equities back, for the most part. There were a couple of shops that didn't, but we didn't want to punish anyone in case there was knock-on effect to Lehman Brothers, because of liquidity. There was a judgement call there—if it didn't come back after a day, we would wait another.

Has indemnification always been a mainstay of securities lending deals?

When I came into the business in 1993, about 80 to 85 percent of the business was indemnified. Indemnification is a bank just willing to protect a beneficial owner's securities if a borrower defaults. If a pension fund lends IBM to a broker-dealer such as Merrill Lynch, and it defaults, but the securities are returned on a timely basis, and the deal was indemnified, there is really nothing else to do. The securities were returned, so there was no fail and everything worked smoothly. If the situation had called for liquidation of collateral to buy those securities back, then the indemnification was there.

Clients such as mutual funds and pension plans like, and almost always request, indemnification. Mutual funds have a board of trustees that could be anyone, either less or more sophisticated investors, and they have a tendency to look for the safest or easiest common denominator to protect the fund, which, if they're going to participate in securities lending (and more than half of mutual funds do), is indemnification.

Is indemnification facing any threats?

There's going to be pressure down the road. The way Basel III's going, with large exposures and reading some other things, there could be high or restrictive cost to indemnification in the future, but we'll see how that plays out with comment letters and conversations with regulators and capital experts. It doesn't really make sense for an indemnity that subrogates its rights to the collateral be hit with an overzealous capital charge, but crazier things have happened.

> "Interest rates dropped drastically and we marched towards a zero interest rate environment. This helps the common American and anyone who has to get a loan and pay a credit card, but it doesn't, and didn't, help securities lending"
>
> *Christopher Kunkle, director, securities lending and market risk, RMA*

How does the securities lending industry look now compared to the recent past?

In 2006, the industry was at its largest in terms of outstanding volume. There was a large portion of easy stock out as well as a lot of hard to borrow out too. It was a volume lending business, with a lot of general collateral out, and the thinly traded equities were out. The market was one and a half times the size it is now.

Then the liquidity crisis hit and volume dropped because first of all general collateral started coming off the books. Interest rates dropped drastically and we marched towards a zero interest rate environment, which helps the common American and anyone who has to get a loan, or pay a credit card, but it doesn't, and didn't, help securities lending. So the market was in a zero interest rate environment. Usually, general was a 7 to 15 basis point (bps) market. With interest rates being at zero, that dropped to less than 5 bps. Are you going to put a trade out for 4 bps? Probably not. Even if you put billions out, it's not that exciting to a bank, or broker-dealers because they're getting hit on capital.

We've gone from a volume proposition to a more intrinsic value play. You make your money on intrinsic value, ie, the demand for a security, and then what you can make on the reinvest, and you don't want to take too much risk on the reinvest—you want overnight, repo, and you want the money market level. Because you're not looking to make much money on the reinvest, you just have to price the value of the intrinsic security better. **SLT**

Securities lending at a crossroads

As practitioners look to the 30th edition of RMA's Conference on Securities Lending, the industry faces one of its most challenging environments ever

RMA Journal, September 2013, Frank Devlin, writer and contributing editor, RMA Journal

Each fall for the past three decades, practitioners of the specialised field of securities lending have gathered to network and become educated in the latest opportunities and trends. Working as they do at an endeavour that can be arcane to the general public, the RMA Conference on Securities Lending has been a welcome chance to converse with like-minded professionals on the issues of the day. Between seminars and speeches by keynoters who have ranged from money maven John Bogle to "Money Honey" Maria Bartiromo, the group has discussed solutions to the big issues and taken stock of the big crises.

Topics have included the fallout from the 1982 collapse of US treasury note short seller Drysdale Securities, the needed switch from next-day to same-day settlement of funds, and the effort to have traders know exactly who they were trading with—rather than just who the broker was. Christopher Kunkle, the RMA's director of securities lending and market risk, was at the 2008 conference, which was held during the depths of the financial crisis. A senior securities lending executive at the time, he remembers "a pallor" and a feeling of "what just happened?" More importantly, he remembers lenders coming together and discussing solutions around liquidity and reinvestment.

But as difficult as the financial crisis was for the industry—activity is down by nearly half from pre-crisis levels of over $3 trillion in securities on loan at any given time—the upcoming 30th edition of the conference comes as the industry faces perhaps its most difficult era ever.

Reforms being proposed for the financial industry as a whole could take a particularly heavy toll on securities lending, which relies on the thinnest of margins—basis-point spreads can be as low as the single digits—for its survival. In rules and regulations spanning the Dodd-Frank Act, Basel III and various regulating bodies in the US and internationally, the industry faces changes that could at the least further reduce activity, and at worst threaten the practice's very existence, some say.

"We've had steadily progressing issues regarding the regulation of securities lending but they never reached the level and volume and potential

effect to this business as today," says Kunkle. "We've had hiccups but they would have just cost us money."

Kunkle says: "We now have language in Basel III and Dodd-Frank 165 that could devastate this industry."

It could also affect the financial system as a whole, securities lenders say, because the practice boosts liquidity by increasing the supply of securities. Conversely, cutting securities lending would take away some of that liquidity. Meanwhile, the short selling for which some borrowed securities are used is said to lead to pricing that more accurately reflects the reality of the markets.

Some proposals would target short selling in particular by forcing hedge funds to disclose short positions if those positions rise above certain percentages of company ownership. It is assumed that such requirements would lead firms to curtail short strategies. And while shorting is often seen as a destructive force, many say it is necessary because it can keep prices from getting over-inflated, and can serve as an avenue to express suspicions or pessimism about a company's fortunes.

"Short selling can foster investor confidence, as investors can be confident that securities prices reflect both optimistic and contrarian views," said Troy Paredes of the Securities and Exchange Commission (SEC) at a 2009 appearance. Speaking at the Practicing Law Institute of the Harvard Law School Forum on Corporate Governance and Financial Regulation not long after the SEC's temporary move to halt short sales in financial stocks, Paredes said: "Short selling can buttress buying by allowing investors that go long … to hedge their positions. Investors may be more reluctant to buy if the more pessimistic views of short sellers are not fully reflected in the securities prices."

A steep drop in securities lending would hurt Main Street investors: the pension and mutual funds that invest for them are among the big securities lenders, and are able to boost returns and reduce costs through gains from lending stocks and bonds.

Kunkle says institutional investors that lend are generally able to increase their returns by 20 basis points (bps) through the practice. That's a particularly important figure "in a market that's flat", he says. "That adds up over time." The Economist, citing numbers from Markit, said securities lending generates $11 billion a year in income, including a recent average of $100 million a year for the Teacher Retirement System of Texas alone.

But the spread on each arrangement is so small that the proposed 10-bps Financial Transaction Tax in Europe, if applied to securities lending, could effectively wipe out much of the activity there. Timothy Keenan, the former head of sales and business development at Quadriserv, says the FTT "could be the biggest killer" of securities lending in Europe.

"Already, a few beneficial owners have gotten out of the international business," says Jan Price, managing director of securities lending at Wells Fargo Advisors.

Regulators and lawmakers say leaving securities lending regulations as they are could play a part in another financial crisis. The margin on deals may be small, but regulators say the exposure they create can be large, and they want lenders to put more reserves aside, limit exposures to individual trading partners, and take various other measures.

The first securities lending deals go back to the days when a trade was not settled unless the actual paper security was delivered. If a dealer could not deliver a promised security—a happening that was quite common decades ago, before electronic systems were developed—a penalty was enforced. To avoid costs associated with such "fails," brokers would borrow securities from each other and then repay the lender with similar stocks or bonds later.

It was a fairly casual arrangement.

"You cut a deal and you lived up to it," muses long-time trader Thomas Kirdahy, senior vice president and head of North American sales at SunGard Securities Finance. "Everything was done on a handshake."

Soon, other uses for borrowed securities eclipsed the covering of fails, which became less common as technology progressed. Fran Garritt, the RMA's associate director of securities lending and market risk, says the European business around yield enhancement also dropped off. This was mostly due to tax efficiencies in the local markets.

Securities lending is often explained in terms of its use in short selling. In a successful short sale, an investor borrows, say, one million shares of a stock that is selling for $50 a share. The investor sells the shares and collects $50 million. If all goes according to plan, the share price later drops—to say, $40—and the investor buys the one million shares needed for repayment at the lower price. In this simplified example, the securities borrower makes $10 million—the difference between the $40 million purchase price and the earlier $50 million sale price. If the plan backfires, and the price of the stock rises by $10 a share, the investor is out $10 million.

That's unfortunate for the trader playing the market. But the owner who lent the securities makes money either way. Here's how: lenders, or their agents, invest the collateral borrowers put up. The gain is the difference between the interest rate the lender is able to get by investing the collateral and the rebate rate that the lender pays the borrower for use of the collateral. Beneficial owners traditionally take a majority of the gain, with the agent taking the minority percentage.

Kirdahy says he remembers when institutional investors started getting into securities lending. "They thought, 'this is a great way to make money.'" Years later, he says, with the financial world reeling, some owners realised you can lose money lending securities, too.

The many applications of securities lending and the related practices of repos and reverse repos include hedging, pairs trading, market making and the covering of long positions to lock in profits.

Securities lenders say many of the proposed regulations are out of proportion to the risks of the arrangements. Those risks are: (i) the possibility that borrowers will not return securities and will not have posted enough in collateral to cover the cost of repurchasing them; and (ii) the possibility that money will be lost in the investment of collateral.

Take the proposed regulations that would serve to limit the exposure each bank would have to a counterparty, or trading partner. Or the regulations that would require lending agents such as BlackRock, State Street and the various brokerage arms of the big bank holding companies to take capital charges and assign heavier risk weights related to the amount of securities lending they do.

The industry says regulators are not properly accounting for collateralisation.

When a borrower borrows a stock, it puts up collateral in the form of cash or securities. The industry standard is 102 percent or more of the value of the borrowed security. The collateral is used to purchase replacement securities if the borrower defaults and can't return what was loaned.

A further protection is the daily mark-to-market in which the amount of collateral is adjusted to keep it tied to the market price of the borrowed security.

Securities lending proponents say collateral makes another important element of securities lending currently under regulatory scrutiny—indemnification—much less risky.

Indemnification is when lending agents guarantee the beneficial owners of securities that they will not lose the loaned security if the borrower defaults. It's a common arrangement in the industry, and many of the big institutional lenders insist on it.

The new regulatory landscape that appears to be taking shape could affect the ability to provide the indemnification agent lenders could offer.

A big concern is that a reduction in—or absence of—indemnification will cause lenders to leave the market, and "if you knock out a whole group of potential beneficial owners, such as mutual funds or Employee Retirement Income Security plans, you knock out a whole supply of securities," says Kunkle.

In an October 2012 letter to US regulators regarding Basel III, the RMA Committee on Securities Lending said that: "In an informal survey of RMA members involved in the drafting of this letter: (i) many with the largest securities lending operations have never experienced any losses as a result of borrower-default indemnification; and (ii) none has incurred material losses as a result of the indemnification.

The money that has been lost in securities lending, particularly during the crisis, has often been in the re-investment of that collateral.

The classic example is AIG and its famous bailout by the US government. AIG didn't lose billions because borrowers didn't return the securities it lent. It lost billions because when borrowers did return the securities, AIG had lost much of the collateral in risky investments and couldn't return it. "They bought a variety of longer-term paper and then other investments that were riskier," says Kunkle, and, for a time, made a much higher ROI on investment of collateral when the average fiduciary was making well below 0.75 percent.

Collateral management will be one of the many topics discussed at RMA's Conference on Securities Lending, which will be held October 14 to 17 this year in Boca Raton, Florida.

Regulation, of course, will be a major focus.

The first conference was held in 1983, when a call was growing for standardisation and best practices in the burgeoning industry. In 1982, there had been the spectacular failure of Drysdale Securities, a firm that borrowed and shorted US treasuries but was not including accrued interest when it posted collateral. Prices rallied, Drysdale couldn't make good when the accrued interest came due, and its counterparties were out $360 million (they were later made whole by the agent lender).

Other big moments in the 1980s included in 1981, when pension funds in the US were allowed to lend securities for the first time.

The conference has been a venue to talk about employing strategies and correcting problems, and is organised with the RMA Committee on Securities Lending. Over the years, the committee has developed the original survey on securities lending statistics, and the quarterly aggregate composition survey. "In the mid-2000s," says Garritt, "the industry as a whole came together to solve the agency lending disclosure process requested by regulators." Now, the crucial issue is how to respond and react to various rules and regulations that could be on the horizon.

> "A big concern is that a reduction in—or absence of—indemnification will cause lenders to leave the market, and 'if you knock out a whole group of potential beneficial owners, such as mutual funds or Employee Retirement Income Security plans, you knock out a whole supply of securities,' says Kunkle"

At the conference and elsewhere, RMA members will discuss proposed regulations "to see which make sense and what's helpful, and what will restrict or remove liquidity from the market", says Kunkle.

Despite the challenges the industry is facing, Kirdahy says he is optimistic about the future. He says securities lending will get a boost from a rebound in interest rates—which seems inevitable—and that the industry will adapt to new regulations, if it comes to that.

One possibility, says Peter Caruso, a partner at ITG, is lenders that are prohibited from certain deals because of counterparty limits will find different counterparties to lend to, perhaps ones with fewer assets that they wouldn't have considered working with in the past.

Price says he can't imagine an economy without securities lending.

