

World Economic Forum: Balancing Financial Stability, Innovation, and Economic Growth Initiative

Remarks of Michael Bodson, DTCC President & CEO

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Remarks As Prepared for Delivery

Good afternoon and thank you for allowing me to speak to you today. It's always a pleasure and honor to participate in a conference sponsored by the World Economic Forum.

I'm particularly excited by today's meeting because it is an excellent opportunity to build upon the work we began last year on examining the forces reshaping the financial services industry. I expect that we will continue to have a robust discussion on this topic in the years ahead, particularly because the industry is evolving so rapidly in response to several pressures. Today I want to spend a few minutes talking about three of them:

- One, the higher level of competition facing banks today, which is largely being driven by the advent of new technologies, and how this is giving rise to shadow infrastructures. We are all very familiar with how business-to-consumer firms like Uber, AirBNB, Lending Tree and Zopa have disrupted their particular spaces, and we are now starting to see a similar phenomenon in financial services.
- Two, the disruptive potential of newer technologies like cloud computing and distributed ledgers and how they may transform the financial industry.
- Three, the evolving global regulatory landscape, which has grown significantly since the financial crisis and how this is impacting financial institutions.

Competition and the Rise of Shadow Infrastructures

Let me begin with the topic of competition and its impact on financial services. As I mentioned, banks are facing increased competition from fin-tech start-ups and existing technology companies, which are challenging the long-standing relationships that firms have with their customers. This is happening primarily through greater digitization, but in some cases, like the new consumer-focused marketplace lending models, we are seeing a separation of the client relationship layer from the asset layer.

While this trend is not necessarily new – for example, Zopa and Lending Tree have been in business for many years – a recent study by Capgemini/Efma suggests that the public may have reached a tipping point in its use of and trust in fintech services, which have gained a strong foothold in challenging the traditional advantages of banks. Today, fintech firms are attracting greater numbers of retail customer from the large banks or forcing them to lower their fees and prices to remain competitive, which is reducing their already thin margins and increasing the cost pressures they face.

Some of you may be aware of a recent study by Deloitte that painted a somewhat less optimistic view of the threat posed by fintech against banks. And, of course, Capgemini and McKinsey issued their own paper on the topic, as did the WEF, which highlighted both the challenges and opportunities facing retail banking. While this represents a diverse set of viewpoints, the common thread connecting all the research can be summed up as such: Banking will change, but the ultimate winners and losers are still to be determined.

At a market infrastructure like DTCC, we face a different set of issues when it comes to competition from fintech. Interestingly, while the fintechs are trying to make in-roads in the post-trade ecosystem, their efforts may ultimately prove to be less disruptive than the retail innovators. There are several reasons for this, but a major one cited by McKinsey is that the fintechs that are focused on payments and settlement and transaction processing are more likely to serve banks directly and seek to improve processes for one or more elements of banking's value chain.

In other words, while market infrastructures are facing more intense competition than ever before on a variety of fronts, fintechs are probably less likely to completely replace the existing back office ecosystem, but rather integrate into it in order to drive greater efficiencies and cost savings for the industry.

However, there is one area of concern that I would like to draw attention to -- what I call the rise of "Shadow Infrastructure." As banks continue to face increasing cost pressures, they are looking to outsource more of their post-trade processing to a variety of service providers. The drivers behind these decisions, especially in the short term, appear entirely rational, but there are several long term consequences that we must grapple with.

For example, banks have begun to outsource components of their post-trade processing to different firms or are looking to new entrants that are offering low-cost "entry" rates. While these options are financially attractive in the short term, there are implications to consider, such as the costs and complexity of harmonizing and integrating data after it has been fragmented...or the inevitable friction of normalizing and consolidating data as new products are introduced or new regulations go live. To state it in the simplest of terms, putting Humpty Dumpty back together again will be increasingly difficult if not impossible.

Another long-term issue that will need to be addressed is the fact that many of the outsourcing firms are not regulated. While a lot of these companies may have good reputations, as the concentration of activity within them increases, the lack of regulatory oversight is troubling. It is hard to argue that these firms are not systemically important and don't introduce a high level of interconnectedness risk into the system.

As you can see, there are many questions that will need to be addressed as fintech continues to shape market structure and how the industry is responding to these changes.

Blockchain & Cloud Computing

Let me turn to my second topic on the disruptive potential of newer technologies like distributed ledgers and cloud computing and how they may impact the financial industry.

Looking at blockchain first, we believe this technology is potentially transformative because its unique capabilities and features may enable it to modernize the post-trade environment in areas like clearance, settlement and payments. However, we also believe that collaboration is essential to maximizing its potential.

At DTCC, we have been playing a leading role in shaping how the technology can be adapted and integrated into the post-trade environment because of our unique position in the marketplace. As an organization that develops and uses technology to enable markets to operate safely and efficiently, we are committed to exploring opportunities to drive innovation in post-trade processing to benefit the industry and, ultimately, the end investor.

Our role as one of 30 founding members of the Hyperledger Project, a consortium promoting open source development of blockchain technology, and the investment we made earlier this year in Digital Asset, a blockchain service provider, reflect our commitment to collaboration and our support for advancing the technology. Across the industry, we are seeing similar acts of collaboration as the fintechs seek opportunities to work with – rather than replace – the established market participants to develop new solutions.

