FCA future scenarios conference: IHS Markit scenario on wholesale markets
**Introduction – a big business with lots of potential**

Reading a newspaper or listening to a bank CEO, it would be easy to conclude that the wholesale banking industry is in permanent crisis and decline. Sellsise firms across the world seem to be facing a series of issues that put pressure on their bottom lines including, new regulatory regimes, updating legacy systems, deleveraging and derisking, fines and a generally difficult economic environment. Some also assume that technological disruptors will further diminish the standing of such firms; Brexit has added to the uncertainty.

Despite these undoubted challenges, it is important to remember that capital markets and investment banking (CMIB) industry remains extremely lucrative and substantial in size. BCG recently estimated that, despite recent shrinkage, the available revenue remains well over $200 billion,\(^1\) an attractive prize under any measure. Furthermore, the position of current incumbents is relatively secure, particularly as the potential for new competitors to enter this market remains limited due to the high regulatory hurdles and concentration in the industry. Even today’s entrepreneurs, often labelled disruptors, mainly seem to be starting companies not with the aim of directly competing with incumbents, but rather to either sell innovative products to these incumbents or to be acquired by them. Furthermore, despite a vast amount of new regulation, new approaches to regulation, and the burden it causes, are emerging from technology suppliers and even regulators, themselves being challenged to make regulation more innovative and less burdensome while remaining highly effective.

**Stresses and strains – how is the CMIB industry evolving?**

The CMIB industry has evolved enormously in the last generation and we have seen significant retrenchments of business activities and ruthless cost savings in the back office. Use of innovative technology has already facilitated this, with processes that were previously labour intensive and collocated with the front office being performed far more cheaply and from almost anywhere in the world.

However, despite these wholesale back office changes, most market participants’ business models are fundamentally the same now as they were 10 years ago. We believe that there is huge potential in the industry to improve performance beyond the back office and further exploit technology to enhance significantly the efficiency of CMIB business. The application of technology will drive significant changes in

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\(^1\) For example: www.bcgperspectives.com/content/articles/financial-institutions-digital-economy-adapting-digital-advances/?chapter=2#chapter2_section2
compliance functions and the relationship between wholesale financial services, their clients and so the so-called real economy.

The driver of such change has always been the need to remain competitive and cut costs. This process is sure to continue and there are plenty of events on the horizon that will add cost pressure. For example MIFID 2 is due to apply from January 2018 and the Fundamental Review of the Trading Book requirements from December 2019. Structural separation of retail and wholesale banking will also take place in the UK in the upcoming years. Brexit could mean further fragmentation and lead to firms in the UK scrutinising the location of different elements of their businesses.

However in the longer term the picture for the firms in this market remains optimistic. First, as mentioned above, despite vocal complaints about regulatory burden the high entry costs of regulation and a lack of substitute services means that the market position of incumbent firms is secured in all but the longest of terms. Evidence of this can be seen in the increasing concentration of the wholesale financial industry since the global financial crisis. Second, as CMIB revenue streams remain very large, even proportionately small savings would deliver very large savings in absolute terms, potentially allowing firms to increase profits and potentially benefit the real economy with lower costs for businesses raising finance and managing risk.

The question is where will savings come and what will be the impact of them. As explained, significant savings have been made in back office processes. However, the front office continues to be a significant cost factor (BCG estimates that it accounts for over 50 percent of CMIB operating costs). We believe that it is here that comparatively small efficiencies could lead to significant cost savings. We also believe that, compared to other fields of finance, the CMIB business remains relatively little affected by the relatively recent arrival of technology providers often termed as ‘disruptors’.

**Industry challenge – innovation in the front office**

Innovation will be shaped by the pressures on the CMIB industry as well as concerns of regulators and policymakers. This technology is likely to change the way the front office operates and it is here that significant savings can be made. It is true that over the past twenty years the way resources are deployed has changed enormously. Twenty years ago the trading room was a noisy, hectic place. Now quants pore over data while computers trade automatically across many venues following highly complex algorithms. Data is more and more important and the ability to obtain and use it is radically different; now traders and sales people can access data from all over the world and analyse it at the push of a button. However, firms have struggled to make significant cost savings in the front office, in the main due to concerns of losing human capital and competitive edge.

Increased use and familiarity with technology and outsourcing, as well as a ruthless pursuit of cost savings, should mean a new appetite to look at how savings can be made in the front office. Opportunities will emerge through services that could be shared or operated by cognitive machines. Also there is no reason firms need to locate all front
office resources in financial centres. It is notable that, unlike the back office, very little front office activity has been moved to lower cost locations like China and India. We believe this will change.

