Powering the flow of global capital
Capital markets investor insights
What is driving today’s global capital marketplace?

By Satvinder Singh, head of Global Securities Services and head of Global Transaction Banking, EMEA (ex. Germany)

In the summer of 2016, Deutsche Bank Global Securities Services commissioned a survey of 200 market participants, to examine what was driving the key players in the industry and influencing their strategic thinking.

Volatility remains top of the list for more than half of the institutional investors, banks, financial sponsors, brokers and sovereign wealth funds we surveyed. But beneath that turmoil, they highlighted very specific challenges and opportunities.

Regulatory change remains a burden for many, but the right regulations are being welcomed. Technology threatens to disrupt the market as a whole and – in the case of blockchain – that disruption may be coming sooner than many think. And emerging markets that have been the most active in developing their capital markets are expected to return to form.

The right regulations
Regulation was clearly a pressing concern for respondents in our survey. This isn’t necessarily a surprise – we’ve heard this from clients and at conferences, and it certainly rings true from our own perspective as a business serving the industry.

Regulatory change has always been a catalyst for strategic shifts, both for good and bad. For many in the industry, this represents a cost, but our findings reveal a more nuanced perspective: instead of a threat, regulatory change is now being viewed by many as an opportunity to improve settlement, liquidity and collateral funding. For example, 62% felt that Basel III brought the most benefits to the overall financial system, followed by Solvency II (48%) and AIFMD (34%).

At Deutsche Bank, we try to view the regulatory landscape through a fresh lens, one of opportunity, and it’s clear that others in the field are beginning to see the possibilities on offer.

Technology today and tomorrow
This same dichotomy between threat and opportunity can be seen in our respondents’ views
on technology, which has been a challenge for the industry over the years.

Cybercrime is a prime example of a threat that continues to face the industry and is one that requires decisive action.

Everyone working in the industry has a duty to ensure that current platforms and system architecture are watertight. At Deutsche Bank, we have done everything possible to make sure that cybersecurity is our number one priority – but this is only part of the story.

The second part is focused on the future, on our ability not only to adapt to new technology and platforms – from TARGET2-Securities (T2S) to distributed ledger technology – but to understand their potential for ourselves and our clients. And that means conducting our own research. We’re investing in real ideas and while they may not all change the world, they could be a catalyst for something remarkable.

We’re collaborating with both infrastructure and fintech experts from across the market, to discover how digital assets and digital enablers can address process opportunities and the management of an asset through its life cycle. In our analysis, we are exploring many great opportunities in the midst of technological concepts.

Based on our survey, the industry understands this as well. For example, 51% of respondents are positive about their experience using T2S for settlements. It is a nascent platform and, as time passes, I expect that number will increase, because T2S fundamentally shifts the way our clients look at post-trade Europe.

Emerging markets
This search for opportunity is perhaps most visible in our survey responses on emerging markets.

People continue to be excited by emerging markets because, even in a downturn, China, India, Indonesia and others are still enjoying 7–9% growth. The growth in European markets is somewhat tepid by comparison, while the seeds for strong growth can be seen in the US.

There’s also untapped potential in emerging markets. Regulators hope to do more with their capital markets and that’s where the real opportunity lies. Consistent growth rates, coupled with a local desire to be more open and to introduce more asset classes, more trading strategies and therefore more investors in those countries – all of these make emerging markets that much more attractive.

Conclusions
Overall, one message keeps coming through loud and clear in our research: the industry has to adapt its strategic thinking if it is going to cope with the pace of change in capital markets. And the results of our survey show that market participants understand the challenges they face and are prepared to adapt in their pursuit of opportunity.
Key findings

1. The market welcomes the right regulations

Most beneficial regulations
- Basel III 62%
- Solvency II 48%

Least beneficial regulation
- FATCA 53%
  (Also rated as the most burdensome)

Greatest concerns regarding the changing regulatory environment
- Increased cost 43%
- Reduction in liquidity 31%
- Increased counterparty credit risk charges 26%

2. Blockchain is coming sooner than you think

87%
Blockchain and distributed ledger technology will have an impact on the market for securities services.

78%
This technology will be actively used within the next six years.

38%
Blockchain could reduce the cost of providing securities services by more than 20%.

48%*
Systems failure (and subsequent market disruption) is the most important risk that blockchain technologies could reduce.

*Respondents were asked to select top two options
Emerging markets are due a revival

54%
Emerging markets will deliver growth rates last seen during the 2001–2011 boom within the next four years.

62% *
Regulatory hurdles are among the greatest challenges when carrying out securities transactions in emerging markets.

76%
A lack of capital markets infrastructure deters them from operating or investing in otherwise attractive emerging markets.

88% *
India/South Asia is the most attractive region for long-term growth prospects.
The market welcomes the right regulations

Regulations may be part of life for both investors and issuers these days but that doesn’t mean they’re always seen as a burden.