"People sometimes tell me it's going away," says Price, "that stock loan is not going to stay around. But we haven't written our doomsday scenario yet." **SLT**

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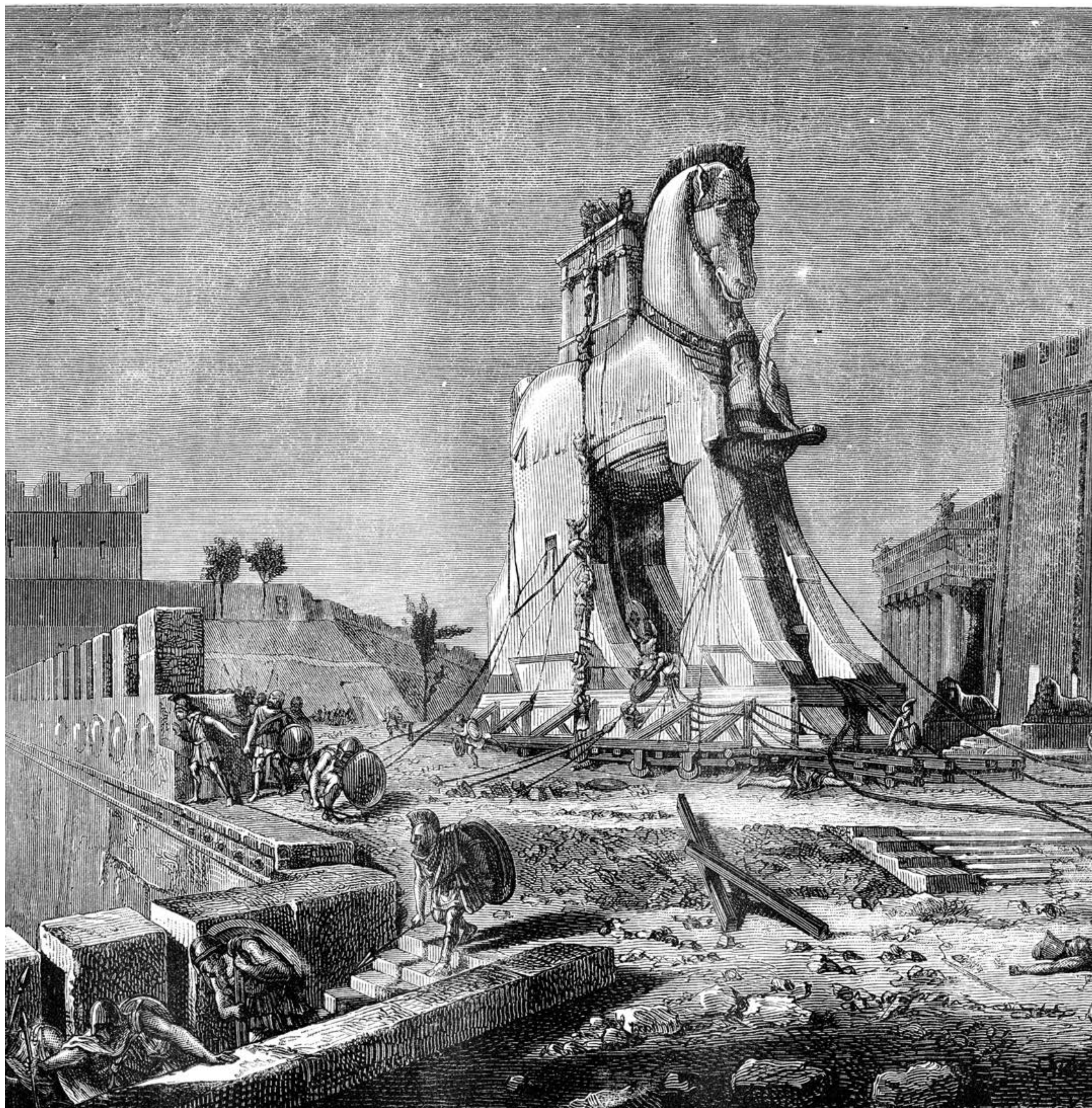

A different animal

Members of the RMA's executive committee reflect on years gone by, and look forward to what may be on the horizon in the future

How have you been involved in securities lending over the years?

Judith Polzer: I have been part of the securities lending industry since 2008 in several product/risk capacities.

Glenn Horner: Over my 17 years in the industry I have been involved in risk management, quantitative analysis and regulatory affairs.

Jason Strofs: I started in securities lending as a business school intern at State Street Bank in the summer of 1996 and focused on risk management within securities lending for several years right

after business school. In 2000, I moved to San Francisco to work for Barclays Global Investors (acquired by BlackRock in 2009) and have had a number of roles within securities lending over the past 13-plus years. I'm currently head of US investment strategy for securities lending at BlackRock. I also have been a Risk Management Association (RMA) securities lending committee member for the past three terms, serving as chair in the current term.

How important has the RMA been to the securities lending industry?

Polzer: I think that since 2008 the RMA has played an important role in helping the industry cope with the changing landscape. For clients that means adjusting to the new market realities and helping them to understand the potential changes, and for regulators that means participating in outreach programmes to discuss how the market has changed and what some of the consequences of newly proposed regulations may entail.

Horner: I think the RMA has always been an important organisation that has allowed members to create a dialogue on the important issues that affect the industry. I think that importance has increased exponentially over the past five years. The RMA is now central to the industry's ability to maintain dialogue with key regulators such as the Federal Reserve, Office of the Controller of the Currency, Federal Deposit Insurance Corporation, Securities and Exchange Commission, Basel Committee, and Financial Stability Board. During this time, it has become critical that the industry has a voice and is able to comment on regulatory proposals in a unified voice. The RMA has enabled us to comment on numerous proposals and meet with relevant regulators.

Strofs: The RMA has facilitated the sharing of ideas for securities lending practitioners and has always been the primary voice of the securities lending industry. Through conferences, forums, and roundtables, the RMA has created a venue for the advancement of the industry and more recently, the RMA has been the venue in which the industry has been working with regulators.

What is the biggest change you have witnessed during your time in securities lending?

Polzer: The biggest change would be the impact on and response to the market conditions/regulatory changes by the demand side of the market. There have been numerous exogenous impacts to the market in terms of liquidity, leverage, rates, central bank participation and regulatory rulings (proposed and implemented), that have significantly altered the playing field. The role of the agent lender and the RMA has been to help clients adjust.

Horner: This is a difficult question because there have been a number of major changes in the industry. However, if I had to pick one, I would say the increased transparency and use of data would be at the top of the list. Client transparency has increased significantly during this period so clients can, at a granular level, know exactly what is on loan, how it is collateralised, what is the spread being earned, if cash is taken how it has been invested, and often some additional risk and benchmarking measures. Most of this data is available on a daily basis, so clients can better assess performance and its drivers and push providers to be as efficient as possible. I believe this information is critical for the future health of the industry and clients are becoming more focused on understanding what is happening on their behalf. There were some participants that realised losses in 2008 and 2009 and were surprised that it could happen. However, I think the information was available so that the potential for losses could be understood. Participants were just not focused on it. I believe many clients held the belief at the time that 'I am indemnified, so it must be riskless'.

> "The RMA is now central to the industry's ability to maintain dialogue with key regulators such as the Federal Reserve, Office of the Controller of the Currency, Federal Deposit Insurance Corporation, Securities and Exchange Commission, Basel Committee, and Financial Stability Board"
>
> *Glenn Horner, managing director, State Street*

Obviously, clients now know that this is not the case and are much more focused on what the risks are and how are they being managed.

This same data is available to traders and analytical groups, so that loans can be priced in an efficient manner with advanced analytics increasing the ability of traders to spot trends and future specials sometimes even before the market moves rates.

Strofs: Data, data, and more data. The level of information that is available to lending agents, borrowers, hedge funds and clients has exploded over the past 15 years. What is available, who is providing it, and how it is provided has changed dramatically and the demands by clients to have enhanced reporting by utilising that data has increased at the same pace.

If you could change one thing about the industry, what would it be?

Horner: I would have to say that I would like to see a more rational approach to impending regulations. Unfortunately, being a small corner of an overall larger banking and financial services industry, our business is often lumped in with other products that may share some similarities, but often the nuanced differences are not always appreciated.

In addition, some participants in the industry made poor decisions pre-crisis. However, these were anomalies and did not reflect general best practices. While there was plenty of poor decision making and nobody was completely immune, I believe that those firms that were

following best practices had minimal losses during this period, especially compared with other financial market products. Excluding the couple of anomalies, I think that the losses during the crisis were not put into perspective against historical performance. I would be willing to bet that an overwhelming majority of participants, both clients and agent lenders, earned over the prior 10 years in excess of 10 times the losses incurred. For most financial market products, this would be viewed as stellar performance, maybe not a 'free lunch', but a really cheap lunch.

lending enables more liquid and efficient markets while decreasing transaction costs for investors. Not to mention that many of the same investors are able enhance the returns of the investments through the returns they generate from securities lending.

How optimistic are you about 2014 and what will be the key trends?

Polzer: I think the key trends of 2014 will be a continuation of the regulatory impacts on the market. One of our jobs is to help inform clients of and prepare them for these changes. Financial markets tend to find a way to adapt and securities lending will continue to play a role in the market, but it may look different than it has in the past.

> "Data, data, and more data. The level of information that is available to lending agents, borrowers, hedge funds and clients has exploded over the past 15 years"

Jason Strofs, managing director, global securities lending and financing, BlackRock

However, due to the impact of firms operating outside of best practices and the shock of many in the industry and regulatory community that those losses could actually occur, we have entered an era of drastic regulatory reform. I applaud these reform efforts in that they recognise the risks inherent in the business and aim to make the market and system safer for all participants.

However, in many cases I believe that the reforms go too far and ultimately may be more harmful than beneficial. In particular, the proposed large exposure limits under both Basel III and the US Dodd-Frank Act could have significant downside implications, not only to our business but the system as a whole. I agree that the interconnectedness of large institutions needs to be managed, but the approach proposed by the regulators throws out decades of financial market theory for archaic measures. Holes can certainly be punched in the financial market theory, but it is not completely wrong. I believe a better approach would be something that continues to reflect actual market dynamics while protecting against model error and gaming the system. The non-internal model method approach proposed for derivative transactions probably hits the right chord in so much as it is conservative and cannot be gamed, but still reflects some of the realities about market dynamics.

Strofs: It's image. It has been a real challenge to overcome many dated or simply incorrect perceptions of the securities lending industry. What many investors fail to realise is that securities lending is a highly regulated industry with ever increasing transparency and many researchers have strong evidence that supports the fact that securities

Horner: I am pessimistic for the short term, but remain optimistic about the long term. I think the key trends in 2014 and beyond will be centered on the changes created by regulatory reform. The regulators are really coming at this from all directions, essentially trying to limit banks' ability to arbitrage the regulatory system. I like to think of it much like a Rubik's Cube, where as soon as you solve one side there is a tendency to mess up another side. With that said, this will present opportunities to those creative enough to actually solve the puzzle as there will continue to be a demand to borrow securities at a certain price point by end users. I think that the regulatory environment will throw sand in the gears of the traditional model of an agent lending to a broker-dealer that on lends to an end user. This model will not go away any time soon, but its future growth may be limited.

This may lead to some creative solutions, such as a central counterparty model that is beneficial to all participants in the value chain, an increase in agent lenders acting as principal and going directly to end users, and broker-dealers and agent lenders within the same firm. These are a few models that are in existence or development that could see growth, but I am sure that creative people within the industry will develop competing models or distribution methods. I am confident that the industry will eventually return to growth, but it may look very different that it has over the last 20 years. **SLT**

> "I think the key trends of 2014 will be a continuation of the regulatory impacts on the market. One of our jobs is to help inform clients of and prepare them for these changes"

Judith Polzer, global head of analytics and research, agent lending, J.P. Morgan

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RMA Committee on Securities Lending

Many have worked hard over the years to develop and help make the RMA Conference on Securities Lending the success that it is today

START

1983-84

Robin S. Midkiff, Wells Fargo Bank, San Francisco (Chair)
Marie B. Knox, Morgan Guaranty Trust, New York
Allen Oechsner, US Trust Co, New York
Nancy B. Wolcott, Harris Trust & Savings, Chicago

1984-85

Allen Oechsner, US Trust Co, New York (Chair)
Anne F. Adamczyk, Chase Manhattan Bank, New York
Thomas M. Cole, Bankers Trust, New York
Dale M. Schumacher, First Trust Co, St. Paul
Susan Tomanek, Wells Fargo, San Francisco
John J. Welsh, Mellon Bank, Pittsburgh
Nancy B. Wolcott, Harris Trust & Savings, Chicago

1985-86

Allen Oechsner, US Trust Co, New York (Chair)
Anne F. Adamczyk, Chase Manhattan Bank, New York
William Barron, Irving Trust, New York
Susan Tomanek, Wells Fargo, San Francisco
Samuel J. Troia, Bank of America, Los Angeles
John J. Welsh, Mellon Bank, Pittsburgh
Nancy B. Wolcott, Harris Trust & Savings, Chicago
David J. Peterson, Norwest Bank, Minneapolis

1987-88

Nancy B. Wolcott, Harris Trust & Savings, Chicago (Chair)
Orrin J. Bargerhuff, Northern Trust, Chicago
Timothy Biedrzycki, Mellon Bank, Pittsburgh
Robert Decker, US Trust Co, New York
Timothy Keenan, Chase Manhattan, New York
Cory Martin, Wells Fargo, San Francisco
Jeffrey L. Newman, Irving Trust, New York
Samuel J. Troia, Bank of America, Los Angeles
Carmen Williams, First Pennsylvania Bank, Philadelphia

1988-89

Orrin J. Bargerhuff, Northern Trust, Chicago (Chair)
Timothy Biedrzycki, Mellon Bank, Pittsburgh
Robert W. Decker, US Trust Co, New York
Timothy Keenan, Chase Manhattan, New York
Cory Martin, Wells Fargo, San Francisco
Jeffrey L. Newman, Irving Trust, New York
William Pridmore, Harris Trust & Savings, Chicago
Terence J. Toth, Bankers Trust, New York
Ralph F. Vitale, State Street, Boston

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Robert W. Decker, US Trust Co, New York
Timothy Keenan, Chase Manhattan, New York
Jeffrey L. Newman, Irving Trust, New York
William F. Pridmore, Harris Trust & Savings, Chicago
Stephen Lee Smith, State Street, Boston
Susan Tomanek, Wells Fargo, San Francisco
Terence J. Toth, Bankers Trust, New York
Ralph F. Vitale, State Street, Boston

1990-91

Ralph F. Vitale, State Street, Boston (Chair)
Timothy Biedrzycki, Mellon Bank, Pittsburgh
Robert W. Decker, US Trust Co, New York
Timothy Keenan, Chase Manhattan, New York
Judith A. Leavitt, Banc One, Indianapolis
Jeffrey L. Newman, Bank of New York, New York
William F. Pridmore, Harris Trust & Savings, Chicago
Stephen Lee Smith, State Street, Boston
Susan Tomanek, Wells Fargo, San Francisco
Terence J. Toth, Bankers Trust, New York

1991-92

Ralph F. Vitale, State Street, Boston (Chair)
Orrin J. Bargerhuff, Northern Trust, Chicago (Chair)
Timothy Biedrzycki, Mellon Bank, Pittsburgh
Jeffrey L. Newman, Bank of New York, New York
Susan Tomanek, Wells Fargo, San Francisco
Terence J. Toth, Bankers Trust, New York

1992-93

Timothy Biedrzycki, Mellon Bank, Pittsburgh (Chair)
Steven E. Cutler, Continental Trust, Chicago
Jeffrey L. Newman, Bank of New York, New York
Rosemarie O'Connor, Marine Midland, New York
William F. Pridmore, Harris Trust & Savings, Chicago
Susan Tomanek, Wells Fargo, San Francisco
Terence J. Toth, Bankers Trust, New York
Ralph F. Vitale, State Street, Boston (Ex-Officio)

1993-94

Timothy Biedrzycki, Mellon Bank, Pittsburgh (Chair)
Gary A. Beyer, First Interstate, Los Angeles
Steven E. Cutler, Continental Trust, Chicago
Jeffrey L. Newman, Bank of New York, New York
Rosemarie O'Connor, Citibank, New York
William F. Pridmore, Harris Trust & Savings, Chicago
Terence J. Toth, Bankers Trust, New York