DTCC Proof of Concepts

I want to briefly share with you two examples of the work we're doing to help modernize the post-trade environment using blockchain technology.

The first initiative is focused on developing a proof of concept to streamline the way repo agreements clear and settle. We believe that a distributed ledger can reduce the risk that exists throughout the day by eliminating the multiple steps and reconciliations that are currently required to clear and settle these transactions while also giving all parties to the transaction access to see the same information simultaneously. The second initiative is a proof of concept to test the effectiveness of blockchain to manage post-trade lifecycle events for credit default swaps.

I would like to contrast these two applications. In the repo use case, we are attempting to use blockchain to solve an existing issue where current technology isn't adequate – a green-fields approach. In the second case, we are looking to replace an existing platform, DTCC's Trade Information Warehouse for credit default swaps, with what we believe will be a lower cost alternative.

These experiments underscore a more fundamental point – that distributed ledger technology appears to have unique qualities that could have a significant and positive impact on the financial market structure. We are excited about these possibilities and are committed to exploring opportunities for leveraging the technology to reduce risks and costs and enhance processing efficiencies.

Saying that, there are two important conditions that must be taken into consideration:

- One, to take advantage of a collaborative technology, the industry must work collaboratively.
- Two, the concept of a “permissionless” and “trustless” financial market structure is a non-starter. Matters related to standards, issue resolution, regulatory role and oversight, volume capacity and, what may be the thorniest of all, the transition from the current structures to a whole new world all must be dealt with before the revolution truly changes the world.

Cloud Computing

While we are actively working on leveraging blockchain to drive greater efficiencies and cost savings for the industry, it is very likely that the biggest impact on our applications and cost base over the next 5 years will be a different technology – cloud technology.

While cloud computing is not new, we believe it has reached a level of scale and maturity to create opportunities to eliminate legacy infrastructures and replace them with lighter weight more agile capabilities at a fraction of the cost. As cloud architecture has reached sufficient scale, firms are now in a better position to innovate and experiment more quickly and without the cost of heavy infrastructure investment.

While the cloud is not the answer for everything – we continue to see mainframes as the most secure and efficient option for disaster recovery, for example – there is a growing realization that for many other applications, the cloud may be more secure than hosting applications internally. Business are clearly moving toward increasing use of the cloud and, in some cases, we are even seeing interest from some industry participants to leverage the cloud instead of owning or renting space at physical data centers.

This is an interesting development that has many implications for the future, and much like the work around blockchain, the industry must engage with policymakers to ensure we share a common understanding of these new technologies and their impacts on the safety and soundness of the market.

Regulatory Landscape

Turning to my third and final topic, it is clear that the industry is going to continue to embrace fintech to help solve the many challenges facing financial firms today. In fact, according to a recent survey by McKinsey, there are now more than 2,000 fintech start-ups today compared to just 800 in April 2015 – an increase of 150% in just one year. As McKinsey noted, “Fintech companies are undoubtedly having a moment.”

They certainly are....and this has many implications for policymakers, especially as new financial rules are spurring innovation and changes to market structure at a pace we've never seen before.

This phenomenon is unlikely to stop, which means that industry participants and policymakers need to develop the right level of knowledge and expertise to ensure that any disruption is consistent with broader regulatory priorities of creating safer and more transparent markets and is in the best interests of the investing public.

This was a key finding of last year's WEF white paper, which said that collaboration between regulators, incumbents and new entrants would be required to understand how these innovations will alter the industry's risk profile, both positively and negatively. Incorporating new technologies, such as cloud computing and blockchain, into the regulatory landscape also holds potential benefits, especially as the cost of compliance increases and as firms continue to focus on cost cutting by providing opportunities to streamline how financial institutions comply with new requirements.

This is top of mind for many firms because, as the Wall Street Journal reported last week, the six largest U.S. banks by assets in collectively spent at least \$70.2 billion in 2013 on regulatory compliance, up from \$34.7 billion in 2007.

Regulatory Harmonization

In addition to this, another force reshaping the industry is the lack of harmonization of international regulatory requirements. For example, despite the G20's common commitment to derivatives trade reporting, the regimes that emerged following the financial crisis differed significantly along national lines, which created inconsistent sets of reporting requirements globally. This has made it more challenging to standardize, access, share and aggregate data on a global scale.

While reporting regimes have been enacted in major derivatives jurisdictions around the world, which is giving regulators access to more derivatives data than ever before, the G20 transparency goals remain only partly addressed.

Until we fully achieve these goals and the recommendations of the FSB, we will not attain global data transparency. However, once a harmonized framework is in place, there is the potential for new technologies to play a role in bringing even greater degrees of transparency to the marketplace.

Conclusion

Let me close by noting that technology and the regulatory environment will continue to drive changes in financial services and, in many ways, these forces will impact each other. We have certainly seen a heightened regulatory environment since the financial crisis, but as that environment matures, new technologies may offer opportunities to create a more efficient means to achieve compliance.

I hope my talk has given you some interesting topics to think about today and helps spark debate during our session this afternoon. Thank you again for the opportunity to participate today and I look forward to our discussions