What’s keeping the buy-side awake at night? Volatility. Macroeconomic uncertainty is preoccupying investors more at the moment than the low return environment or changes in regulations (Figure 1).

This shouldn’t come as a surprise, given the unpredictable nature of global markets right now. Nor should the focus on low returns, which usually follows. As the COO of a Dutch institutional investment firm says: “Our biggest concern is the amount of volatility in the market. Growth in developing countries is quite low and getting returns has become tough.”

What is surprising is the relative consensus on regulatory change. For example, from a list of current or impending financial sector regulations (Figure 2), survey respondents rank Basel III the most likely to bring the most benefits (62%) followed by Solvency II (48%) and Europe’s Alternative Investment Fund Managers Directive (AIFMD) (34%).

This consensus is also present when asked about regulations least likely to bring benefits (Figure 3): 53% highlight the Foreign Account Tax Compliance Act (FATCA), followed by 48% citing the European Union’s Capital Requirement Directive IV (CRD IV) and 29% citing the European Market Infrastructure Regulation (EMIR).

“The Basel rules have ensured banks invest their capital more responsibly, while the AIFMD regulations helped us to invest more confidently,” comments one Swiss portfolio manager.

“Foreign account tax structures have created additional technological requirements and implementing them is a big challenge for our business,” says the COO at a US insurance company.

On a five-year view, both buy-side and sell-side survey respondents name FATCA, CRD IV and the European Central Securities Depositaries Regulation (CSDR) as likely to remain somewhat burdensome for their organisations.

“It surprises me that so many respondents are not expecting a massive drop in terms of regulatory burden in the next five years,” says Deborah Thompson, head of Custody and Clearing. “They are expecting FATCA, CSDR and others to still be as burdensome. One would hope people would have figured out how to deal with that regulation by then.”

For most, the greatest concern regarding regulatory changes is the likelihood of increased costs of execution, followed by the prospect of a reduction in market liquidity (Figure 4).
Figure 1: Which of the following is your most pressing concern?

- Sovereign institutions
- Institutional investors
- Financial sponsors
- Broker-dealers
- Banks

Options:
- Volatility
- Low return environment
- Regulatory changes

Figure 2: Which two of the following financial sector regulations bring most benefits to the overall system?

- Basel III
- Solvency II
- AIFMD
- Dodd-Frank
- Capital Requirement Directive IV (CRD)
- Central Securities Depositories Regulation (CSDR)
- MiFID II
- UCITS V
- European Market Infrastructure Regulation (EMIR)
- Foreign Account Tax Compliance Act (FATCA)

Figure 3: Which two of the following financial sector regulations bring fewest benefits to the overall system?

- Foreign Account Tax Compliance Act (FATCA)
- Capital Requirement Directive IV (CRD)
- European Market Infrastructure Regulation (EMIR)
- Central Securities Depositories Regulation (CSDR)
- Dodd-Frank
- AIFMD
- Solvency II
- Basel III
- UCITS V
- MiFID II

Figure 4: Which of the following is your biggest concern resulting from the changing regulatory environment?

- Increased costs for execution
- Reduction in liquidity
- Increased counterparty credit risk charges

Options:
- 43%
- 31%
- 26%
“With the changing regulatory environment, the costs for execution have increased to a drastic extent,” says the head of operations at an Indian insurance company.

A portfolio manager at an Asian sovereign wealth fund adds that “both liquidity and the returns we have been able to generate have been impacted by these regulations.”

Survey respondents are overwhelmingly negative with regards to a potential financial transactions tax – 80% or more of institutional investors and sovereign institutions believe such a tax is likely to cause them to exit certain business lines or strategies.

“Whether it’s Dodd-Frank, FATCA, EMIR, MiFID or UCITS, all regulations are of concern simply because of the massive increase in regulatory burden in recent years and the requirement to understand them, prepare for the increased cost and comply with them,” says David Rhydderch, head of Alternative Fund Services at Deutsche Bank.

“It’s interesting that only 13% of banks put regulation as their most pressing concern, whereas broker-dealers, financial sponsors and institutional investors rate it higher,” adds Thompson. “If I asked my clients on the custodial side, I know it would be higher than 13% – it’s one of the key things affecting their environment and operating model.”

Enhanced asset safety worth the cost
Under Europe’s AIFMD, fund depositaries have to indemnify investors in the region’s hedge funds against possible losses caused by fraud or negligence at the level of the custodian or sub-custodian.

Europe’s UCITS V Directive, which covers traditional mutual funds (UCITS), contains an equivalent level of protection and extends the indemnification to the central securities depositaries (CSDs) where funds’ assets are held.

“There is a fairly accepted standard of care that custodians take, whether a global custodian or a sub-custodian, and that usually involves responsibility for some sort of fault, i.e. negligence or default fraud,” says Thompson. “Now, depository banks are, by definition, on the hook whether negligent or not – the risks are being moved around the table.”