1994-96

Terence J. Toth, Northern Trust, Chicago (Chair)
Steven E. Cutler, Banc Once Investment Advs, Columbus
John E. Martinez, Wells Fargo, San Francisco
Jeffrey L. Newman, First Interstate of CA, Los Angeles
Rosemarie O'Connor, Citibank, New York
Susan C. Peters, State Street, Boston
Elizabeth Siano, Bank of New York, New York

1996-97

Jeffrey L. Newman, Wells Fargo Bank, Los Angeles (Chair)
Steven E. Cutler, Banc Once Investment Advisors, Columbus
Rosemarie O'Connor, Citibank, New York
Susan C. Peters, State Street, Boston
Eugene Picone, Chase Manhattan Bank, New York
Dee Trussell, NationsBank, New York
Elizabeth Siano, Bank of New York, New York
Terence J. Toth, Northern Trust, Chicago (Ex Officio)

1997-98

Jeffrey L. Newman, Wells Fargo Bank, Los Angeles (Chair)
Steven E. Cutler, Banc Once Investment Advisors, Columbus
Rosemarie O'Connor, Citibank, New York
Susan C. Peters, State Street, Boston
Eugene Picone, Chase Manhattan Bank, New York
Elizabeth Siano, Bank of New York, New York
Charles Weidman, Bankers Trust, New York
Terence J. Toth, Northern Trust, Chicago (Ex Officio)

1998-00

Steven E. Cutler, Banc One Investment Advisors, Columbus (Chair)
Peter Adamczyk, AIG Global Investment, New York
William Allen, KeyCorp, Cleveland
Richard B. Bentsen, Northern Trust, Chicago
Leona Bridges, Barclays Global Investors, San Francisco
Gregory W. Harmon, State Street Bank, Boston
Eugene Picone, Chase Manhattan Bank, New York
Jeffrey L. Newman, Wells Fargo Bank, Los Angeles (Ex Officio)

2000-02

Richard B. Bentsen, Northern Trust, Chicago
Peter Adamczyk, AIG Global Investment, New York
Leona Bridges, Barclays Global Investors, San Francisco
Steven E. Cutler, Banc One Investment Advisers, Columbus
Gregory W. Harmon, State Street Bank, Boston
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2002-04

Peter Adamczyk, AIG Global Investment, New York (Chair)
Leona Bridges, Barclays Global Investors, San Francisco
James O. Bryant, Investors Bank & Trust Co, Boston
W. Tredick McIntire, Boston Global Advisors, Boston
Eugene Picone, J.P. Morgan Chase & Co, New York
Robert G. Smith, Wells Fargo Institutional Investments, Minneapolis

2004-06

Eugene Picone, J.P. Morgan Chase & Co, New York (Chair)
James O. Bryant, Investors Bank & Trust Co, Boston
Michael P. McAuley, State Street, Boston
W. Tredick McIntire, Boston Global Advisors, Boston
Angi B. Meyers, Northern Trust, Chicago
Robert G. Smith, Wells Fargo Institutional Investments, Minneapolis

2006-08

W. Tredick McIntire, Goldman Sachs, Boston (Chair)
Christopher R. Kunkle, Wachovia, New Jersey
Sandra L. Linn, Northern Trust, Chicago
David Lonergan, Barclays Global Investors, San Francisco
Michael P. McAuley, State Street, Boston
Mark H. Payson, Jr, Brown Brothers Harriman, Boston
Kathy H. Rulong, Bank of New York Mellon, Pittsburgh

2008-10

Michael P. McAuley, Premier Global Securities Lending, Boston (Chair)
Patrick Avitabile, Citi, New York
David DiNardo, Bank of New York Mellon, Pittsburgh
Sandra L. Linn, Northern Trust, Chicago
Judith Polzer, J.P. Morgan, New York
Elizabeth Seidel, Brown Brothers Harriman, Boston
Jason P. Strofs, BlackRock, San Francisco
W. Tredick McIntire, Goldman Sachs, Boston (Ex Officio)

2010-12

Michael P. McAuley, BNY Mellon, Boston (Chair)
Patrick Avitabile, Citi, New York
Gene Gemelli, Credit Suisse, New York
Sandra L. Linn, Northern Trust, Chicago
Rebecca Nordhaus, Brown Brothers Harriman, Boston
Judith Polzer, J.P. Morgan, New York
Elizabeth Seidel, Brown Brothers Harriman, Boston
Jason P. Strofs, BlackRock, San Francisco
W. Tredick McIntire, Goldman Sachs, Boston (Ex Officio)

2012-14

Jason P. Strofs, BlackRock, San Francisco (Chair)
Patrick Avitabile, Citi, New York
Gene Gemelli, Credit Suisse, New York
Glenn Horner, State Street, Boston
Sandra L. Linn, Northern Trust, Chicago
W. Tredick McIntire, Goldman Sachs, Boston
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Then and now

Fax machine? Ink blotter? It may have only been 30 years, but stock loan technology has come a long way in that time, and it may yet go futher

Firstly, here go many thanks and congratulations to the Risk Management Association (RMA) for 30 years of success with our annual industry conference. This has always been an excellent forum in which to meet people, learn about what's going on, share thoughts and get new ideas. Many more, please.

A few of our customers have been working in stock loan for more than 30 years, which means they have been practicing in this industry since before the inaugural RMA securities lending conference. They are an inspiration and deep source of institutional knowledge. As I look back on my own 15-plus years of practice in stock loan technology, I see many things that have changed dramatically for the better and others that seem stubbornly stuck. Here are a few observations.

Printed paper

In 1996, my first seat on the stock-loan desk was at the end of the row next to the fax machine. As a morning person, I generally arrived to work early—early enough to take note of the frequent whir and sputter of that fax machine as it spat out document after document. For the first few hours of each day, pages with lists of securities available for loan or needed to borrow would pile up. Copies were made and distributed up and down the desk.

On the other side of the fax machine was the printer. While the fax machine was busy with listings, the printer would be making multiple copies of the firm's book of business—all open contracts listed by both counterparty and security. As desk personnel arrived for work, the first order of business was to address current need-to-borrow requirements, and to study balances, income and expense. Then we would go to work on areas that needed improvement. This required combing through the multiple printed documents, cross referencing to find the opportunities, and fixing the problems. Constantly being on the phone meant that a good memory was a big help.

Now more than 17 years later, hardly anything is ever printed. What was once so standard has today, thankfully, been replaced by on screen technology. For those firms that still fax recall notices, even they can be generated electronically, and most firms have the incoming recall fax routed directly to email—not printed locally. The stock loan desk is almost ready to go paperless.

Paper blotters

There are a few firms that still use a pencil or pen and paper blotter to record new contracts, especially for conduit dealing, listing both sides of trades, the borrows and the loans. Perhaps because this seems easy to do while talking on the phone, or it helps to keep things balanced, or maybe it's because one can then hand off the blotter to someone else to key the trades into the system.

As orders and opportunities are now more likely to arrive by email or instant message, and not over the telephone, it is much better to just get these deals onto the system, as soon as possible.

Paperless

We live in an era of drag-and-drop, point-and-click, and copy-and-paste. Anybody who still uses paper to keep track of borrows and loans should have a look at the Anetics Argent Deal Blotter. It automatically creates and pairs-off the virtual borrows necessary to satisfy a loan order or in-house needs. And then it matches those borrow requirements with available sources of supply, auto-borrowing where possible—all from the same page. And all without typing a security ID, symbol, quantity, and many times even a rate.

Benefit of paperless

Looking back just 10 years, the important factors in counterparty dealings were rates, balances and credit limits. There may have been a few securities that were restricted for one reason or another, but this was a short, discrete list, easy to write on paper, and remember.

Today, we see many factors that must be evaluated before a customer order can be booked. Not just rate, balance amount and credit limit, but restrictions on class of security, country of origin, membership in one or more indexes, the potential future exposure on a set of trades, and compliance restrictions, all of which are easy to validate when the blotter is on-screen, in the system.

There is much to be said for moving towards more automation. Technology that can streamline this process not only increases the efficiency of the desk, it also sets the stage for better industry integration.

Price discovery and transparency

It is important to note the improvements made in the areas of price (or rate) discovery and transparency. Looking back a decade or so, the big complaint from custodial lenders was just how difficult it was to get any information about prevailing rates and market colour, other than what potential borrowers would reveal by telephone. The borrowers, of course, had a vested interest.

Today, those same custodial lenders have fairly comprehensive rate reports allowing them to see what's hard, what's easy, what trades are being done at what level, and they are able to segregate the day's available inventory into general collateral and premium-borrow items, some of which may even be offered in a mini-auction.

Up now on my soap box, a reminder that securities borrowing and lending is not an exchange-traded commodity but a complicated network of bilateral transactions, each done for a purpose, no two exactly the same. Two firms borrowing and lending a large lot of a certain security at 2:15 pm on a Tuesday may have little in common with someone borrowing to cover a short position in the same security early Wednesday morning.

Automated bilateral discovery for both rates and availability is possible, but the industry lacks the infrastructure to support it. There are many disparate systems that portend to aid in such discovery, but there are no common standards to enable full industry-wide integration—or any one desk with any other.

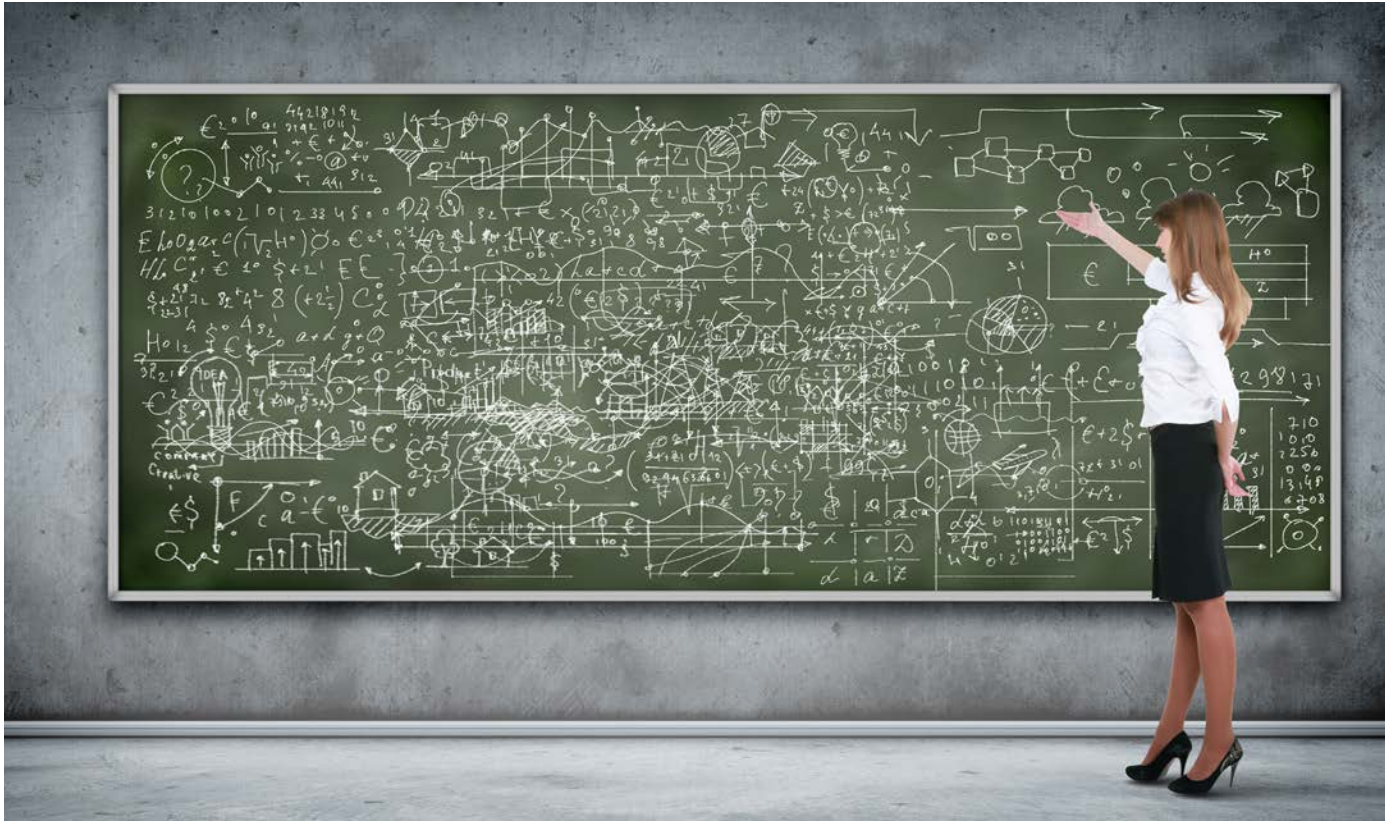
Stubbornly stuck

A little over 20 years ago the cash equities market had need for better electronic communication of trading data. The FIX Protocol specification was created in 1992 to enable Fidelity Investments and Salomon Brothers to communicate about equity trades. Today, FIX has become the global standard for equities trading, has expanded into post-trade and other straight-through processes, and has moved into the derivatives, fixed income and foreign exchange markets. Somehow it missed securities lending.

We at Anetics use FIX to route short sale locate requests from the trader to the desk, and from the desk to the order routing engine (this for but a few customers). Nevertheless, the securities lending industry at large has failed to establish a common set of messaging standards despite an overwhelming historical body of evidence showing that such standards contribute directly to improved business integration and efficiency.

The lingua franca of stock loan today is the email, half of which appear to flow through Bloomberg. If you have some loans out that you wish to see returned, send an email. With any luck, borrower personnel (the recipient of the email) will be able to copy the list and paste it into his system, thereby automatically setting up the returns. This is not where we could be with common messaging standards and better integration, but it is much better than 30 years ago. **SLT**

> "Looking back just 10 years, the important factors in counterparty dealings were rates, balances and credit limits. There may have been a few securities that were restricted for one reason or another, but this was a short, discrete list, easy to write on paper, and remember"
>
> *Rob Sammons, principal founder, Anetics*



Algorithms—the new revolution in securities finance

Algorithmic trading was unheard of a few years ago, but now it should be all the rage, with increased performance mooted as a strong benefit

It used to be that to diagnose an illness, interpret legal documents, analyse foreign policy, or write a newspaper article, you needed a human being with specific skills—and maybe an advanced degree or two. These days, algorithms that can do precise work not only with speed, but also with nuance, are increasingly handling high-level tasks. These 'bots' began with human programming and logic, but now their reach extends beyond what their creators ever expected. The May 2010 "Flash Crash" exposed Wall Street's reliance on trading bots to the tune of a 998-point market drop and $1 trillion in vanished market value. But that was just the beginning. There are bots that are driving cars, penning haiku, and writing music mistaken for Bach's. They listen in on our customer service calls and figure out what Iran would do in the event of a nuclear standoff. There are algorithms that can pick out the most cohesive crew of astronauts for a space mission, or identify the next Jeremy Lin. Some can even ingest statistics from baseball games and spit out pitch-perfect sports journalism indistinguishable from that produced by humans.

Algorithms are being introduced into all aspects of our daily lives, from medicine to motoring.