Technology and changing geo-political trends could lead to truly global infrastructure and further facilitate front office efficiency savings from reducing personnel and moving to lower cost locations. The growing familiarity with such jurisdictions and their increasingly well qualified workforce should help this process, as will increasing business opportunities in those jurisdictions as emerging markets develop. Changing trends in business, for example the move from active management to tracking funds, could also further reduce the size of front office activity and increase the potential for automated processes. Given the high costs of front office, if these processes yield even relatively small savings there could be substantial cost advantages. This should feed through to the real economy, assuming, of course, the competitive framework means savings are passed on the ultimate end consumers of financial services.

Technologies such as direct lending and automated services could also have a significant impact on institutional markets. There is also considerable excitement about the potential for technological developments such as Distributed Ledger Technology (DLT) and IHS Markit has been conducting proof of concept operations to provide practical experience of how such technology could be applied commercially. The industry feels like it is on the verge of significant change and one in which the regulator will play a big role and be just as affected.

**The Regulator’s challenge**

Recent technological innovation has the potential to transform the CMIB business but it will also affect the way it is regulated. The global financial crisis triggered an intensive programme of financial regulatory reform that will have significant and long lasting implications. This programme sought to address the risks and weaknesses of the previous regulatory regime. However, regulatory reform has increased reliance on centralised infrastructure (for example central counterparties and regulated trading venues), massively increased the amount of data reported to authorities and created increased regulatory costs to doing business.

This has led to three fundamental changes: 1) increased concentration of systemic nature – including by creating critical points of failure risk; 2) significant risks of detriment to market users due to a lack of effective competition as market entry becomes more difficult; and 3) massively increased burden on industry and regulators as firms struggle to comply with regulation and regulators struggle to, digest, store, analyse and understand the vast amounts of information available to them (for example, through reporting). The global financial system has also become increasingly fragmented as jurisdictions have implemented global commitments to regulatory reform differently and on varying timetables.
These trends directly challenge the FCA’s ability to meet its objectives of protecting consumers, ensuring market integrity, and promoting effective competition. Other authorities, particularly governments are also increasingly concerned about faltering economic growth and may look at issues of regulatory burden and lack of competition as factors contributing to this. Technological innovation in the form of Regtech offers a way forward by potentially lowering compliance burdens and making regulators more effective without rolling back regulatory reform and reintroducing or increasing the risks of crises.

**Regtech – lowering regulatory burden while maintaining high standards**

We would consider Regtech to be a subset of Fintech where technology and innovation is used to provide solutions that aid industry with their compliance burden and support regulators in their work. This includes through standardised and streamlined supervision and analysis of firm and market behaviour. Importantly, Regtech could provide a unique chance to reduce regulatory burden without reducing the level regulation or the quality of compliance, thus breaking the so-called regulatory cycle.

The regulatory cycle has been well described as being:

Regtech offers a number of ways to break this cycle. Using a shared solution to regulatory compliance means the costs of building compliance systems can be shared between the subscribers, lowering costs of compliance for each individual firm. Also
with financial services firms likely to be using one of a small number of main providers there is little incentive to compete on regulatory standards. Respectable providers should use best practice approaches agreed with the users of the services. The advantage for the regulator would be higher quality compliance and fewer approaches to scrutinise. Regulators providing clarity on the use of such shared services and endorsement of specific standards would be beneficial to the uptake of such services without inhibiting innovation. We should not pretend there are no risks, but the use of such services offer a genuine way of reducing compliance burden without lower standards, and so help break the regulatory cycle. Examples would include know your customer (KYC) services and other on-boarding systems, transaction reporting services and shared analytical provision for regulatory requirements like capital.