For those in the custody business, an important question is whether large institutions are likely to request the same levels of asset protection in segregated accounts. The survey shows that 90% of sovereign institutions and 63% of institutional investors think the extra protections embedded in AIFMD and UCITS V are worth the resulting cost.

Asset safety regimes differ around the world, ranging from “direct” holding structures (where individual ownership is recorded at the level of the CSD) to indirect structures (where investors’ ownership rights are recognised only at the level of the custodian or sub-custodian, which may pool client assets in so-called omnibus accounts). Under Europe’s CSD Regulation, CSDs have to offer both individual and omnibus client regulation.
Figure 5: What appetite do you have for individually segregated accounts at the CSD level?

- No interest in this service
- Some interest in this service
- Significant interest in this service

<table>
<thead>
<tr>
<th>Total</th>
<th>No interest</th>
<th>Some interest</th>
<th>Significant interest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16%</td>
<td>26%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>58%</td>
<td>52%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
<td>40%</td>
<td>50%</td>
</tr>
</tbody>
</table>

- Banks

<table>
<thead>
<tr>
<th>No interest</th>
<th>Some interest</th>
<th>Significant interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>8%</td>
<td>52%</td>
</tr>
<tr>
<td>54%</td>
<td>20%</td>
<td>23%</td>
</tr>
<tr>
<td>12%</td>
<td>13%</td>
<td>59%</td>
</tr>
</tbody>
</table>

- Broker-dealers

<table>
<thead>
<tr>
<th>No interest</th>
<th>Some interest</th>
<th>Significant interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>20%</td>
<td>70%</td>
</tr>
<tr>
<td>62%</td>
<td>26%</td>
<td>18%</td>
</tr>
<tr>
<td>20%</td>
<td>23%</td>
<td>39%</td>
</tr>
</tbody>
</table>

- Financial sponsors

<table>
<thead>
<tr>
<th>No interest</th>
<th>Some interest</th>
<th>Significant interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>16%</td>
<td>45%</td>
</tr>
<tr>
<td>62%</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>20%</td>
<td>20%</td>
<td>30%</td>
</tr>
</tbody>
</table>

- Institutional investors

<table>
<thead>
<tr>
<th>No interest</th>
<th>Some interest</th>
<th>Significant interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>30%</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>30%</td>
<td>30%</td>
<td>50%</td>
</tr>
</tbody>
</table>

- Sovereign institutions

No interest in this service

Some interest in this service

Significant interest in this service

Figure 6: What appetite do you have for individually segregated accounts at the local custodian level?
Buy-side survey respondents express some or significant appetite for individually segregated accounts both at the CSD level (Figure 5) and the local custodian level (Figure 6).

Backing up demands for greater asset safety, 90% of sovereign institutions and 89% of institutional investors say they wish for sub-custodian risk to be partly or fully indemnified by their global custodians (Figure 7).

These survey answers suggest that a significant reallocation of responsibilities and costs among those involved in the custody chain may lie ahead.

Consolidation versus concentration risk
The TARGET2 Securities (T2S) project, which went live in 2015, is designed to rationalise and harmonise Europe’s system of securities settlement. T2S introduces a single set of rules for securities settlement and is meant to make the functioning of capital markets more seamless by lowering operating costs, improving liquidity and allowing for the easier movement of collateral.

Just over half (51%) of survey respondents say their experience of the system has been somewhat or very positive, with 27% saying it has been somewhat or very negative and 22% saying they haven’t used T2S or that it was too early to say.

Individual comments by respondents are, however, almost exclusively positive about T2S. The following quote is typical: “It has simplified the way we carry out settlements. It is a unified system, cross-border fees are less and it has reduced the risks we face,” says the COO of a UK asset manager. Over three-quarters (77%) of survey respondents expect either some or a dramatic increase in consolidation among sub-custodians in Europe as a result of T2S.

However, any push towards a consolidation of network providers is likely to be counterbalanced by pressure to rotate market counterparties in the face of potential concentration and other risks: 71% of survey respondents say they foresee moderately more or significantly more pressure to address such risks during the next five years.

Third-party collateral management
Although survey respondents rank EMIR as one of the least beneficial reforms for the global financial system, nearly four-fifths of institutional investors expect to make greater use of third-party collateral management services as a result of its introduction (see Figure 8). Sovereign institutions in the survey express a lower level of interest.

On balance, institutional investors feel regulators have a good grasp of their industry’s risks, relative to all respondents: 49% agree or strongly agree with a statement that regulators fully understand the risks present in their business, with 34% neutral and only 17% disagreeing (Figure 9).