What is an algorithm? An algorithm is a computer program that replaces a complex process that would traditionally have been carried out by a human brain.

Calculating profit and loss on a securities finance trade requires the programing of a calculation that is consistent across the industry. The challenges here were to model the data in such a way that the profit and loss can be calculated 'real-time' for the entire organisation. I wonder how many of you still have an overnight batch-based process where you know the profit and loss for today, tomorrow. But this is not an algorithm. An example of an algorithm would be determining the rate to offer back on a trade. This requires multiple data inputs (current trades, market data, security static, counterparty profiling, control parameters, etc) and a process that simulates the thought process that a trader goes through. Today's first generation algorithms, if employed by your firm, have helped traders and the business in general to take the business from the concept of trade capture to an automated negotiation process. The rate selected may well be different every time the algorithm runs due to the shifting patterns of the security in the market, and indeed based on the success of the calculated rate (ie, is the offered rate accepted) the algorithm can adjust its parameters automatically.

In order to better understand this concept, let's take a brief look at the history of securities finance booking, to put it in perspective of where we have come from over the past 40+ years:

- 1970s—single security transaction trade capture, mainly on custom built in-house systems.
- 1980s—single trade from the 1970s, but with enriched information and vendor-based systems now actively selling IT solutions (excluding Reuters IP Sharp).
- 1990s—single and multi-trade capture for US domestic, interna-

tional and some collateral/SWAP transaction functionality (various vendors).

- 2000s—the 1990s functionality coupled with the ability to transact via a central counterparty (CCP) structure as well as some bilateral FTP trade activity. Typically used for standard general collateral trades and in big volume (basically to handle the growth of quant based high frequency equity trading).
- 2010s—first generation algorithmic-based responses (simple multi-factor rules respond to initial bids and offers) for trade negotiation.
- Future—second generation learning algorithms that pass non-structured messages and assist in the negotiation process with traders' oversight.

So where is your firm on the time scale with respect to securities finance trading? If you are still manually entering in trades as the lion share of the daily activity, you may want to pause for a moment and think about the state of the industry and your peers with respect to systems and their ability to provide you with productive, systematically consistent finance transactions that meet your firms' hurdle rates based on Basel III or other regulatory demands.

Why algorithms now? The answer is the massive increase in the performance of computers in terms of speed and memory set against the reduction in the cost of this hardware. It allows developers to attempt to tackle repetitive tasks that would not have been cost effective in the past. Equally important, algorithms will and can make sound investment decisions when borrowing or lending for your firm's finance trading book. The sheer volume of trades created by algorithmic trading for equity trading activity has fundamentally changed the composition of your finance book.

As has been shown in other industries (and indeed other parts of the financial markets), those who adopt algorithms ahead of their competitors stand to gain the most benefit.

Algorithmic trading is now a mainstream part of the outright markets with a number of the largest hedge funds dedicated to computer algorithm-based trading only. There have been some spectacular failures caused by algorithmic trading, but many more spectacular successes (think renaissance technology).

So what algorithms would apply to securities finance?

At Trading Apps, we recognised the value that algorithms can give a business from our foundation in 2011. One of our first apps created push lists on a user defined schedule (daily, hourly, weekly, etc), but each time the list was created it dynamically analysed the real-time forward ladder of positions to only offer those securities above a minimum size (after applying a buffer based on market utilisation) that were available for X days forward and were not special (again dynamically calculated).

From there we now have algorithms running in our Pre-Trade Negotiation, Portfolio Evaluator, and Triparty Collateral Optimiser apps.

These apps are already providing a tangible return in terms of greater volume and time saving to our customers, which allows the traders to concentrate on the 'outliers' where the most money can be made 'or lost'. Another benefit to utilising current technology combined with algorithms is the efficiency you gain when dealing with less technologically sophisticated counterparties. Our systems provide the ability to take non-structured messages, convert them into 'pre-trade' transactions, and then based on the algorithms output, send them back to the counterparty that initiated the trade in a structured format (modified and secure Excel spreadsheet) to continue on the negotiation until completion. Today, the pre-trade aspect of the securities finance business is really the core of the trade that has been automated from the historically utilised phone or more recently, email and Bloomberg message.

Finally for most firms, the booking of the transaction is the easiest and concluding part of the transaction. If you consider the total amount of trades that a finance desk booked in aggregate for a day in the 1980s when compared to today, you understand the power of technology. Now, turbo charge that technology with an algorithm that can immediately initiate the response without the requirement of a trader, but with the help of a sophisticated algorithm, and see what you can really do to the profitability of your business. That in itself proves we have come a long way from the 1970s.

> “There's an algorithm coming to your desk soon. Do you want to be an early adopter and get the competitive edge, or follow the herd?”
>
> *Matthew Harrison, managing director, Trading Apps*

There's an algorithm coming to your desk soon. Do you want to be an early adopter and get the competitive edge, or follow the herd?

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The evolution of automation in securities finance

EquiLend recently sat down with some industry leaders to discuss the past, present and future of technology in the securities finance industry

What kinds of technological changes have you observed in your careers in securities finance?

Brian Lamb: When I traded in securities lending back in the late 1980s, we used a pen and paper together with computer terminals, and we thought we had a pretty sophisticated technology solution. But looking back on it, it was very limited. There has been a lot of technological change throughout, and it has enabled the business to grow quite significantly by magnitude. If you look at the outstanding balances 30 years ago versus today, today is just so much larger and so much more expansive globally, and clearly technology has enabled that growth.

Mark Hoogs: Many of the remaining significant pieces of the trade lifecycle now have automation solutions available. And perhaps more importantly, the adoption rate of automation has increased significantly, which has been a key enabler of growth across the industry. That includes not just adoption from an individual firm perspective, but also adoption of automation standards in industry best practices. This is important, as those standards are increasingly referenced by auditors and regulators, which further supports functional adoption.

Sandra Linn: When technology began to play a greater role in the growth of securities lending, there were fairly standard options available in the US for post-trade activities. However, automated trading was done on a bespoke one-to-one method. Straight-through processing could be achieved for the lower intrinsic US equities, but common standards for communication were lacking. EquiLend filled that gap, which accelerated the pace of uptake by borrowing counterparties. The standardisation also paved the way for increased automation for non-US markets, notably by an initial focus on automating post-trade activities.

Hoogs: All of those proprietary connections are resource-intensive to set up and maintain. The creation of standard interoperability plat-

forms has enabled firms to redeploy resources to work on things that are more value-additive to the business.

Lamb: Clearly, EquiLend has played a substantial role in standardisation and centralisation, allowing for a lot of risk mitigation and efficiencies. Furthermore, one of the themes that comes up quite often is a perception that automation leads to people losing their jobs, but actually it's quite different. While there may be some shifting in responsibilities, we've definitely seen that you still need people, but they can focus on more value-added services.

Hoogs: I agree, and I think that's led to the acceleration of progress, as people are focusing on the things that are more important to the growth of the business as opposed to maintaining intricate webs of proprietary interfaces. That's been a huge contributor to the pace of growth within the industry.

Are there any other key benefits to automation that you see?

Hoogs: Automation clearly reduces risk significantly, which is important for our firms and for our clients. We also know that regulators are increasingly focused on transparency, and particularly given the volume of activity across the industry, technology is critical to delivering on those expectations.

Linn: As a lending agent, our role is to capitalise on the intrinsic value of our clients' securities portfolios. Automation has allowed our trading experts to focus more on research and assessing the strength of demand, ultimately to extract the best value for our clients.

Are there any areas in the securities finance industry, either trade or post-trade, that still lack automation?

Hoogs: There are always going to be opportunities to enhance existing services to work more effectively, and broad adoption is something that we'll all need to remain vigilant to promote. Fixed income is one example, which you have focused on through BondLend, but that's going to take some time to fully proliferate into the marketplace.

Lamb: Mark, you mentioned fixed income, and that will take time, and it has taken time. We certainly have observed that with BondLend. But we're getting there, and we're seeing quite substantial increases and flow on the fixed income side—not just corporates but also treasuries and sovereigns and now particularly with our post-trade services.

Linn: Today, there is extensive automation in trading and post-trade activities, as well as insightful pre-trade tools. One area that is still largely lacking automation is corporate actions.

Hoogs: Corporate actions is an interesting case because that function often sits outside of the securities lending or finance product areas, and may utilise different tools and systems. I suspect that across our businesses more broadly we'll see an increasing need to think about connectivity with other complementary platforms. Corporate actions may be a good example of where we could see that. A lot of us are thinking about our businesses in a much more holistic and connected way than we might have in the past, and that's only going to continue.

> "One of the themes that comes up quite often is a perception that automation leads to people losing their jobs, but actually it's quite different"

Brian Lamb, CEO, EquiLend

> We know that regulators are increasingly focused on transparency, and particularly given the volume of activity across the industry, technology is critical to delivering on those expectations

Mark Hoogs, global head of securities lending investment operations, BlackRock

Lamb: Whereas a decade ago the securities lending group at a borrower or a lender might have its own dedicated IT resources, more and more I am seeing that different groups within a firm are sharing a centralised resource. That means more senior participants are involved in the conversation about what exactly is the EquiLend service and what could it be.

Hoogs: That's a good point. I think more broadly, the à la carte vender technology service model is going to need to shift to more of a full-service model if we're going to leverage the scale of automation at an industry level. In order to take this to the next level and do something meaningful in terms of evolution, it's going to require a more holistic model.

coming up with solutions that confront the need for increased transparency that regulators are demanding, while complementing and not disrupting our industry.

What sorts of advances do you think we'll see in the future of securities finance?

Lamb: To answer it a different way, I would have thought we would have been further along by now on screen-based bid-offer trading. I'm surprised we're not. So that makes me think that we're not likely to get there anytime soon.

> Until recently, automation was primarily focused on increasing efficiencies, reducing operational risk and providing information. Now, it's becoming more sophisticated with solutions for trading higher intrinsic securities and baskets of securities

Sandra Linn, senior vice president, global COO for securities lending, Northern Trust

How are market participants integrating market data from providers such as DataLend into their activities?

Linn: Market data is a powerful component of the decision-making process for trading. It also facilitates a meaningful assessment of performance and supports transparency to clients by comparing performance to a comparable universe.

Hoogs: We've barely begun to scratch the surface of the usefulness of data. I don't think even Silicon Valley has scratched the surface, but we certainly see a burgeoning information industry forming all around us, trying to figure out just how to leverage the power of data. So even though we may not have the answers yet, I feel like that's going to be an immense growth opportunity for our industry.

How will regulatory drivers affect the way data is used by market participants and others?

Hoogs: A lot of the innovation that's going to need to happen in this industry is going to be around enhancing transparency and really

Linn: Until recently, automation was primarily focused on increasing efficiencies, reducing operational risk and providing information. Now, it's becoming more sophisticated with solutions for trading higher intrinsic securities and baskets of securities. As Mark noted, global regulatory developments are likely to shape the priorities for further automation.

Hoogs: Yes, the challenges that will need to be addressed will be more complex. Well beyond simply automating trade flow or operational processes, we'll need to find ways to continue to drive scale across our entire platforms.

Lamb: I like the word that Sandra used—sophistication. Back in my early days, it was an ultra-simple model, and perhaps that's what changes: the sophistication continues to change, and it just becomes more of an integrated part of the overall market and product, which leads to partnerships and collaboration for the benefit of everybody. **SLT**

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Doom and bloom?

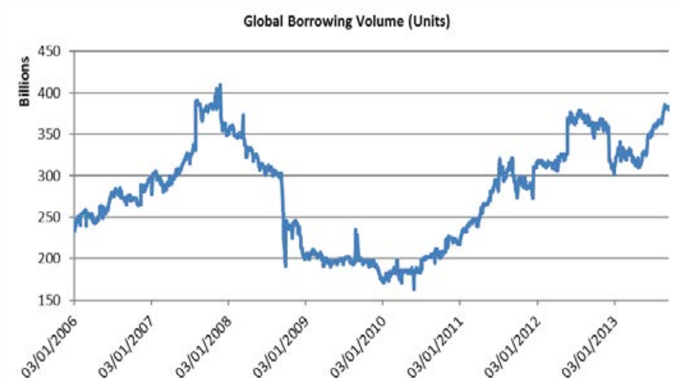
The industry is thought to be, at best, at a crossroads, and at worst, under the threat of imminent demise brought about by multiple factors

At this year's Risk Management Association (RMA) Conference on Securities Lending, as at every other one for the last 30 years, industry leaders will discuss and debate where we are and what the future of securities lending holds. As everyone knows, the industry is thought to be, at best, at a crossroads, and at worst under the threat of imminent demise brought about by throttling legislation, oversight and capital requirements. Add to this a recovering hedge fund industry and a low interest rate environment, and it does indeed seem that all the stars are misaligned and there is nothing to be optimistic about. However, the statistics and experiences of the last 30 years may provide more accurate insight into how the industry might fare.

It is easy to have a short-term perspective on the current state of the industry. In virtually every conversation, panel session, speech and article, the phrase "pre-crisis levels" appears. This is the yardstick against which we compare everything, and if not reached, then we are seen to be failing and consider ourselves doomed. Perhaps this should not be the case. Perhaps the "pre-crisis levels" were not the norm and perhaps we should look at trends over the longer term without cherry picking the period against which we wish to be measured. Just as picking the right period to measure comparative global warming can give two different answers, perhaps we should adopt a more positive approach to measuring securities lending volumes and returns.

Taking the long term view, the 2008 'blip' could be just that, a blip. If you look at the trend over the last 30 years, there have been varying degrees of progress year-on-year as new opportunities, whether regionally, fiscally or conceptually, have revealed themselves or have been thought up by very clever people. One can also argue that comparing current business levels and rates of growth to immediately before the crisis is not a good thing. How do we know that the 2007 data was not the aberration?

Looking at the chart below, we can see that the volume rate of growth (taking out market pricing effects) in 2006, for example, was steadier and more sedate than the almost frantic growth rate of 2007. It is almost as though there was a slope leading up to the edge of the cliff and the lemmings could not put the brakes on.

