

Capital Markets 2020

Will it change for good?



Are capital markets participants and users prepared and capable to reimagine the future, innovate and compete against this still unfolding backdrop?



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Welcome

Welcome to the second instalment of our Banking and Capital Markets 2020 series.

This paper covers the future of capital markets, a subject of increasing focus since the financial crisis. The vitality of capital markets is critical if the world is to return to an environment of sustainable economic growth. Moreover, effective capital markets are crucial to the efficient allocation of credit and investment. To be most beneficial, capital markets must be able to function freely, rewarding strong performers and penalising those who are unable to deploy capital effectively. Looking forward to 2020, capital markets will play an increasingly important role in providing everything from financing to the world's most innovative companies to generating the investment returns needed to support an ageing population in the developed world. This paper will provide insights and understanding into the future of this industry, which either as a 'participant' in or a 'user' of capital markets, is critical to your actions today and to your plans for the future.

Our survey of top capital markets executives which is part of the study, clearly demonstrates that leaders believe it is important to have a better understanding and a more clearly articulated vision of their place in the capital markets industry in 2020 than they do today. We wholeheartedly agree – this is an area of strong interest not only for the 'participants' (i.e. investment banks, broker-dealers, financial market utilities and the like), but also the 'users' (i.e. private equity firms, pension funds, hedge funds, other non-bank financial intermediaries and corporates), who rely upon on global capital markets for funding, risk management, and transactional banking services. Furthermore, other stakeholders such as policymakers and regulators also need to develop the right balance between investor and system protection as well as the need for markets to function freely and efficiently in order to support economic growth.

As a capital markets participant, understanding the future is imperative. Otherwise, how can you best determine whether to invest in a certain area, grow or reduce your footprint in a country, or launch or discontinue a particular product, business or strategy? As a user of capital markets one will need to develop a view of the types of products and financing options that will be available to support your business.

To make these decisions you will have to consider various scenarios and possibilities. Where will the leading financial markets be in 2020 and beyond? How will regulation shape capital markets in the future? How will megatrends such as urbanisation translate into opportunities for capital markets and financial institutions to fund infrastructure and trade? What will be the revenue drivers moving forward? Do you need to consider different business models going forward? Will new players disintermediate existing financial institutions or provide for innovation and partnership opportunities? These are all critical questions to consider when formulating a business strategy and more tactical action plans going forward.



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To produce this paper, we assembled insights from PwC teams and our clients from around the world. Additionally, we assessed challenges and opportunities the evolving marketplace is creating for financial market participants and users and how they plan to respond. We then developed a point of view regarding how megatrends will impact the future of the global financial system using PwC's proprietary Project Blue framework. We considered how these trends will drive various scenarios for the future of capital markets, focusing on questions such as: Where will the clients be in 2020? Where will the capital come from? What will be the potential roles of capital markets participants in the economy and in the context of government policy? We then translated these trends and our view of the landscape into six priorities for capital markets participants and users to help ensure their future success. Finally as previously noted, we commissioned a survey of over 250 capital market executives and industry leaders from around the world to obtain their feedback and insights in order to validate our hypotheses (or not!).

We look forward to hearing your feedback on our work and to engaging in a provocative dialogue with you and your colleagues going forward. We would be pleased to share additional points of view, information and insights as appropriate. Please feel free to reach out to me or one of your existing PwC contacts to start the dialogue.

Visualising the priorities of participants through the lens of capital markets users

Are capital markets participants and users prepared and capable to reimagine the future, innovate and compete against this still unfolding backdrop?

Imagine you are on a journey from the present to 2020 with one of the emerging market's new entrepreneurs...

Rajiv symbolises the new India. In 2013, he, along with two other partners founded an offshoring firm focused on predictive analytics. The company's seed money came from a combination of savings, family loans and a government development grant. The business grew to 200 people and over USD 10 million in revenue in 2017, so he and his partners sourced a USD 2 million loan from a bank in Singapore to finance the purchase of new computer hardware and software to grow their business. They considered crowd-sourced financing at the time, but the rates and conditions were not as favourable as those offered through their bank.