However, some investors are conscious that regulatory reforms can only go so far: “Recent regulations won’t prevent another crisis. That will happen because people make inappropriate investment decisions, which are impossible to avoid,” says the vice president of investment at a Finnish insurance company.
Figure 7: To what extent do you think sub-custodian risk should be indemnified by global custodians?

- Sovereign institutions
  - Should be fully indemnified by global custodians: 20%
  - Should be partly indemnified by global custodians: 50%
  - Should not be indemnified by global custodians: 30%

- Institutional investors
  - Should be fully indemnified by global custodians: 10%
  - Should be partly indemnified by global custodians: 41%
  - Should not be indemnified by global custodians: 48%

- Financial sponsors
  - Should be fully indemnified by global custodians: 15%
  - Should be partly indemnified by global custodians: 33%
  - Should not be indemnified by global custodians: 52%

- Broker-dealers
  - Should be fully indemnified by global custodians: 20%
  - Should be partly indemnified by global custodians: 30%
  - Should not be indemnified by global custodians: 50%

- Banks
  - Should be fully indemnified by global custodians: 8%
  - Should be partly indemnified by global custodians: 62%
  - Should not be indemnified by global custodians: 30%

Figure 8: Would your organisation consider using third-party collateral management for dealing with the increased collateral requirements imposed by EMIR?

- Sovereign institutions
  - Significant interest in this service: 40%
  - Some interest in this service: 50%
  - No interest in this service: 10%

- Institutional investors
  - Significant interest in this service: 23%
  - Some interest in this service: 42%
  - No interest in this service: 35%

- Financial sponsors
  - Significant interest in this service: 40%
  - Some interest in this service: 50%
  - No interest in this service: 10%

- Broker-dealers
  - Significant interest in this service: 30%
  - Some interest in this service: 30%
  - No interest in this service: 40%

- Banks
  - Significant interest in this service: 30%
  - Some interest in this service: 30%
  - No interest in this service: 40%

Figure 9: “Our regulators fully understand the risks present in our business” (all respondents)

- Strongly disagree: 17%
- Somewhat disagree: 30%
- Neutral: 42%

71% expect to face more pressure over the next five years to rotate market counterparties in face of concentration and other risks.
This survey gave us a unique opportunity to draw out a number of trends in the investor services market, to discover what was front of mind for our clients and colleagues in the industry and to find out where they believe we’re heading.

First and foremost are the themes that impact their operating models, notably the legal implications of existing regulations on those models. For example, around two-thirds of institutional investors and 90% of sovereign institutions say they see the additional protections embedded in regulations like AIFMD and UCITS V as important. Both embed a liability regime that places a responsibility on a fund’s depositary to reimburse the fund in the case of a loss of assets held in custody.

Though we welcome them, I would argue that the regulations have muddied the duty of care well established in the custody chain. The largest pension funds and sovereigns were already accustomed to performing substantial due diligence on their custodians and probably regarded themselves as well-protected.

From a top-down perspective, the risk in the custody chain hasn’t disappeared just because it is being moved away from the end investor, it’s just being moved around. Unsurprisingly, if depositaries are asked to bear strict legal liability for losses, they will wish to have that risk shifted elsewhere. And if investors wish to be indemnified by their custodians against potential losses by their sub-custodians, as most buy-side respondents to the survey told us, these costs will be passed back up the custody chain.

There’s an inevitable trade-off here. Investors will be forced to ask whether the extra comfort they are getting via the new regulations is worth significantly more than the costs involved.

As regards T2S, there are several trends at play. From one perspective, it’s natural to expect consolidation among sub-custodian networks across the T2S markets. Then investors might add on extra sub-custodians for adjacent markets, for example Eastern Europe, under a separate sub-regional model.

We are already seeing a reduction in the overall number of banks offering sub-custodial services across Europe. But, countering this trend, there is potential concern among some investors about concentration in the sub-custody business. So we will probably arrive at a balance.
But, arguably, the real benefits of T2S come in the form of readier access to liquidity and the more seamless movement of collateral across the participant markets. When combined with the new asset protection regime, T2S is having a major impact on the overall structure of the custody business.

For some buyers, such as global custodians, we are seeing some movement away from a full-service custody (or “bundled”) model towards a more unbundled, modular approach. In this modular approach, buyers separate the safekeeping function from the asset servicing part using account operator or asset servicing only models and look at the costs and benefits of each component.

The digitalisation of the post-trade market and the future role of technologies like blockchain have attracted a lot of industry and media attention. I found it interesting that our survey’s respondents were clearly positive about the potential impact of blockchain — almost all participants saw it as either moderately or completely disruptive to existing business models — and an overwhelming majority believe it will be actively used within the next six years.

While 39% of survey participants saw distributed ledger technology being actively used within five years, this feels like a long way away, given the pace of change in banking. Clearly there’s great interest but not yet much in the way of detailed plans.

The survey results reinforced a general perception of optimism about emerging markets. Most participants expect the growth rates of the previous decade to return, with markets across Asia seen as the most attractive.