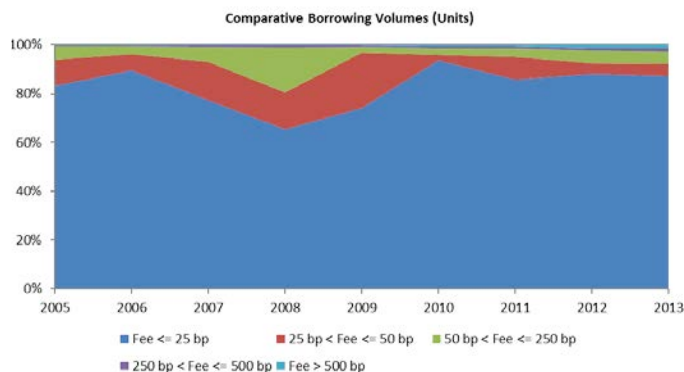


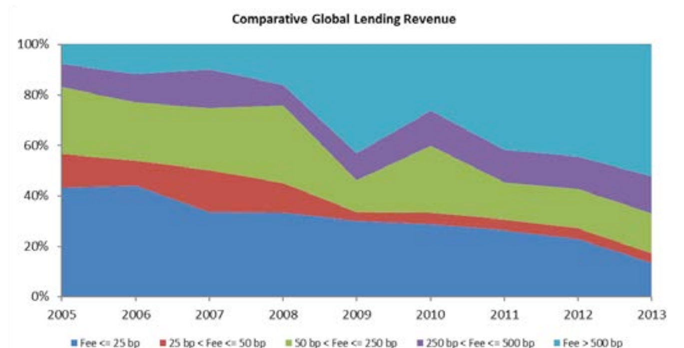
> Practitioners have worked together to ensure that proper practices are in place, and where necessary, found different routes to ameliorate the effects of any proposals

Timothy Smith, executive vice president, SunGard's Astec Analytics

Turning to rates, many have bemoaned the fact that returns for securities lending have gone down markedly and do not seem to be moving back to pre-crisis levels. This is a bad sign apparently. This too can be interpreted differently. Firstly, we would expect that as new markets mature, securities lending rates will decrease over time. In 1985, for example, lending fee rates for callable Japanese equities were 400-plus basis points (bps), with portfolios evaluated on the basis that say 20 percent of it would be out at any one time at an average rate of 400bps, with the exception of the spring and autumn record dates. This is not the case now and has not been for some considerable time. This has been a very normal evolution of supply and demand as more and more supply has become available over time, and is a pattern that has been repeated across many markets.

Secondly, while rates have remained relatively stable over the last few years, and the relative volumes of general collateral and specials have remained fairly stable, the proportion of revenue emanating from specials has increased dramatically, especially towards the very deep specials. This is illustrated clearly in the charts below and to the left.





Why are these facts significant and how can they be interpreted? As part of a continuing evolution, perhaps securities lending is returning to its roots as it were, actually looking at the securities being borrowed rather than the investment returns on cash collateral. In addition, one of the benefits of the crisis has been the drive for greater efficiency, thereby necessitating less borrowing as internal supply is used and brokers no longer sit on borrowed stock unnecessarily—surely a good thing.

How should we view the future?

Many times within the last 30 years, there have been 'global crisis' conference calls to discuss issues that have been deemed to threaten the entire existence of the securities lending world as we know it. However, in each instance, the 'global crisis' in fact usually only had a limited and short-term impact. Through the auspices of lobbying by the RMA and other industry groups, in some cases, regulators have relented or amended their edicts. Practitioners have worked together to ensure that proper practices are in place, and where necessary, found different routes to ameliorate the effects of any proposals. Vendors and system providers have found ways of automating processes and reporting in order to comply with regulations, without the need for structurally threatening implementation requirements.

It can be argued that past experiences have all arisen from the unforeseen consequences of regulation and controls that have been aimed at other businesses, and from which securities lending has been only caught unintentionally. The current raft of proposals is seen to be targeting the business directly in order to bring it 'out of the shadows'. This, it is argued, is the difference. However, as has been the case over the last 30 years, new opportunities will undoubtedly present themselves. It is generally accepted that the requirement for collateral and the borrowing thereof has the potential to increase massively over the next few years. In addition, the adoption of a universal defensive stance is almost palpable as all stakeholders come together to bring these potential unintended consequences to the attention of the regulators, no matter how noble the original intent may have been. This does seem to be bearing some fruit, with the first signs of wobble and even 'can-kicking' being seen.

Maybe it is spring already because there seems to be a growing feeling in the air of 'finding a way' or 'just getting on with it', especially as more money flows in to the system looking for new opportunities. Bring on the next 30 years. **SLT**

Floored repo

North America's Federal Reserve bank unexpectedly announced plans to establish a pre-determined rate to drain excess reserves

Dan LaRocco and Bryan Crowe, short duration fixed income portfolio management, Northern Trust

In a move surprising to both Federal Reserve watchers and the market, the Federal Reserve noted in the minutes of its July Federal Open Market Committee meeting that it is exploring the option of establishing a full-allotment fixed-rate repo facility (FFRR). While it was widely anticipated that the Federal Reserve would use reverse repo as part of its strategy to drain excess reserves resulting from its unprecedented accommodative policy, the FFRR differs from the previously-planned fixed-size auctions in that the rate is pre-determined. The implications of this proposed facility are expected to be largely positive for short-term cash investors, including the fact that the FFRR would effectively set a 'floor' under short-term investments. Additionally, the FFRR would likely allow the Federal Reserve to maintain its target interest rate when the time comes to tightening monetary policy.

Implications of the FFRR on repo rates

It is our expectation that the rate at which the Federal Reserve's FFRR will pay repo investors will effectively become a 'floor' for most short-term market instruments including repo, although there may be exceptions. We foresee dealers having to pay a 2 to 4 basis point (bps) premium over the FFRR rate in order to fund their inventory of treasury and agency securities in the repo market. Treasury repo will likely trade at the lower end of the 2 to 4 bps premium over FFRR and agency mortgage-backed securities collateral on the higher end (ie, 4 bps over the FFRR rate). Repo rates on non-government collateral (known as 'non-standard' or 'non-traditional' repo) are not tied to overnight interest rates, so the yield on this collateral would likely move in conjunction with changes in LIBOR.

Implications for government issued securities

Generally speaking, we anticipate the rate 'floor' set by the FFRRs in the repo market will subsequently set another floor for repo substitutes such as treasury bills and agency discount notes. However, given the strong demand for treasury bills (as investments or as collateral), we expect to see the very short-end of the treasury bill curve (one to three months) trading below the FFRR rate. Yields on government sponsored entity (GSE) securities (ie, Fannie Mae and Freddie Mac) would likely see impacts similar to those experienced by treasury bills, with the potential for very short GSE paper (ie, overnight discount notes) to trade below the FFRR rate based upon demand from investors. We expect that GSE securities would continue to trade at a spread of 2 to 5 bps higher than treasury bills.

Eligible counterparties

The effectiveness of the FFRR programme will likely be determined in large part by the scope of the counterparties eligible to participate. It is our belief that in order to meaningfully influence the federal funds and other money market rates, the FFRR programme should include enough counterparties to represent a significant percentage of the cash in the short-term markets. GSEs maintain sizeable participation in the repo markets, and by the Federal Reserve including them in its expanded list of eligible counterparties last year, we have some confidence that the Federal Reserve has already achieved the critical mass necessary for the FFRR programme to successfully support its desired interest rate policy.

Future policy

While it remains uncertain which policies and tools the Federal Reserve will ultimately select in its effort to manage interest rates and exit its accommodative policy, it is likely the FFRR will provide greater clarity for short term cash investors. We will continue to monitor this facility and its ability to control rates and influence the short term markets. **SLT**

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Not afraid to emerge

What is the situation with securities lending industries in emerging markets?

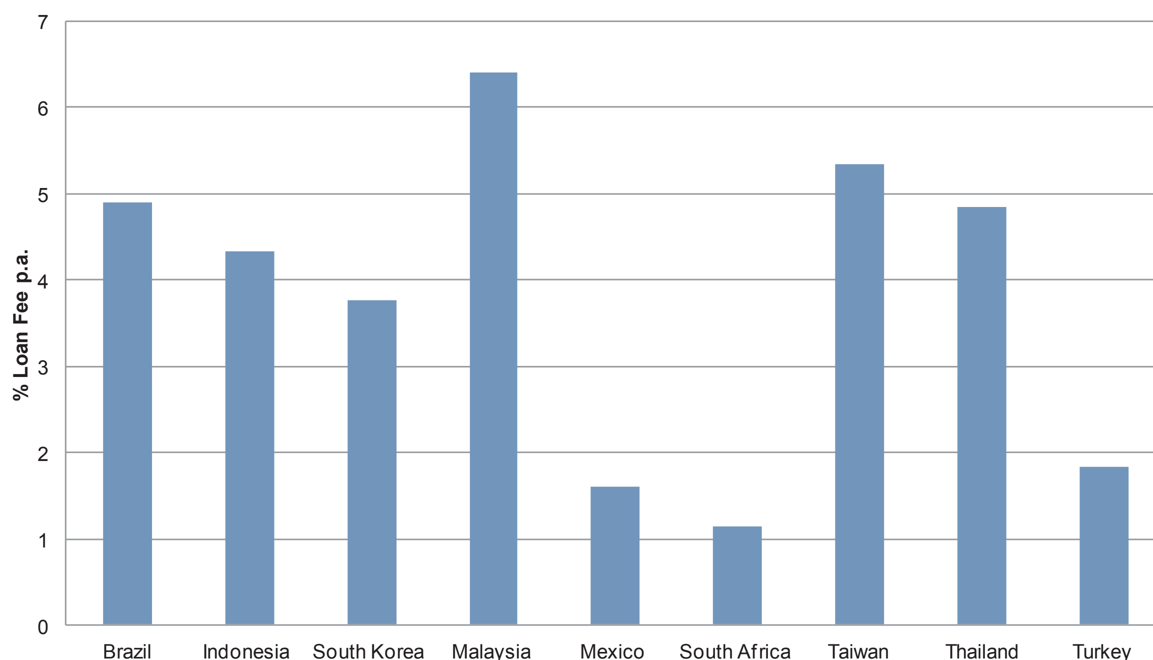
There are many views within securities lending as to what constitutes an emerging or frontier market. For example, whereas some lending participants would categorise markets such as Israel, Turkey and South Africa as emerging, others would deem these to be developed markets. J.P. Morgan's view is that there is no golden rule as to what comprises an emerging market. Many elements can contribute such as: does a regulated, local market stock loan mechanism exist? Is the market open to international entity participation? How difficult is the market to support operationally? What are the main business and legal risks? As a point of reference, J.P. Morgan currently considers markets such as Brazil, Taiwan, Malaysia, Russia, and India as emerging markets and China, Indonesia, the Philippines and the United Arab Emirates (UAE) as frontier markets.

markets and facilitates trade settlements. In turn, this results in fewer failed trades and costs, supporting risk hedging and general financing techniques—all of which are generally welcomed by the local markets.

What is driving this demand?

While demand drivers vary per emerging market, the following trading themes are typically the primary drivers of demand:

- Cash market directional trading—pairs trading;
- American depository receipts/ordinary index pricing arbitrage;
- Arbitrage trading around mergers and acquisitions;



Source: Markit

Why undertake securities lending in an emerging market?

There are a number of reasons to consider securities lending in an emerging market. The most apparent is the significant revenue opportunities that can be derived. From J.P. Morgan's experience, emerging markets typically command fees that are multiples of those in developed securities lending markets. True to economic principles, first mover lending advantage is the key to capturing these returns as borrow demand usually far exceeds supply. It is important your lending agent is committed to making the necessary investments to take advantage of these opportunities.

In addition to the commercial benefits, there is a positive perception to be gained not only from beneficial owners but within the local market. Attracting international participation in the lending of domestic securities provides the much needed liquidity to local capital

- Convertible bond arbitrage;
- Hedging of synthetic instruments;
- Reverse cash and carry arbitrage;
- Sector specific directional trading; and
- Yield enhancement.

What does it take to enter an emerging market?

There can be many barriers to entering an emerging market including tax and regulation clarity, local market efficiency, foreign investor participation restrictions, central counterparty settlement structures, commercial risk, and economic stability.

A thorough due diligence process is the cornerstone to evaluating the feasibility of market entry. Significant commitment and investment are required to assess the specific market opportunity and risks, using specialist counsels complimented by country, product and risk expertise,

> Regional and local market trading and operations are also important elements to effectively managing securities lending activity in these markets
>
> *Paul Wilson, global head of agent lending product and portfolio analysis, investor services, J.P. Morgan*

as well as numerous on-the-ground visits. The due diligence process ensures every element of market entry is reviewed and analysed from multiple perspectives: legal, tax, regulatory, market settlement mechanisms, operational support and commercial.

Historically, a key part of the lending agent's role has been to simplify market entry participation. However, as we encounter more esoteric market practices and regulations, there is a greater need for lending agents to partner with underlying beneficial owners and their fund managers to understand their appetite and attain agreement on proposed operating solutions. This investment of time will be more than compensated for by the enhanced revenue to the beneficial owner.

Beneficial owners generally encounter diverse market entry questions and considerations, which range from the need to complete local market documentation (Brazil and Taiwan), to agree to collateral being held onshore through a central counterpart (Brazil and India), to provide TD/TD-1 sale notifications (Taiwan and Malaysia) to the lending agent, to enable timely loan recalls to avoid naked sale regulations and penalties.

Regional and local market trading and operations are also important elements to effectively managing securities lending activity in these markets. Having a strong on-the-ground presence with expert knowledge is critical in managing settlement issues in these emerging markets that tend to operate automatic buy-ins and punitive penalties.

That said, every effort is made to ensure that emerging market entry follows, as far as possible, the traditional securities loan structure recognised by beneficial owners today.

Demand drivers per emerging and less developed established markets

The matrix (see bottom of page) provides a summary of the demand drivers for various emerging and less developed established markets. As already noted, the command of lending fees can be substantial, especially as international investment into these countries continues to grow and, augmented by increasing hedge fund activity, generate more stock loan activity.

What are the next emerging markets?

J.P. Morgan is currently monitoring several markets that are in different stages of stock, borrowing and loan evolution and testing borrower demand. This focus follows market and regulatory events in China, the Philippines and Indonesia where there are some signs of interest in attracting offshore participants in stock loan and borrowing by establishing a more recognisable market structure.

In addition, there is a need to constantly review and monitor frontier markets—where directional trading is currently only conducted synthetically or that have an aspiration to develop a financial infrastructure, such as the UAE.

While securities lending in emerging markets may appear a daunting leap into the unknown especially around operating practices and participation conditions, with the right partner it may be possible to dispel the mystery of lending participation and realise the revenue opportunities that can be derived. SLT

Market	Current demand drivers
Czech Republic	Demand is primarily yield enhancement as short directional trading interest is limited
Israel	Directional demand in the financial and chemical sectors
Poland	Yield enhancement with strong directional demand in the financial, energy, chemical and technology sectors
South Africa	Directional demand in the technology sector
Turkey	Directional demand in the financial and construction sectors
Thailand	General directional demand and settlement issue coverage
Brazil	General directional trading across all sectors and yield enhancement
Malaysia	Directional and convertible bond activity
Taiwan	Directional trading in the technology sector
Russia	Directional trading in the financial, consumer, gas oil and mining sectors

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On the horizon

James Slater and Georgina Lavers discuss how beneficial owners will have to bear the brunt of Dodd-Frank and Basel III's capital costs

What can you tell us about the shift in topics since the RMA conference began?

I've been attending the Risk Management Association (RMA) Conference on Securities Lending for close to 20 years now, and things have absolutely changed. The event used to be known as predominantly a networking conference, and there is still a very strong emphasis on that.

But I would say that it has gotten more serious post the financial crisis. The industry is dealing with a number of challenges in this segment of the market and more recently, there's an incredible focus around regulatory change and how that will impact the industry. How we will get all the members of the industry aligned, and how we can help influence the outcome, are of utmost importance.