In 2020, as the partners look to return to the bank for a substantial increase in working capital, Singapore suffers a crippling cyber-attack, shutting down markets and undermining trust in technology-delivered solutions. Conveniently, other competitive funding sources were available that were as competitive as those offered by their bank. Furthermore, these sources now offer increased flexibility in terms of scaling to their growth plans.

As Rajiv considers the company's future, he sees his business at a critical turning point.

It is now a fast-growing USD 100 million software and services business with subsidiaries in the US, China and Germany. The company is managing business relationships in 15 countries and 10 currencies. They are eyeing acquisitions on two continents and considering a small debt offering to finance further expansion, but the trust of a key client has been challenged. His nevertheless optimistic partners are pushing for a potential IPO in 2022.

Rajiv faces some daunting questions. Can the firm rebuild the trust they once had with their key client? Where should he source his capital? In India? Or in a global hub, such as Hong Kong, London or New York? Should he consider seeking direct investment from a private equity firm, pension fund or sovereign wealth fund? How aggressive should he be in raising capital? Can the firm absorb one or more acquisitions? Is this the right time to consider selling equity? Most importantly, who can advise him on these strategic choices? Do his current bankers have the experience, product set and geographic reach to properly serve him? Or must he look elsewhere?

The premier capital markets participants of the future must be able to address these issues and more.

1

Introduction

We believe that capital markets in 2020 will look very different than they do today. Based on feedback from clients, many have gloomily predicted a shrinking capital markets landscape, overregulation and the fall of traditionally powerful financial centres such as London and New York. However, we have a different vision for 2020 – one of a new equilibrium. This new equilibrium consists of a traditional financial axis of power further solidifying their positions at the top and the world seeking stability and predictability in the context of riskier and more uncertain geopolitical situations. In addition, much of the landscape where financial institutions operate will change significantly. This change will come from economic and government policies, innovation, operational restructuring, technology, from smarter and more demanding clients, companies harnessing powerful data and from continued growth of the shadow banking system.

As global interconnectivity and ubiquitous access to financial markets increase, we see a world where well-functioning, deep capital markets are needed more than ever. Industry leaders must address the continually changing market forces and prove that they can operate within this new equilibrium, which includes justifying their social utility.

Participants and users of capital markets will need to choose what posture to adopt against this shifting landscape – whether to be a shaper of the future or a fast follower. To restore public confidence and position businesses for long-term success, they will need to take a leadership role in shaping the new equilibrium – whether by helping drive the creation of new utilities, or by taking the lead on transforming entrenched businesses and operating models. Staying the same will not be an option. Consequently, we believe that the winners in 2020 and beyond will need to relentlessly execute against today's imperatives, to radically innovate, and to transform in order to meet the client and industry needs of the future.

Today's challenges

The challenges for capital markets players are vast and include pressures from clients, stakeholders and regulators. Despite this difficult environment, 84% of surveyed executives indicated that they feel somewhat or fully prepared for the challenges within the industry, although many players are struggling to meet more stringent risk and capital requirements while maintaining acceptable levels of profitability. Users of capital markets face a number of their own challenges – from finding yield in a period of pervasively low interest rates to adhering to complex regulations that they had not been subject to before. Meanwhile, incumbent and emergent financial market utilities (FMUs) are finding their places within the new capital markets landscape and need to reach sufficient economies of scale to operate effectively over the long-term. This point of view is consistent with that of our surveyed executives who cite top challenges ranging from increasing client profitability (36%) and attracting and retaining talented employees (33%), to adapting to new technologies (33%).

At the same time, improving client relationships is a more fundamental challenge than it has been in the past. Our survey indicated that 31% of capital markets executives view retaining existing clients as one of their top challenges during the next five years. It is not enough to simply fulfil immediate client needs. Backed by new technology, more information and growing confidence, clients will be more demanding and more resistant to the status quo. As such, capital markets participants will need to better understand what clients expect of them and how they wish to interact with their firms. Capital markets participants recognise the need to enhance their client service offering and as many (56%) cited this as their top investment priority.