Bold regulatory reforms and improvements in capital markets infrastructures in emerging markets are seen as crucial. India, according to respondents, has already made significant steps on the infrastructure front. And although investors may be a bit more lukewarm about China’s long-term growth prospects than before, the country was still rated as one of the most attractive in the survey.

Above all, the survey reinforces the impression of ongoing, fundamental changes across both the buy-side and sell-side. The vast majority of respondents told us they had partially or completely reshaped their operating models (96%), buying behaviour (95%) and capital/fund allocations (98%) over the past two years. I found this a remarkable result.
Investors are optimistic about blockchain and the pace of its implementation but not everyone agrees on what it will look like when done.

According to a recent study by Oliver Wyman, banks’ IT and operations expenditure in capital markets totals $100–150 billion a year, with a further $100 billion spent on post-trade and securities servicing fees. Market participants also incur substantial capital and liquidity costs as a result of inefficient post-trade infrastructures, said the consultant.

Distributed ledger technologies like blockchain promise to replace the current model of a single central ledger and record-keeping based on labour-intensive reconciliations to a post-trade process involving shared datasets. In theory, the blockchain model may be able to streamline many current support operations or make them redundant.

“Blockchain may completely change the settlement model for securities processing, creating a utility around securities processing and cash management,” says Deutsche Bank’s Rhydderch. “The entire back end would become a far more efficient, far less costly, more accurate and less risk-prone function. This has an obvious knock-on effect on the cost of service provision. In the administration space, blockchain may not be quite the disruptor. It’s more in the functional utility elements within the securities processing settlement chain. In that context, it may be totally revolutionary.”

Survey participants are optimistic about the future prospects of blockchain-type distributed ledgers: 87% of respondents say they expect such technologies either to completely disrupt or have a moderate impact on the securities services market.

The fact that 75% of survey respondents see distributed technologies being widely used within the next three to six years (Figure 10) suggests a surprising degree of certainty in an industry that can take its time when it comes to implementing technological change.

“I think the banking industry is quite slow to accept change,” says the head of investment at a Northern European sovereign institution, who expects active
use of blockchain by market participants only within the next seven to eight years.

According to the head of operations at one institutional investor, however, the pressure to adapt will push them to change sooner than expected: “These technologies are quite new and are not used by many participants, but corporates have understood the need to implement new technologies and this will drive them to adopt these,” he says – and in his view, this could take place within the next four years. Rhydderch adds that, “at the moment, people are scrambling to figure out how they implement blockchain in the current web of legacy infrastructure. They’re trying to determine how it can be deployed in a way that works, given ongoing data protection and security concerns. They’re also trying to figure out how to transition from the older infrastructure to this entirely new system.”

Almost two-thirds (62%) of survey respondents expect the introduction of distributed ledger technologies in the securities services market to produce savings ranging from 11-25% (Figure 11). Almost half (48%) argue that it will help the industry cope with the risk of system failure and market disruption (Figure 12).
Dealing with increasing regulatory requirements, overcoming legacy IT architecture, avoiding inadvertent data disclosure and preventing cybercrime were seen as other potential benefits.

**Spending more for cybersecurity**

The link between blockchain and security is highlighted by 31% of respondents in the survey.

“The two IT risks that blockchain technologies would help with in particular are cybercrime and systems failure,” says the CIO of a US pension fund. “The number of cyberattacks has gone up significantly and client data that is under threat from a third party is assuredly a problem.”

The senior vice president and director of operations at a custodian bank adds: “The two most crucial IT risks that blockchain technologies can help with are data disclosure and cybercrime. Many hackers are interested in making easy money these days by disclosing the data of one firm to another and, as a consequence, the number of cybercrimes has gone up significantly. Blockchain technologies would allow us to safeguard our data.”

Deutsche Bank’s Rhydderch agrees: “This isn’t purely about companies protecting their own IT. Many are concerned about the risk of contagion. Imagine a PE film investing in a portfolio of companies and there’s a cybersecurity attack – possibly political or financial, or just disruptive. If one of the underlying companies hasn’t protected itself, there’s a risk the entire portfolio could be hit, including the firm managing that capital.

“As a consequence, we’re starting to see a huge degree of due diligence among private equity firms around their clients’ underlying cybersecurity protections. It’s no longer just a firm protecting against attacks on itself; it’s protecting against an attack on the companies it may hold within its portfolio.”

As a consequence, spending on cybersecurity is on the rise among buy-side firms. On average, sovereign institutions expect a 10.2% increase over the next three years, compared with an 8.4% increase over the past three years. Institutional investors see an 11.7% increase over the next three years, up from 9.1% over the past three years (Figure 13).

Over two-thirds of survey respondents say that cybersecurity consumes between 11-20% of their overall IT budget (Figure 14).