Ten years ago, many of the sessions were not very well attended, as people were too busy networking, but now there is a much more workmanlike atmosphere. I see attendees who are taking notes, and who are generally very engaged with the actual content of the conference.

Similarly, a decade ago saw the regulatory focus make up only a small part of the overall agenda. It was usually one item and typically seen as the sleepy topic. There would be the occasional small regulatory change here or there, but now it is about real structural change. I would say nearly every panel at the upcoming conference will have a regulatory theme as it is a driving force that's shaping the markets.

What makes you keep attending the conference?

I would say that the conference is one of the core events that practitioners want to make sure they attend, alongside the International Securities Lending Association and Pan Asia Securities Lending Association conferences. Many conferences come and go, I don't know that there is any one that sticks out, has attendance or staying power like the RMA.

Why is borrower default indemnification so important to have?

For many years, beneficial owners, ranging from mutual funds to public and private pension funds, have relied on their lending agents to provide indemnification in order to provide some peace of mind, and to assist with their governance processes around ensuring that they have a safe and well-managed programme.

If you were to think about a small- or medium-sized pension fund, they will likely have a limited staff—it could be one person or it could be five people. For a lot of beneficial owners, to engage in a securities lending programme, they rely on their agent lender for managing the credit risk with counterparties.

As an agent lender, we've been very comfortable with that risk. I think beneficial owners that have put the time and energy into understanding this product don't believe that this a high risk activity. Securities lending transactions are fully collateralised with additional margin, they're mark-to-market every day, and, generally speaking, they are lending assets in order to extract intrinsic value.

For instance, if you're lending equities and taking cash as collateral, what happens if there's a terrible shock to the system? The equity markets are likely to fall, and so too will the value of the loaned securities. But the value of your collateral stays the same because it is cash, so you have more margin.

To reiterate, beneficial owners need such indemnification because it is not practical for them to do credit assessments on 100-plus counterparties to lend securities to, then come up with the dealing or credit lines. For a robust programme, they really rely on outsourcing that service to their agent. From a governance perspective, pension funds can go to their board of trustees and say that they are participating in securities lending transactions that are fully collateralised

(with excess margin), are marked-to-market every day, and all with a highly ranked lending agent and a reputable bank providing borrower default indemnification.

How will the US Dodd-Frank Act and Basel III affect indemnification?

In the past, the capital that agent lenders had to set aside for this indemnification was commensurate with the economic risk. It was a relatively low cost for agent lenders to provide capital for borrower default indemnifications. But under Basel III, regulatory capital associated with these indemnifications has gone up significantly, which ultimately increases the costs for the agent lenders that offer that service to their clients. This will be one of the topics at the RMA conference, from the perspective of how that rulemaking impacts activity and pricing going forward.

There are several different ways to address this. Agent lenders could try and charge the borrowers more for the securities, so they earn more. But the margins in a lot of areas in this market are smaller so the opportunities versus the practicality of charging more may be limited.

We could ask for more margin—additional collateral that would help reduce our own cost of capital for this service. It is possible for some transactions that this might be an option, but it ultimately only increases the cost of capital for the borrower.

If they have to put up more margin it will increase their cost, which probably is not all that viable in the long-term.

Ultimately it's the beneficial owner that will bear the cost as they enjoy the benefits. This may translate into a lower fee split for them going forward. For the beneficial owners that have valuable assets, the markets will find a way for them to continue on in a way that is consistent with their objectives and risk appetite.

Indemnified securities lending continues to play a vital role in the market as far as beneficial owners are concerned, and by extension agent lenders. But the rulemaking and implementation of regulatory changes will ultimately impact the costs of that indemnification, and the market must change to match it.

Section 165(e) of the Dodd-Frank Act deals with the amount of exposure an agent lender can have with one counterparty. Indemnification brings this into play for agent lenders—it's not a cost per se, but rather becomes a capacity constraint with each of the borrowers.

The rule basically says that a bank has a limit in terms of the amount of business that it can do with a single counterparty, and that limit will be a percentage of its overall regulatory capital.

Broadly, the regulators are working to reduce systemic risk from the markets and make them safer for the wider economy. That said, it has not been any easy adjustment for the markets and many challenges lie ahead.

At BNY Mellon, we recognise these challenges but also see an opportunity to work consultatively with our clients to deliver the holistic solutions and services that will support their overall investment strategies. This is a remarkable period for the markets. Our clients and counterparties are equally challenged and we are working hard to partner and support their changing needs. **SLT**

> “Ultimately it's the beneficial owner that will bear the cost as they enjoy the benefits. This may translate into a lower fee split for them going forward”

James Slater, global head of securities lending, BNY Mellon

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Data decisions

As the market continues to constrict, there will be a heightened demand for real-time applications that mitigate risk and provide better controls

We may have put the financial crisis from five years ago behind us, but the tsunami of regulation that has hit the beaches of the securities lending industry have been of epic proportions.

The next wave has been washed ashore with the recently distributed Financial Stability Board (FSB) paper entitled Strengthening Oversight and Regulation of Shadow Banking, with a strong emphasis on the importance of data collection, the granularity of data and the ability to connect to a trade repository entity appeared to take considerable priority. Out of the 11 'waves' of proposed recommendations, data amounted to nearly half.

The main points expressed are authorities should be collecting more granular data on securities lending and repo exposures among larger financial institutions with high urgency, regular snapshots of outstanding balances should be collected, and further work should be carried out on the practicality and meaningfulness of collecting trade-level data and the ability for the FSB to aggregate monthly data, which will assist in providing global trends of securities financing markets (eg, market size, collateral composition, haircuts and tenors).

The industry itself is well positioned in the data collection space. Today, several vendors provide services that have become industry

> "What may prove even more daunting is if regulatory desire to move into a 'real-time' model becomes reality. Today's data vendors do not have capabilities, at this present moment, to deliver real-time data across multiple regions"

Jonathan Lombardo, head of global sales, Pirum Systems

standards. Key concerns that may possibly be raised by regulators are: how authentic is the data being provided, what validation process does each vendor perform to cleanse data, how do we move towards market standardisation, and is there a growing appetite for real-time data collection?

The technical impact to individual organisations to be compliant with the above concerns, as well as their existing regulatory work load, may prove daunting. What may prove even more daunting is if regulatory desire to move into a 'real-time' model becomes reality. Today's data vendors do not have capabilities, at this present moment, to deliver real-time data across multiple regions. This therefore creates the need to either build new technology, which may take several years, or look for the possibility to outsource to an organisation that may have the required data set within its existing offering.

Information technology capacity at most buy/sell organisations is also stretched to its limitations, dismissing the likelihood that firms would build data feeds away from their existing data providers to meet regulatory requirements. Viable alternative solutions must be thoroughly investigated. Building on existing vendor infrastructure, which has the ability to produce the required data set, might be deemed the resolution of choice in this space. The decision would seem likely due to minimal IT build and the continued utilisation of a validated and vetted vendor/process already in play.

As the FSB recommends a granular collection of data, there is a possibility of focusing attention on the post-trade reconciliation provider. They require participants to supply and compare a significantly wider data set than that of the normal data vendor. This requirement increases settlement efficiency and creates a robust straight-through processing solution with full automation. A post-trade reconciliation provider that can provide this granular analysis in a real-time data set then becomes an even more valuable cog in the regulatory reporting process.

As daily real time files are being received for the ongoing reconciliation and post-trade automation service, no additional pipe work would need to be completed. The post-trade provider therefore becomes a single point of entry for not only the daily reconciliation but also as a distributer of data. The post trade provider acts in a centralised hub capacity allowing participants to route information to any repository or data vendor of choice with no additional IT build. By utilising an existing data provider, the ability to bring market standardisation increases dramatically and helps appease regulatory requirements. Post-trade automation providers also have an ability to deliver a clean data set due to their requirement to receive full trade files from participants, which addresses any concerns of accuracy from the regulators.

National/regional authorities looking to collect data should be eager to engage with data providers as it narrows their touch points within the industry. Authorities will also receive a level of comfort from data providers as they are widely considered industry standard covering a large segment of the market.

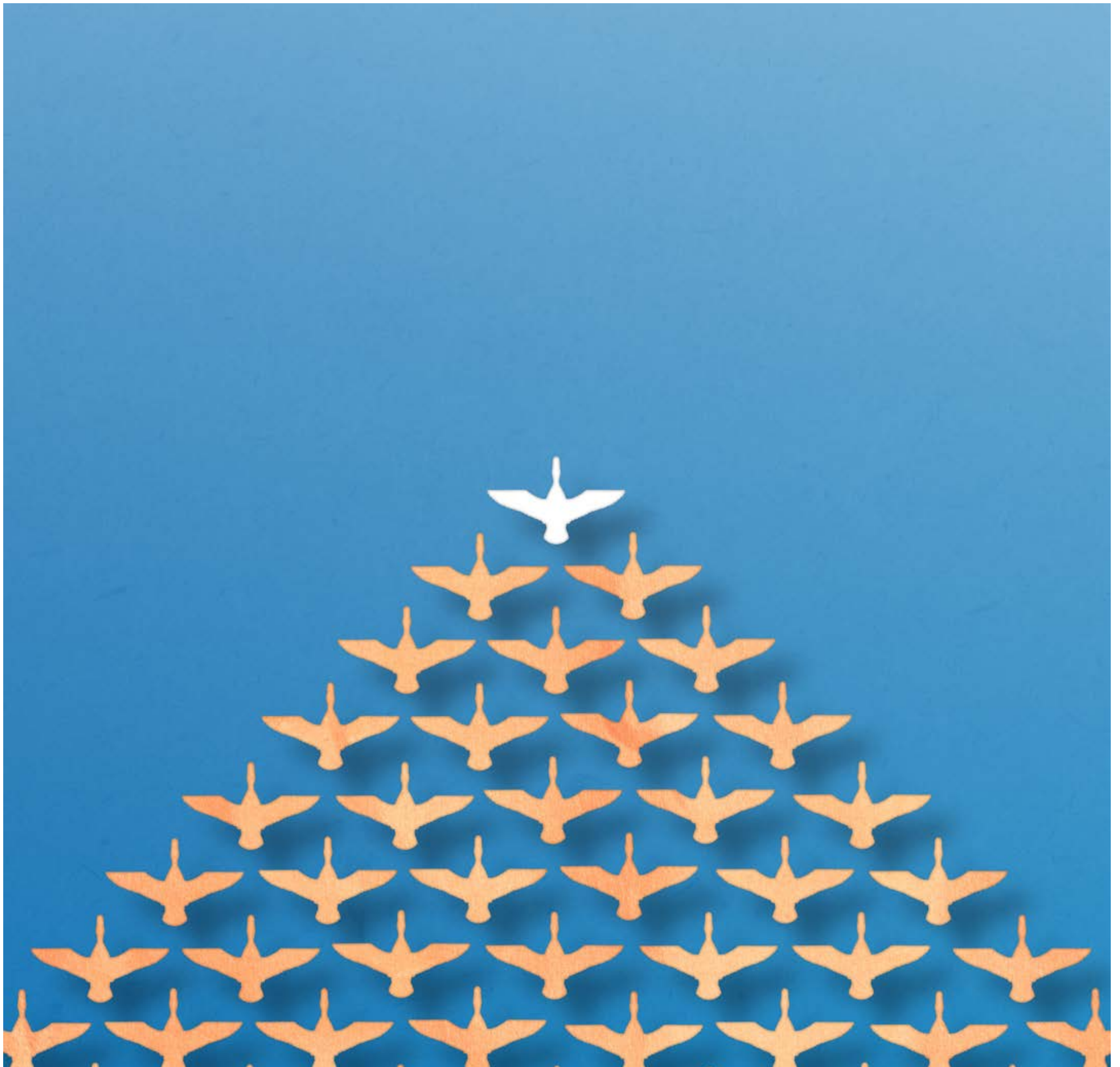
The recently announced strategic alignment between SunGard's Astec Analytics and Pirum Systems brings a dynamic solution to the market place. This alignment allows participants of both organisations, via Pirum's central hub structure, to benefit from a unique service offering that satisfies internal analysis demand and regulatory reporting requirements with minimal build and resource allocation.

Users of the Pirum Systems real-time service offering will have the ability to activate a newly established routing functionality that will directly send their own real time data set to Astec Analytics, which will then consume and provide enhanced analytics as well as an opportunity to provide information to regulators if required.

SunGard's Astec Analytics solutions bring global intraday rate and volume information on securities lending transactions to today's marketplace. Enhanced analytics and benchmarking tools for trading, performance measurement and programme management for market participants are also available, directly benefiting from Pirum's real time data set. Thus, it helps to increase transparency in the market and enables more effective trading.

Strategic alignments are critical for future growth and for the evolution of the market. Aversion to any infrastructural change and limited technology resources prohibit participants from building to match the ever changing dynamic of the fluid marketplace in a timely fashion. By utilising Pirum's central hub structure, participants technically outsource a portion of their development work, reducing overall implementation timelines. Customers further benefit from the 'network' effect where one connection, via a single portal, enables connectivity into all partnership structures developed by Pirum. Flexibility, nimbleness, and 'light touch' implementation are key differentials that will separate successful models from those that require individual pipe structures or highly customised development. The latter models will ultimately struggle in today's present environment of cost reductions and technology resource restraints.

Pirum will continue to work with its clients to develop and implement innovative solutions for today's marketplace. As the market continues to constrict, there will be a heightened demand for real-time applications that mitigate risk, provide better controls and bring overall operational efficiency to their institutions via a single portal access route. Organisations will look to embed these practices across all business lines as the market continues to ride the 'waves' of change. **SLT**



Leading from the front

SunGard has always been at the forefront of technical advances in securities finance, as Timothy Smith tells Georgina Lavers

What have been some particular RMA conferences that stood out for you?

Each conference has had distinct and different features to it. However, the ones that stand out the most are usually held after certain market events that require industry input and reaction. Perhaps the one that stands out the most though is the one that was not held at all—2001, in the wake of 9/11.

What kinds of developments in securities finance technology have you seen since the RMA began?

That is a huge question and worthy of an article all of its own! The technology now is totally different to that in place 30 years ago. This has been the result of several factors. Firstly, regulatory scrutiny and reporting requirements have meant that technology providers have

had to respond to and usually anticipate their clients' needs for automated reporting. Secondly, the expansion in numbers of instruments and countries involved in lending has required much more sophisticated technology.

Thirdly, the drive for greater integration between client business units has meant the need for greater integration of diverse systems. Finally, the increase in the size of the business has meant that technology now has to undertake automated transactions, make efficiency and cost savings suggestions, and identify profitable opportunities. Without technological advances in all these areas, it would have not been possible for the business to thrive, or maybe even survive.

How do you think SunGard has helped with technology advancements?

SunGard has always been at the forefront of technical advances in securities finance. The main way by which SunGard has helped the industry is by leveraging its in-house expertise to work in partnership with the industry to help identify and anticipate the needs and respond to them.