Technological innovation offers further potential to regulators. Below, we pick out areas of key examples how innovation and the kind of solutions highlighted above could help meet regulatory objectives:

a) Protecting consumers

Technology could address issues around information asymmetry by providing greater certainty to all players in the market. The focus for regulators should be to use technology to improve buyer and seller access to information needed to make decisions about what transactions to undertake, with whom and provide certainty that counterparties are able to provide deliver on commitments. With better information, risk for participants will be reduced and better decisions should be made, creating more efficiency for the real economy. These could be Regtech shared services, such as: a) improved KYC processes, which should help drive out unwelcome participants; b) more powerful transaction cost analysis systems, which would provide greater assurance of best execution; and c) big data and scalable Cloud technology, which should also drive better risk analysis that help investors by reducing the chance of them buying inappropriate products, including through wholesale robo-technology where advisors (or distributors) have a full picture of their clients, thus empowering them to understand better what is really suitable for them. Better outcomes for lower costs are a real possibility. Furthermore, regulators will also have greater certainty about how markets are working and allow greater scrutiny of who did what with whom and when.

b) Market Integrity

DLT has the potential to revolutionise the way markets work and how they are regulated. Regulatory reform since the global financial crisis has deliberately led to increased centralisation with the mandated use of central counterparties (CCPs) and reporting to trade repositories the most obvious examples. A side effect of this reform has been to introduce risks around key points of failure, potentially increasing systemic risk.

DLT could offer an alternative model to mutualise systemic risk that does not rely on centralisation. DLT should provide a means of authenticating, securing, transacting, and governing assets and contracts in a digital peer-to-peer environment. In other words, parties would commoditise and distribute the tasks associated with asset and
contract maintenance (tasks that are currently performed by systemically important institutions) in a digital network of multiple parties operating a shared protocol. These networks effectively digitise assets and contracts across every participant in real time. Therefore, if parties are able to mutualise the costs to secure and exchange assets and contracts in real time, DLT networks might allow parties to collateralise assets to cover settlement windows that last seconds instead of hours or days. Such an environment would also promote price transparency across assets that are currently difficult to price and therefore ineligible for use as collateral. All the while, regulators would accrue the benefits of a standardised, robust data set that records the movement and concentration of assets across network participants. While the benefits of counterparty insurance that CCPs provide will not go away, the maintenance and portfolio services that CCPs offer at cost will become less important over time as centralised books and records and the services required to maintain them become redundant. Once books and records are distributed, those services become commodities.

c) Promoting Competition

Improved technology should help promote competition by lowering the costs of market entry. Current regulatory requirements such as capital, expensive systems (such as for reporting) and the costs around the mandated membership of market infrastructure mean that challenging current incumbents in wholesale markets is virtually impossible. In theory, innovation would help deal with these issues. However, firms continue to struggle to compete effectively without the networks or infrastructure of incumbents and so many are only able to innovate through partnership or by being acquired by those incumbents.

It will take a real revolution to change significantly the competitive landscape, but some seeds are already there. As discussed, DLT could potentially reduce the need to fulfil onerous and expensive conditions required for membership of centralised infrastructure and thus lower the cost of accessing markets while reducing the ability for such firms to bundle services and arrange themselves into vertical silos that can reduce competition. Technology that is currently being tested in retail markets should also impact upon wholesale markets, particularly by allowing corporates to lend directly to each other. Scalable shared services would allow costs to be shared among participants proportionately, meaning the build costs that form a barrier to smaller players entering could be negated. Analytical software and better data will allow firms to fully exploit the potential for modelling to ensure maximum efficiency in capital requirements while being fully transparent to regulators.

Regtech solutions can help break the hold of incumbents, but only with the right framework. Prior to the financial crisis, financial markets globalised because business demanded it. This globalisation exposed the weaknesses of the predominately national regulatory regimes. The response of those regimes has fragmented the market, bringing with it significantly higher costs for participants. Technology provides the potential to rebuild globalised efficiencies as physical location becomes less relevant but regulators will need to alive to the pre-crisis risks returning or new, largely unknown risks emerging. Global cooperation and standards will be even more important.
Emergence of new technology will also pose existential questions to regulators and policymakers around issues such as legal codes, ownership, liability, oversight and enforcement. We can also be sure issues emerge that are unknown to us now. With people able to operate in markets from anywhere in the world and with their data centres in their pocket, some aspects of regulating markets will be more difficult because participants could be anywhere and, with no central infrastructure, so could markets.

One thing that is certain is that change is coming. Technology might make whole elements of the front office redundant. Automated personal assistants already exist but could artificial intelligence replace sales people and account managers? Algorithms with access to massive amounts of data could be used to decide business strategy and spot opportunities. Artificial marketing departments could be sending specific advertising to potential clients through automated social media. In fact we may see automated sales functions speaking to automated business strategy functions to buy things through the financial internet of things. Markets may develop and operate with very minimal human input. Will we then see supervisors being replaced within automated regulators operating with regulation written by artificial intelligence?