While spending is up, businesses are not so willing to share with others. Only 16% of institutional investors say they share intelligence on cybersecurity threats and responses with external partners (Figure 15), with firms citing the lack of a common framework as the main barrier to a more collaborative approach, followed by incompatible data formats and privacy or regulatory concerns. More than a third of investors, however, are considering sharing more intelligence.

“We have not carried this out yet but the risks we face are growing and we feel exchanging data will help us manage them better. Sharing information will also help us spend less on cybersecurity,” says the head of operations at a Dutch institution.

As well as using advanced data analytics and real-time monitoring to combat cybersecurity threats, almost all survey respondents expect to make use of cloud services within the next three years (Figure 16). Machine learning and artificial intelligence, however, are being considered by only a third of respondents.

“We have invested in real-time monitoring and advanced data analytics to follow the market and identify and manage risks efficiently. Cloud data helped us grow and expand, while making it easier to manage our systems,” says the CIO of an Indonesian asset manager.
Figure 13: How much has your spending on cybersecurity increased in the past three years and how much do you expect it to increase over the next three?

<table>
<thead>
<tr>
<th>Category</th>
<th>Past three years increase</th>
<th>Next three years increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sovereign institutions</td>
<td>11.1%</td>
<td>0%</td>
</tr>
<tr>
<td>Institutional investors</td>
<td>9.9%</td>
<td>0%</td>
</tr>
<tr>
<td>Financial sponsors</td>
<td>9.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Broker-dealers</td>
<td>9.9%</td>
<td>0%</td>
</tr>
<tr>
<td>Banks</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 14: What proportion of your IT spending is dedicated to cybersecurity?

<table>
<thead>
<tr>
<th>Category</th>
<th>1%</th>
<th>2-5%</th>
<th>6-10%</th>
<th>11-15%</th>
<th>16-20%</th>
<th>21-25%</th>
<th>26-30%</th>
<th>31-35%</th>
<th>36-40%</th>
<th>41-45%</th>
<th>46-50%</th>
<th>51-55%</th>
<th>56-60%</th>
<th>61-65%</th>
<th>66-70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1%</td>
<td>22%</td>
<td>47%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Banks</td>
<td>1%</td>
<td>22%</td>
<td>47%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Broker-dealers</td>
<td>1%</td>
<td>22%</td>
<td>47%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Financial sponsors</td>
<td>1%</td>
<td>22%</td>
<td>47%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Institutional investors</td>
<td>1%</td>
<td>22%</td>
<td>47%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Sovereign institutions</td>
<td>1%</td>
<td>22%</td>
<td>47%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Figure 15: Do you currently swap intelligence on cybersecurity threats and responses with external partners?

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No but are currently considering</th>
<th>No and not considering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sovereign institutions</td>
<td>40%</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>Institutional investors</td>
<td>50%</td>
<td>34%</td>
<td>16%</td>
</tr>
<tr>
<td>Financial sponsors</td>
<td>65%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Broker-dealers</td>
<td>50%</td>
<td>40%</td>
<td>10%</td>
</tr>
<tr>
<td>Banks</td>
<td>40%</td>
<td>38%</td>
<td>22%</td>
</tr>
</tbody>
</table>

*Yes* Yes* No but are currently considering* No and not considering

Figure 16: Which of the following technologies do you currently use for cybersecurity? Which are you likely to introduce in the next three years?

<table>
<thead>
<tr>
<th>Technology</th>
<th>Currently use</th>
<th>Likely to introduce in the next three years</th>
<th>Not using or likely to use in next three years and not considering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced data analytics</td>
<td>82%</td>
<td>17%</td>
<td>1%</td>
</tr>
<tr>
<td>Cloud services</td>
<td>74%</td>
<td>23%</td>
<td>3%</td>
</tr>
<tr>
<td>Real-time monitoring</td>
<td>63%</td>
<td>34%</td>
<td>3%</td>
</tr>
<tr>
<td>Machine learning/artificial intelligence</td>
<td>29%</td>
<td>66%</td>
<td>5%</td>
</tr>
</tbody>
</table>

The main barrier to swapping intelligence on cybersecurity threats and responses:

- **Lack of framework/standards**: 49%
- **Incompatible data formats**: 26%
- **Privacy/regulatory concerns**: 25%
Three things stood out for me in the survey results. First is the overall impact of new regulations on fund services, second are the opportunities for new data management solutions and third is the growing importance of cybersecurity in the funds business. The survey respondents told us they view certain post-crisis regulations – Basel III, Solvency II, AIFMD, for example – in a generally positive light and others – FATCA, for example – less favourably.

Whatever your opinion, there is undoubtedly a massive increase in the regulatory burden for anyone involved in the fund administration business. The resulting costs of compliance are driving funds to rethink how they engage with service providers.