This may sound glib, but it very much the personal expertise of the SunGard team that has ensured these advances and the continued dialogue with the clients. Specific examples of this would be the development of agency lending disclosure reporting technology, through automated marking-to-market and automated lending, to the handling of repo, lending and risk on an enterprise scale.

What is the definition of transparency, and how much is desired by regulators?

There are many initiatives, both as a result of the US Dodd-Frank Act and the Financial Stability Board regarding the desire to have greater transparency in securities financing to enable the identification of perceived risks to the market structure from 'shadow banking' activity. The concepts are still being ironed out but in the final analysis the information at whatever granularity is required by the regulators is pretty much all there already through the systems of SunGard and others.

The question remains as to what level the regulators will require information and whether it will be at a transactional level by country of origin of the security or from the perspective of the counterparties involved and at an aggregate level.

How have you seen regulators' attention on derivatives contracts (and the subsequent higher levels of collateral needed) affect the way that firms are doing business?

It is fair to say that the anticipated need for more collateral has already been identified by us and our clients. However, there is still a large amount of uncertainty over whether the general collateral business will remain at the same levels or will be impacted negatively by such regulatory or fiscal changes such as the European Financial Transaction Tax. That is what is going to drive change and we are positioning our systems to respond to whichever way it goes.

Do you have any concerns over the Federal Reserve's proposed quantitative restrictions on the interconnectivity of large financial institutions?

I am naturally well aware of our clients' concerns in this area. The presentation of the arguments is naturally a matter for the industry bodies such as the Risk Management Association and the Securities Industry and Financial Markets Association, but SunGard will seek to mitigate the administrative difficulties should they arise for our clients.

It is of course a truism that any such restrictions will restrict the amount of business being undertaken, which itself will have an impact on market liquidity and thus stability. To that extent I am naturally concerned both as an individual and a practitioner. For example, agent lenders have been worried that it may potentially restrict them to provide borrower default indemnification.

The whole area of indemnification has been under discussion notwithstanding any of the regulatory restrictions currently being discussed. Many argue that such an indemnification is largely unnecessary given collateral and system monitoring capabilities such as those offered by Loanet.

Industry discussion has been going on for some time now over the offering of this indemnification and perhaps leading to a choice of differing revenue splits depending upon levels of service. This will in itself require further system enhancements but does give greater choice to the agents and their beneficial owner clients. **SLT**

> "The increase in the size of the business has meant that technology now has to undertake automated transactions, make efficiency and cost savings suggestions, and identify profitable opportunities"

Timothy Smith, executive vice president, SunGard's Astec Analytics

Schooners in the sea of supertankers

Firms in the securities lending business that more closely resemble a start-up than a big-box store figure to be a key part of the business' future

Rory Zirpolo, managing director, Cowen Equity Finance

Since the financial crisis last decade, the industry has undergone a number of changes, only a few of which are cosmetic in nature. They are easy to notice, having filtered into the securities lending marketplace. Bankruptcies and mergers have reduced the number of firms in our landscape and created lingering credit concerns in considering how to grow a securities lending business. The most unfortunate reality is that shrinking revenues for the industry have meant that everyone's team is smaller. More time is spent managing the day-to-day business and less is spent in pursuit of new growth opportunities, which includes the onboarding of new accounts. Anecdotally, it can take several years to sign a new account in today's environment, a sign that we have lost focus on moving forward.

Providing further headwinds are the higher capital costs associated with balance sheet usage, which is particularly problematic within larger firms. The balance sheet is a limited resource, and that limitation creates competition between groups within a firm for its use. Securities lending has run into limitations because of narrower (and still narrowing) spreads with limited re-investment opportunities in this zero-interest rate environment. Adding to this dilemma is a new regulatory regime between the US Dodd-Frank Act (however that's implemented) and Basel III. With a lot of the focus on regulation directed towards the prevention of institutions from becoming 'too big to fail' (however perverse the implementation is), it is firms not targeted for their scale that are coming out ahead since the end of the financial crisis. With the spirit of balance sheet constraints and new regulation designed to sum all like-exposures in a particular firm (to an asset class, to counterparties, etc), smaller shops with a narrower range of core competencies are less thoroughly affected by those new constraints.

More specialisation narrows global exposures, which means they can be managed in a more effective way at the business level, rather than from up-on-high. What's possible in a more focused environment takes us back to more traditional ways of looking at finance: taking risk in ways that make the most sense and breaking up systemic risk by only being a small part of the system.

This way of thinking can strengthen securities lending. It is no secret that counterparty behaviour matters in our business. While shares of the same stock, borrowed from two counterparties, are ultimately fungible, the value behind stability in supply and stability in rate makes that a nuanced question to answer. Nodal liquidity of demand to borrow a particular stock and the constant struggle to provide best execution for hedge fund clients require us to pay close attention to where stock is sourced.

Firms more dedicated to securities lending have the ability to focus on the most difficult trades and to find tailored solutions to their counterparties' needs by being able to explore a broader range of opportunities, provide greater transparency, and pursue analytics and technology-based solutions due to their greater level of nimbleness.

While a small firm's lack of size comes with inherent challenges around credit worthiness, vehicles such as OCC's hedge programme allow for credit disintermediation to allay those concerns and open up doors for a broader range of business to be done. This proves to be essential with the counterparty concentration limits being a part of Dodd-Frank that sticks out for securities lending. The need to find more counterparties and not fewer is likely to become a key part of compliance once Dodd-Frank is implemented. Indeed, firms in the securities lending business that more closely resemble a start-up than a big-box store figure to be a key part of our business' future. **SLT**

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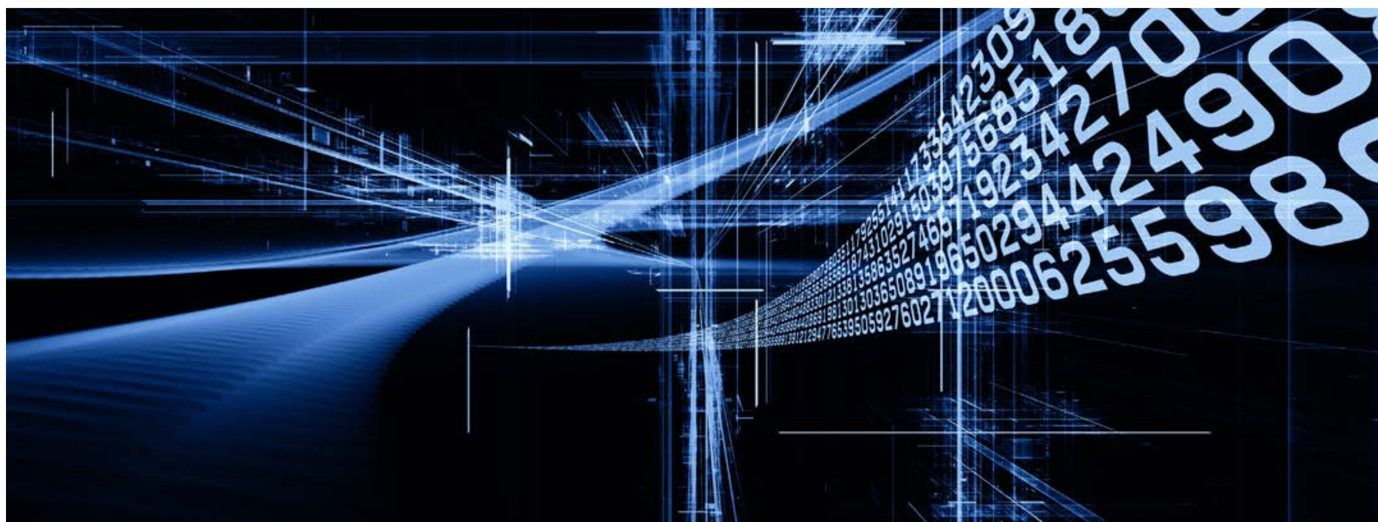

A product of change

Edward Marhefka tells Mark Dugdale how a relationship-driven business has surrendered to a new, data-centric way of thinking

How is Markit working to develop its product sets to meet changing client demands?

Now that Data Explorers is a part of Markit, we're able to draw on a greater pool of expertise to integrate data sets which we believe are complimentary to our core offering. Dividends forecasting, exchange-traded product (ETP) constituent as well as bond pricing and liquidity are all areas where Markit offers insight and transparency and are now available within the Markit Securities Finance service. We continue to add new data sets, and we are making existing data faster, higher frequency and more granular. We had a stand out product to begin with, but being able to integrate with Markit makes it much richer.

There are many firms, especially on the long-only side, that are interested in using this broadened data set to enhance their asset allocations decision making process. We feel that we can offer value to them directly through an appropriate data set, but that this also supports the entire value chain by increasing demand and knowledge around the securities finance market.

In our core securities lending market, we are focused on meeting customers' demands. Not just for more transparency, but for more information about how to make money and analyse trades and their books. We continue to develop our products to meet users' workflow needs as well as simply providing the data. One area in particular where we can optimise workflow and decision making is around collateral. There are huge opportunities to help the industry meet collateral needs. We're still at early days—there's a lot to be done and we're doing it.

What's in the pipeline that readers should be aware of?

We are rolling out a new front-end product soon. It allows users to view everything in one place and is a lot friendlier to use. We've taken feedback from clients and it's been demo'ed at some of the conferences, including the International Securities Lending Association conference earlier this year, and we're going to be doing more at the Risk Management Association on Securities Lending conference.

We understand our clients don't work in a vacuum. They rely on information across several markets, not just stock loan, to inform their decision making and they need actionable content rather than just raw data. This new front end will be part of the standard Markit web service and will continue to incorporate information we feel is relevant to our users—a good example being corporate actions, in presenting a holistic view of the market.

We also continue to develop our benchmarking solutions. We have already broadened the means to access them to include feeds and Excel. Initiatives are well underway to not only improve the user experience around benchmarking but to enhance some of the core functionality based on user feedback.

How is take up of your various product sets, and what do you think this says about the market at this moment in time?

Clients are still using our data for their core needs. They need to know availability, cost to borrow, reporting on lending programmes, etc, and the quality and the breadth of the data is as important to them as it's ever been. Nothing has changed from that perspective—if anything, it's become more robust.

We're investing to improve our data so that clients can consume it in the ways they want, be it through a third party data vendor such as Bloomberg, or via Excel, web-browser or a data feed API. Our recent announcement with Olivetree is one example that allows joint clients of both companies to access our data through Olivetree's OTAS platform.

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Chelsea Potvin
Business Analyst

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Anything that makes it easier for them to take the data, ingest it, and then be able to use it to improve their decisions.

But there are a lot of regulatory reforms, which means that securities lending is playing an important role in matching securities with the people who need them. That's continuing to evolve.

For example, only about a third of the US Dodd-Frank Act has even been implemented or written, so there is a lot that is going to change over the next few years with that. We're prepared to meet that, whatever that framework is going to be.

Furthermore, the big thing at the moment is collateral. To that end, we struck a deal with BNY Mellon's triparty business in March. In the US, more than 80 percent of triparty trades are settled through them and we have a thick data set that we are working through.

We think that as collateral continues to be used more often to fund trades, being able to get more granular collateral data that shows how it is priced will make it more transparent.

That is key because there are many firms that just don't participate globally in the use of that collateral. Being able to add some transparency for that group, as well helping current users of collateral price trades more effectively and have a better understanding of flows, is very important.

How have clients' data needs changed since you started out in the business?

About 30 years ago, nobody had the sort of data that we do today. The business was largely relationship-driven, over the counter and non-transparent, and that's changed over the last 10 to 15 years, in particular with Data Explorers and now Markit having the first and best foothold in the space.

This evolution is not simply about a rate or on loan number, but our clients have demanded, and we believe we have delivered, a rich analytical library of information—be it concentration and market share analysis, active availability or a trading benchmark rate.

Clients using short interest data have been pleased with that development. Thirty years ago you only knew what was on your books and maybe you had a relationship with someone who would give you a variation of the truth about what was happening on their books. Now, data is available at the push of the button from Markit. You can compare and see what's going on in an anonymous way, which is totally different from what used to happen.

Clients using short interest data have been pleased to see the depth of the transparency and analysis that's available, which helps them better manage risk and feeds into to their decision making and trading decisions.

But customers are now asking for more. They still want reliable and consistent data, but they also want to understand the linkage across asset classes, which is why we've integrated other sets—repo, bond liquidity and ETFs—and that opens up new investment opportunities for them beyond just short interest. They're excited about it. **SLT**

"We think that as collateral continues to be used more often to fund trades, being able to get more granular collateral data that shows how it is priced will make it more transparent. Being able to add some transparency, as well as helping current users of collateral to price trades more effectively and have a better understanding of flows, is very important"

Edward Marhefka,
Managing director and co-head,
Markit Securities Finance

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For further information, please contact Rory Zirpolo at (646) 562-1481

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Company description

The team at Anetics have developed and host a suite of software tools that handily connect borrower with lender and automate the workflow associated with securities lending. Any of the functionality listed here can be deployed for your firm on-demand.

- Collate all known sources of both supply and demand into one central utility enabling immediate lookup and cross-referencing of inputs from counterpart availability feeds, e-mail lists, in-house needs and excess available to lend.
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Company description

Global Collateral Services offers a comprehensive suite of capabilities to help our clients address their collateral, liquidity and securities financing needs. As they face evolving global regulations and rapidly changing market requirements, clients can leverage BNY Mellon's products and services to better manage counterparty and market risk in their collateral transactions, engage in more investment opportunities to help maximize their investment returns and access new financing alternatives.

BNY Mellon currently services $2 trillion in global collateral (including tri-party repo collateral worldwide) and approximately $100 billion in assets through its Liquidity DIRECT SM investment portal, and operates one of the industry's largest securities lending programs, with $3 trillion in lendable assets.

BNY Mellon is a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment management and investment services in 35 countries and more than 100 markets. As of June 30, 2013, BNY Mellon had $26.2 trillion in assets under custody and/or administration, and $1.4 trillion in assets under management. BNY Mellon can act as a single point of contact for clients looking to create, trade, hold, manage, service, distribute or restructure investments.

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Company description

BondLend is a securities finance technology platform created specifically to support the fixed income borrowing, lending and repo community. BondLend's Trading and Financing Services provide straight through processing automation for borrowing, lending and repo using a common standards-based protocol and infrastructure processing eliminating manual processes, freeing up valuable resources.

BondLend comparison services add efficiency and reduce the risk of potential collateral management errors. Comparison services are security type agnostic and support global usage for cash and non-cash records. BondLend's trading and post-trade services help drive down unit costs and increase efficiency. It allows firms to free up resources to expand their market presence, increase trading volumes, and reduce error rates all without additional cost.