Capital markets institutions today face difficulties ensuring individuals act appropriately and in the best interests of their clients. Due to misaligned incentive structures and weak cultural values, businesses have struggled to live up to their fiduciary responsibilities and significant reputational damage and distrust has resulted. Establishing a strong culture and conduct is essential to correcting these conflicts of interest and to restoring public confidence. Fundamentally however, this poses a challenge to organisations as only a few are expected to succeed by 2020. Eight in ten executives believe it could take up to three years to strengthen their organisational culture. Despite the challenges, the imperative to act remains as culture is now

seen as a critical component of success, not only to ensuring regulatory compliance but to remaining competitive with clients. More than 90% of our survey respondents believe that clients will gravitate towards firms that have the highest ethical standards.

Complying with growing and changing regulations remains a significant challenge, as reported by 19% of executives. Capital markets participants are still struggling to get ahead of regulation and to develop a proactive stance with their regulators. The bottom line is that regulatory developments are profoundly changing operations, markets and cost structures. So who benefits? Our survey participants believe that global banks will benefit the most from proactively addressing these changes – likely due to their ability to leverage scale to manage the cost and complexity. Responses suggest also that smaller banks (community, regional, credit unions) and broker-dealers will be threatened the most.

Executives are highly concerned by the threat posed by shadow banking players such as crowd funders and peer-to-peer lenders. Seventy percent believe they pose a moderate to severe threat to traditional banks, 20% believe they present innovative partnership opportunities and the remaining 10% believe that non-traditional players only pose a threat to those with inferior technologies. Our survey participants see this threat coming from disparate areas within the industry's ecosystem (i.e.

distribution channels, payments, and asset management/ brokerage systems). Finally, 16% of industry players believe that this shadow banking world may be set to expand beyond its current 25% market share of financial assets and two-thirds of executives expect that shadow banking assets will show flat to moderate growth by 2020.

Executives are divided over who will be the primary beneficiaries of overcoming the challenges ahead. Nearly half of respondents believe that several large, leading sell-side participants will be the market share winners in 2020. However, a third see large institutions capturing only half of the market share or less, and the remaining 18% believe the market will further consolidate with only a few significant players.

Figure 1: As per the Financial Stability Board (FSB), shadow banking assets accounted for 25% of the global financial assets in 2013 (at approximately USD 70 trillion up from USD 26 trillion a decade earlier). By 2020, do you think shadow banking assets will be:

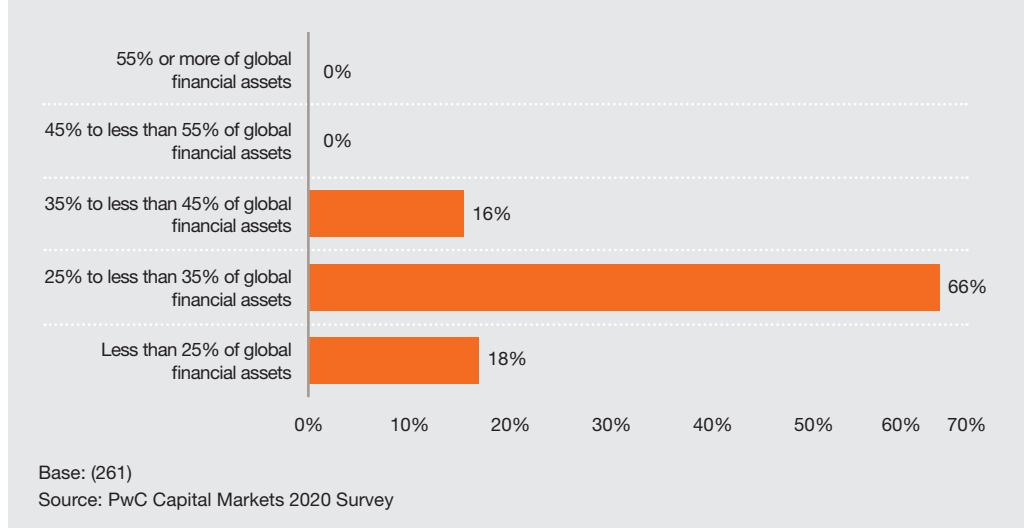
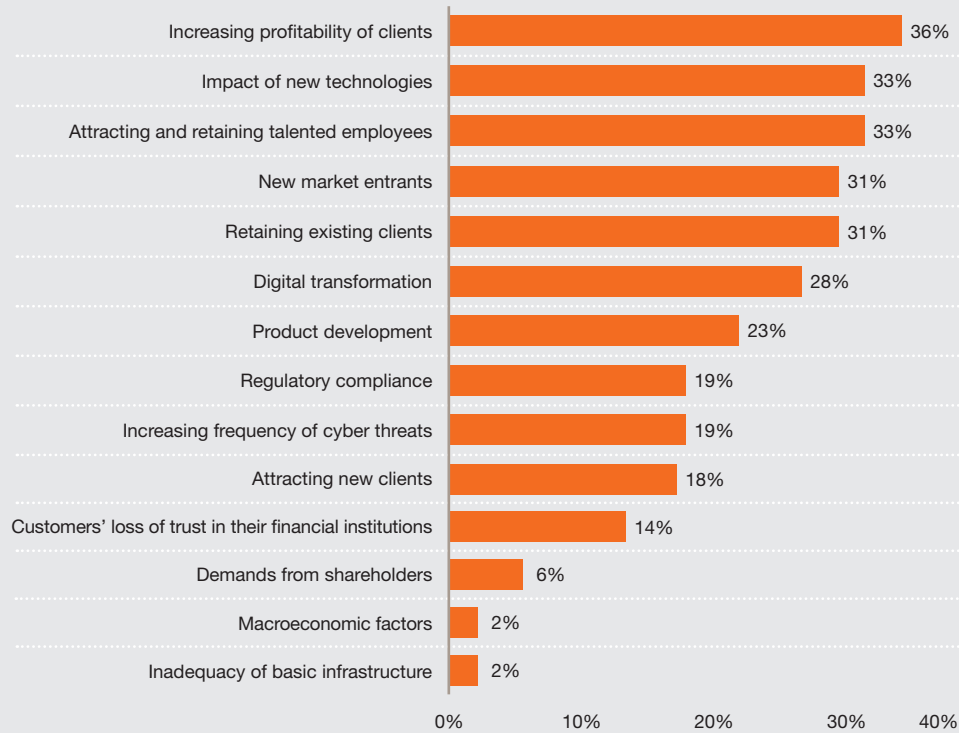