Many private equity funds, for example, were previously happy to run their administration in-house, but now there’s a regular dialogue about outsourcing. Regulation is also shifting the way in which funds, administrators and other service providers interact with one another.

This trend is creating a range of opportunities for better data management solutions. Many funds have developed proprietary technology in front office systems like order management, for example.

What they may not be so good at is data management and the boring but fundamental elements of back-end infrastructure.

I think the buy-side hasn’t yet really seized the opportunity to excel in creating integrated data management solutions. At the moment, different sets of data are used in a largely functional way—to provide books and records, reporting and so on.

Looking forward, I think we should view data as a single pool of information that can have a wide range of uses in fund management and client servicing.

Finally, cybersecurity is a fascinating topic. It’s gone from being very low on people’s radars to one that now crops up at every meeting with clients.

Private equity firms, for example, realise that they are vulnerable to a cybersecurity attack against one of their portfolio companies. This could carry contagion risk not just for the company being targeted, but for the entire portfolio and thus for the fund manager.

As the survey results indicate, asset owners and asset managers are increasing their budget spend on cybersecurity at an accelerating pace.
Emerging markets are due a revival

Boom times are expected to return, as investors shift their focus from China to South Asia in their search for better returns.

“As our clients expand their investment guidelines, as they expand their investment horizon, they’re looking for yield,” says Tim Smollen, global head of Agency Lending at Deutsche Bank. “And to find that yield they’re turning to markets like India, China, Brazil and Indonesia as well. When a client buys assets in a new market, it prompts a number of questions: does that country allow for securities lending? And is the infrastructure in place to allow it?”

Nearly two-thirds of investors are optimistic that emerging markets will return to the growth rates seen during the boom of the last decade.

With lower returns and growth rates in the UK and the EU, companies will invest more in emerging markets and businesses will move to these regions,” predicts the COO of a Hong Kong-based hedge fund.

Although they foresee the best short-term growth prospects to be in South-East Asia, India/South Asia and Greater China, they see India/South Asia and Africa as offering the best long-term growth prospects. However, investors are equivocal regarding China’s economy: answering a separate question, more than half say they expect China to experience a prolonged period of slower growth.

The survey respondents say that the economic outlook, political stability and the capital market’s infrastructure, in that order, are the main factors influencing investor decisions to allocate funds to emerging markets.

Focus on India and China
Of the BRIC and MINT countries, China, Indonesia, Russia and Turkey rank highest for their capital market infrastructures (Figure 17), while survey respondents say India and China have made the greatest infrastructure improvements during the last five years.

“India realised the interest of global investors was rising and it has changed the market completely,” points out the CIO of a Dutch pension fund.

62% think emerging markets will eventually deliver the growth rates seen in the 2001-2011 boom.
Investors rank the economic outlook more highly in Indonesia, India and Nigeria than the capital market infrastructure in those countries. In Turkey, Mexico, Russia and Brazil, the reverse was the case. These findings suggest that there is an opportunity to be had in some emerging markets but investors may be hesitating.

“It is risky investing in emerging markets as the rules and regulations are not really enforced. This also affects the safety of our assets. Capital markets are also not well formed and can be quite fragmented,” says the head of investments at a European central bank.

This view is backed up by the survey results: 62% rank regulatory hurdles as their greatest or second greatest challenge when carrying out securities transactions in emerging markets.
(Figure 18), while 53% name political interference and instability as a challenge, and 40% point to the unreliable capital markets infrastructure.

Bold regulatory reform is the single most important step that emerging market governments can undertake to deliver growth, according to survey respondents, followed by a simplification of tax regimes and stronger governance structures (Figure 19). Infrastructure improvements and changes to securities market laws rank as less important among those surveyed.

Nevertheless, 76% of the survey respondents agree strongly or somewhat with the statement that inadequate capital market infrastructure deters them from operating or investing in otherwise attractive markets.

“It helps if regulators are engaged and willing to look at different ways to achieve our common goals, such as considering a securities lending model or aspects of models that already work in other markets,” says Smollen. “That certainly helps, when you have a regulator who is willing to look at what’s worked in other markets and potentially adapt how they are doing things.”

Similarly, 81% agree strongly or somewhat with a statement that financial market fragmentation is a barrier to emerging market growth.

Survey respondents intend to deepen their corporate governance role in emerging markets through greater participation in investor meetings and conferences: 93% foresee a substantial or moderate increase in their attendance at such meetings.

“There will be a substantial increase in our participation in investor meetings and conferences. This is because we wish to gain more insights that would be helpful and valuable for the firm,” says the director of operations at a US insurance company.
New opportunities in securities lending

By Tim Smollen, global head of Agency Lending

One of the most interesting survey results concerns the opportunities for third-party collateral managers – 77% of institutional investors say they would consider third-party collateral management, which aligns with what we are hearing in the marketplace. A lot of that potential demand comes from the increased collateral requirements required under EMIR.