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Company description

Broadridge Financial Solutions, Inc. (NYSE:BR) is the leading provider of investor communications and technology-driven solutions for broker-dealers, banks, mutual funds and corporate issuers globally. Broadridge's investor communications, securities processing and operations outsourcing solutions help clients reduce their capital investments in operations infrastructure, allowing them to increase their focus on core business activities. With more than 50 years of experience, our infrastructure underpins proxy voting services for over 90% of public companies and mutual funds in North America, and processes more than $4.5 trillion in fixed income and equity trades per day.

Broadridge FinancePro Global offers a global multi-asset financing solution designed to help financial institutions optimize repo and securities funding activities enterprise wide. FinancePro Global enables comprehensive tracking and management of financing transactions throughout the entire trade lifecycle. Traders have real-time access to collateral inventory positions, and can easily navigate screens and enter information for quick deal entry, deal collateral allocation and transaction maintenance. Our advanced reporting and workflow options provide users with a streamlined approach to managing large amounts of complex data.

For more information about Broadridge and our proven financing solution, please visit our website.

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Company description

Cowen Equity Finance (CEFG) is a self-clearing broker dealer that specializes in the sourcing of domestic and international equity and fixed income securities for the purposes of securities lending. A member of the OCC and NSCC, CEFG works with over five dozen counterparties to provide best execution and customized solutions to our counterparties.

CEFG's team averages in excess of 20 years of experience and has excellent breadth and depth of relationships in the securities lending community. CEFG leverages a proprietary technology platform that allows us to best identify sources of supply and demand. Our careful approach to risk management enables us to make the best business-case decisions while minimizing operational risk.

CEFG also participates in the equity and listed options markets to find additional sources of supply and demand to better facilitate securities lending transactions. We feature a robust analytics platform to identify securities lending market trends and best understand our counterparties' tendencies.

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Company description

DataLend is the securities finance data services division of EquiLend, providing the market with global data across all asset classes.

This offering extends EquiLend's position as the standard of excellence in the securities finance industry.

DataLend builds on EquiLend's strengths in technology and benefits from its economies of scale. EquiLend, as a regulated trading platform, is a trustworthy repository for sensitive securities finance data.

Our innovative approach enables our clients to have a direct hand in shaping the evolution of the securities finance industry by producing market data that is best suited to serve the needs of industry participants.

The DataLend mission is to be the leading provider of securities finance market data.

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Company description

EquiLend is a leading provider of trading services for the securities finance industry.

EquiLend facilitates straight-through processing by using a common standards-based protocol and infrastructure, which automates formerly manual trading processes. Used by borrowers and lenders throughout the world, the EquiLend platform allows for greater efficiency and enables firms to scale their business globally.

Using EquiLend's complete end-to-end services, including pre- and post-trade, reduces the risk of potential errors. The platform eliminates the need to maintain costly point-to-point connections while allowing firms to drive down unit costs, allowing firms to expand business, move into different markets, increase trading volumes, all without additional spend. This makes the EquiLend platform a cost-efficient choice for all institutions, regardless of size.

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Helix

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Company description

Helix Financial System's newest product, HelixSL, is the future of Securities Finance technology. We offer a suite of modularised, web based, applications built to support the daily activities of domestic and international stock loan and repo desks. Each of our eight modules, can function together as a robust, integrated whole or can be deployed independently for firms with more unique needs. Your company wins by paying only for the features it needs. Not only does this make HelixSL the most cost effective solution but the method of delivery improves the relevance, usability, and performance of our product allowing you to get the most value from your technology budget.

All Helix products and modules can sit on top of the same technical architecture so we are able to easily, and in real-time, aggregate specific shared data points across all your business lines, such as equity stock loan and fixed income repo. This technology and its inherent flexibility also allow Helix to offer a scalable solution from large multi-billion dollar stock loan and repo desks down to the independent and specific needs of a single department within a firm. Regardless of the size of your business and selection of modules, we are always providing big picture reporting regarding firm funding, collateral pool, market and credit risk, and profit and loss. This ability to give both detailed and big picture information in a single solution is unprecedented in today's securities finance and lending landscape.

J.P.Morgan

J.P. Morgan

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Company description

J.P. Morgan's Corporate & Investment Bank is a global leader across banking, markets and investor services. The world's most important corporations, governments and institutions entrust us with their business in more than 100 countries. With $18.2 trillion of assets under custody and $393 billion in deposits, the Corporate & Investment Bank provides strategic advice, raises capital, manages risk and extends liquidity in markets around the world.

For 35 years, J.P. Morgan has been helping clients to enhance returns with securities lending programs tailored to their unique requirements. Our clients' individual lending, collateral and reinvestment needs are met through a comprehensive range of flexible solutions supported by our leading technology infrastructure, our global expertise and the strength of our firm.

Key benefits include:

- Flexibility and Customisation—work with J.P. Morgan to design a program that specifically meets your unique requirements
- Maximum Control and Transparency—utilise separate account solutions tailored to your unique investment guidelines, counterparty eligibility constraints and reporting needs
- Indemnification Against Borrower Default—supported by J.P. Morgan's fortress balance sheet
- Comprehensive Lending Options—choose from agent-discretionary, client-directed, auction, exclusive and principal programme arrangements
- Premier Risk Management—supported by independent borrower and issuer credit reviews performed by J.P. Morgan's Broker-Dealer Services and Asset Management

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Lombard Risk

Lombard Risk

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Company description

Lombard Risk, founded in 1989, is a leading provider of integrated collateral management and clearing, risk management and regulatory compliance solutions to the global financial services market.

COLLINE®—proactive collateral management and clearing for today's 'new world' of global banking.

A state-of-the-art, web-based solution designed by experienced business practitioners for end-to-end, cross-product collateral management and clearing.

COLLINE provides a single platform for calculating and mitigating exposure risk for multiple products and entities.

With an enhanced repo and securities lending solution, OTC and clearing, ETF, inventory management and optimisation, COLLINE offers the functional flexibility and firm-wide data consolidation options to enable clients to manage their own requirements according to individual priorities.

Other functional benefits include:
Master netting, management information reporting, dispute management and electronic messaging.

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Company description

Markit is the leading provider of securities lending data, tracking short selling and institutional flow across all global markets.

Through its history spanning over 10 years the company has brought transparency to the market, helping beneficial owners and custodians benchmark the effectiveness of their securities lending activities. Our analytics are used by lenders and borrowers to assess rates, availably, squeeze risk and make better informed investment decisions. Content is sourced directly from market participants including prime brokers, custodians, asset managers and hedge funds.

The database covers:

- Over 3 million intraday transactions with $2 trillion on loan
- $14 trillion of securities in the lending programmes of over 20,000 institutional funds
- 10 years history

The service is available through datafeeds, an API, web applications and an Excel toolkit with integrated datasets including Markit's dividend forecasting and ETP and US dollar Repo data. The securities lending data is available on the major market data platforms including Bloomberg, FactSet, S&P CapitalIQ and Thomson Reuters.

Markit Securities Finance Consulting

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Company description

Markit provides performance benchmarking, exposure calculations and structural analysis for securities lending programmes.

The consultancy team has many years of consulting and practitioner experience in securities finance and program analysis. The team draws on the most globally comprehensive daily stock loan database available dating back to 2002. It tracks $2 trillion on loan from a pool of $14 trillion of securities in the lending programmes of over 20,000 institutional funds. Securities finance consulting provides fully independent research and advice to institutions already active, or considering becoming active, in the securities finance market. This includes repo, securities lending and prime brokerage activities.

With a reporting infrastructure built around the unique securities finance data set, the consulting team have a proven track record in providing:

- Performance benchmarking, covering periodical securities lending performance compared against a predefined, comparable peer group
- Programme evaluation, including indemnities, exclusives, fee splits and compliance
- Exposure reports, spanning counterparties, loan/collateral matching and peer group comparisons
- Collateral reviews and spotlight surveys

Northern Trust

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Company description

Northern Trust Corporation (Nasdaq: NTRS) is a global leader in delivering innovative investment management, asset and fund administration, fiduciary and banking solutions to corporations, institutions and affluent individuals.

For more than 120 years, we have evolved with the changing needs of our clients and the world. Clients at Northern Trust have the opportunity to optimise the value of their portfolios by establishing a Securities Lending programme tailored to their individual risk and return profile. Leveraging superior investment management capabilities, Northern Trust is a leader in the Securities Lending industry, operating trading centers throughout the United States, Europe, Canada and Asia/Pacific to take advantage of markets throughout the world 24-hours a day.

Northern Trust is consistently recognised as a top lender, maintaining an exceptional 30+ year track record, and holding top positions at the RMA, ISLA, PASLA, CASLA and Equi-Lend. Northern Trust tailors our clients' programmes to their specific needs, fully consistent with our culture of putting clients first in all matters.

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Company description

Pirum provides highly innovative, functional and reliable electronic services operating in automating post-trade processes in the equity and fixed income securities finance markets globally with a focus on service excellence.

Financial Institutions from around the world have responded to Pirum's creative approach by joining the secure online community. They have increased processing efficiency, reduced operational risk and improved profitability by using Pirum's services to reduce manual processing.

Pirum's Classic Service delivers:
- Contract compare
- Billing compare
- Billing delivery
- Daily position reporting
- Income claims

Pirum's Real-time Service delivers new levels of automation and straight-through processing to the industry, streamlining manually intensive and time-critical processes throughout the day and covers the following:
- Marks automation
- Exposure reconciliation
- Automated returns
- Automated payments
- Real-time contract compare and pending compare
- Automated triparty RQV processing
- CCP gateway

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Company description

Stonewain Systems Inc. is an independent provider of world class software and solutions for the securities finance industry. Our growing customer base, comprised of the leading names in the industry, is a testament to our commitment to preserving years of domain knowledge, integrating emerging needs, and adopting the latest technologies in the field of securities finance. Our proven product platform, reliable services, and innovative solutions are creating a new benchmark for the evolving face of securities finance industry.

Stonewain's platform offers a comprehensive, fully integrated solution with a high level of industry specific functionality, leading edge technology, and automation. This scalable, seamlessly-integrated solution results in significantly reduced cost, higher operational efficiencies, accelerated workflows, faster trading, and improved overall risk management and control.

Stonewain services and solutions:

- State of the art securities finance platform
- Customised enhancements and software solution development
- Implementation and integration
- Software support services

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Company description

SunGard provides best of breed solutions for all aspects of securities finance and related businesses. We help a broad range of participants address their stock borrowing and lending, repo, synthetic finance, collateral management and prime finance technology requirements.

Whether you are on the supply or demand side of the securities finance business, SunGard helps you maintain agile growth and run smarter operations by supporting you in:

- Increasing profitability, improving transparency and making smarter decisions throughout the global trading day
- Expanding your business through support of a broad range of product types and markets
- Controlling operational cost and increasing the efficiency of your business
- Managing risk and holding down the cost of collateral/capital usage

SunGard's solutions for securities finance allow you to automate your entire operation: from order routing, trading, real-time positions management, operations, accounting, settlement, transaction analytics to trade automation services. Our solutions are used by more than 140 of the world's leading financial institutions, including the world's 10 largest banks.

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Company description

SunGard's Astec Analytics offers the most up-to-date rate and volume information on securities lending transactions globally through intraday transactional data. It also provides analytics and benchmarking tools for trading, performance measurement and program management to global financial institutions involved in investment management and securities finance.

Astec Analytics customers are able to see on-screen streamed and analysed data for the previous 48 hours, backed up by online trend analysis of up to seven years.

Astec Analytics unique intraday data offering allows you to:

- Access continuously updated information on global securities throughout the trading day
- Be alerted to stocks movements and adjust strategies in real-time
- Maximise opportunities and spot securities as they become hot
- Reduce risk by predicting stocks with potential recalls or short squeezes
- Make sure supply/demand channels are available and rebates/fees represent the best execution possible

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Company description

SunGard Securities Finance Services offer a flexible business model that allows our customers to remain focused on their core competencies and lets SunGard concentrate on providing what it does best: Highly trusted implementation, integration, support and development services for the management and improvement of our customers securities finance technology and processes.

SunGard Securities Finance Services Team offers the following Services and Solutions:

- Implementation
- Integration
- Application & Business Migration
- Training Services
- Product Upgrades
- Reporting Suites
- Functional and Non-Functional Testing
- Dedicated Support including: Managed and Hosted Services
- Dedicated Development

SunGard is a Fortune 500 company with annual revenue in excess of $5 billion, serves more than 25,000 customers in more than 50 countries, including the world's 25 largest financial services companies.

OCC

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Company description

OCC is the world's largest equity derivatives clearing organization. In 2012, OCC cleared 57 percent of all US exchange-listed derivatives.

For 40 years, OCC has provided high-quality clearing and settlement services and sound risk management with unsurpassed cost effectiveness for the listed options market. Today, the protections of our financial guarantee and central counterparty role extend beyond listed options to financial and commodity futures, security futures and securities lending.

OCC's role as a trusted industry utility is built upon our commitment to excellence in risk management and the strength of our financial guarantee, which allows us to stand behind every trade that we clear. OCC's three-tiered system of financial safeguards includes margin requirements, a clearing fund and rigorous membership standards. This system allows OCC to provide stability during times of unexpected events in the derivatives markets.

OCC is the foundation for secure markets.

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Company description

Trading Apps has a track record of success in developing and deploying cutting edge software to meet the demands of global investment banks, hedge funds and other wholesale financial institutions.

By leveraging our robust application building platform known as Glass, Trading Apps brings immediate return on your investment and tangible results, whether it is identifying opportunities in your trading book or reducing operational inefficiencies.

Contact us to learn more.

CENTRAL COUNTERPARTY GUARANTEE.

UNSURPASSED RISK MANAGEMENT.

For nearly 40 years, OCC has provided high-quality clearing and settlement services and sound risk management at the lowest possible cost for the listed options market. Today, the protections of our financial guarantee and central counterparty role extend beyond listed options to financial and commodity futures, security futures, and securities lending.

THE FOUNDATION FOR SECURE MARKETS.

theocc.com

"EquiLend has proven to be a **comprehensive** service provider consistently addressing our complex securities financing needs."

John Stracquadanio
Head of Global Prime Finance
Scotiabank

We implemented EquiLend in conjunction with a number of significant new clients on our prime brokerage platform. Overall trading increased 40% since that time, and we are now utilizing EquiLend to conduct over 80% of our electronic auto-borrow business.

EquiLend's willingness to listen to the market and understand what the industry wants or needs will ultimately allow them to continue to provide innovative enhancements that are relevant to borrowers and lenders.

OUR INNOVATION. YOUR ADVANTAGE.

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EquiLend LLC, EquiLend Europe Limited, and EquiLend Canada Corp. are subsidiaries of EquiLend Holdings LLC (collectively, "EquiLend"). EquiLend LLC is a member of the FINRA and SIPC. EquiLend Europe Limited is authorized and regulated by the Financial Conduct Authority. EquiLend Canada Corp. is authorized and regulated by IIROC. All services offered by EquiLend are offered through EquiLend LLC, EquiLend Europe Limited, and EquiLend Canada Corp. EquiLend and the EquiLend mark are protected in the United States and in countries throughout the world. © 2001-2013 EquiLend Holdings LLC. All Rights Reserved.