In the current environment of a search for yield, we see many investors looking for securities lending opportunities in emerging markets. Here, the infrastructure that’s in place to facilitate lending is very important, another thing that’s borne out by the survey responses.

Brazil is a great example of an emerging market where the regulators are very engaged with the industry and where all lending goes through a CCP. A country that was a non-starter for us for many years is now starting to open up for many of our clients.

Another trend that appears in the survey responses is towards the unbundling of the services traditionally offered by custodians.

Clients are starting to look at securities lending on a stand-alone basis, treating us like an investment manager and saying: “Okay, I am going to pick you based on your performance. I am going to benchmark you on an annual basis and, in two or three years, I’m going to go through the whole process again.”

The Basel III regulations get a generally positive response from those participating in the survey. The regulations are also driving the trend towards the unbundling of the various services traditionally forming part of a single custody relationship.

We have spent a lot of time ensuring that we know our cost of capital, including the cost of any indemnification, and we look at it on a counterparty by counterparty basis, so we can assign that cost back to each client.

As regulations change and the cost of capital potentially goes up, you’re going to see some lending agents having to get smaller. Some lending agents will potentially have to change their fee splits to cover their cost of capital.
The three main trends to emerge from our survey – covering regulations, technology and emerging markets – have prompted significant shifts in strategy among respondents, reshaping their capital allocation, buying behaviour and operating model over the past two years.

They cite the changing regulatory environment as the biggest factor driving these shifts, as market infrastructure evolves to address these new regulations. In the process this creates a level of transparency that will help the industry deal with the risks involved and reveal just how effective and efficient we can be.

It’s all about connecting the market infrastructure into a harmonised platform to minimise risks and ensure compliance, from T2S in Europe to the T+2 settlement cycle in the US and Shenzhen-Hong Kong Stock Connect in Asia.

But how do we standardise locations and links to improve connectivity through the various platforms in play? And how do we remove any areas of concern around market risk?

Technology may hold the key. From an investor’s perspective, technology is a triangle: data, architecture and process. You can’t improve one without affecting the whole. If an organisation improves its technology to ensure it is complying with regulations, it’s improving process efficiency by default.

This feeds through the entire organisation’s operating model and buying behaviour, and influences resource allocation — all of which is invaluable when making investment decisions.

This thinking is prompting many in the industry to ask: why can’t we have a similar approach to emerging markets, for example in Asia? It wouldn’t challenge the underlying market, but it would provide enhanced asset safety and protection. If they succeed, emerging markets seeking new levels of harmonisation and standardisation could enjoy a new economic boom in years to come.

All of these results demonstrate that our industry is being encouraged to review the way they work in light of these trends, and gives us a clear glimpse of the opportunities that lie ahead.
In the summer of 2016, FT Remark undertook a survey of 200 market participants (institutional investors, banks, financial sponsors, broker-dealers, sovereign institutions) on behalf of Deutsche Bank on three core topics: financial regulations, new financial technology and emerging market volatility. The survey included a combination of qualitative and quantitative questions and all interviews were conducted over the telephone by appointment. Results were analysed and collated by FT Remark and all responses are anonymised and presented in aggregate.

FT Remark produces bespoke research reports, surveying the thoughts and opinions of key audience segments and then using these to form the basis of multi-platform thought leadership campaigns. FT Remark research is carried out by Remark, part of the Mergermarket Group, and is distributed to the Financial Times audience via FT.com and FT Live events.
Contact

If you have any questions or would like to speak with someone at Deutsche Bank about these findings, please email gtb.marketing@db.com

This White Paper is for information purposes only and is designed to serve as a general overview regarding the services of Deutsche Bank AG, any of its branches and affiliates. The general description in this White Paper relates to services offered by Global Transaction Banking of Deutsche Bank AG, any of its branches and affiliates to customers as of November 2016, which may be subject to change in the future. This White Paper and the general description of the services are in their nature only illustrative, do neither explicitly nor implicitly make an offer and therefore do not contain or cannot result in any contractual or non-contractual obligation or liability of Deutsche Bank AG, any of its branches or affiliates. Deutsche Bank AG is authorised under German Banking Law (competent authorities: European Central Bank and German Federal Financial Supervisory Authority (BaFin)) and, in the United Kingdom, by the Prudential Regulation Authority. It is subject to supervision by the European Central Bank and the BaFin, and to limited supervision in the United Kingdom by the Prudential Regulation Authority and the Financial Conduct Authority. Details about the extent of our authorisation and supervision by these authorities are available on request. This communication has been approved and/or communicated by Deutsche Bank Group. Products or services referenced in this communication are provided by Deutsche Bank AG or by its subsidiaries and/or affiliates in accordance with appropriate local legislation and regulation. For more information: www.db.com.

Copyright © November 2016 Deutsche Bank AG. All rights reserved.