Figure 2: What do you expect to be your organisation's top three challenges through 2020?¹

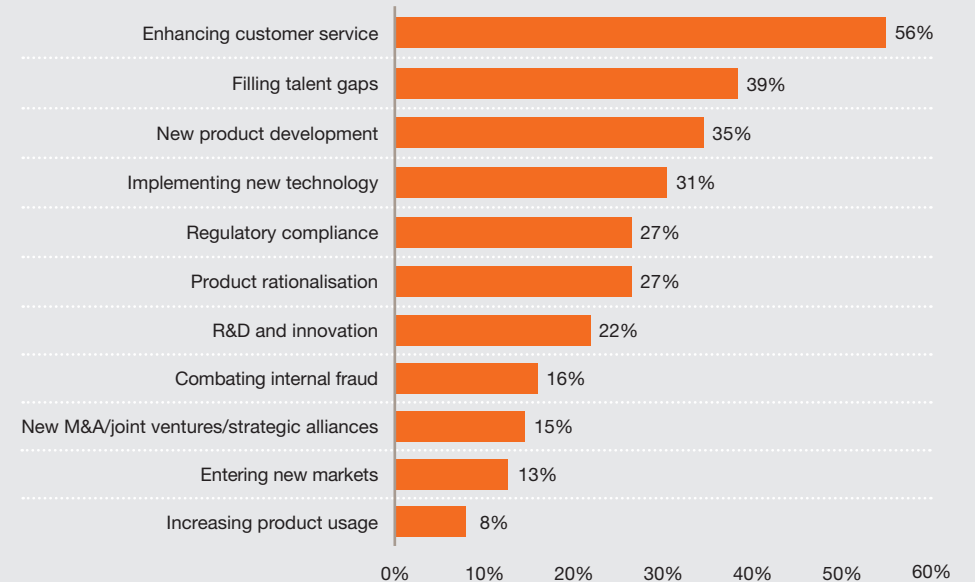


Base: (261)

(1) Please note that executives were able to respond with their top three choices.

Source: PwC Capital Markets 2020 Survey

Figure 3: What are your organisation's top three investment priorities through 2020?²

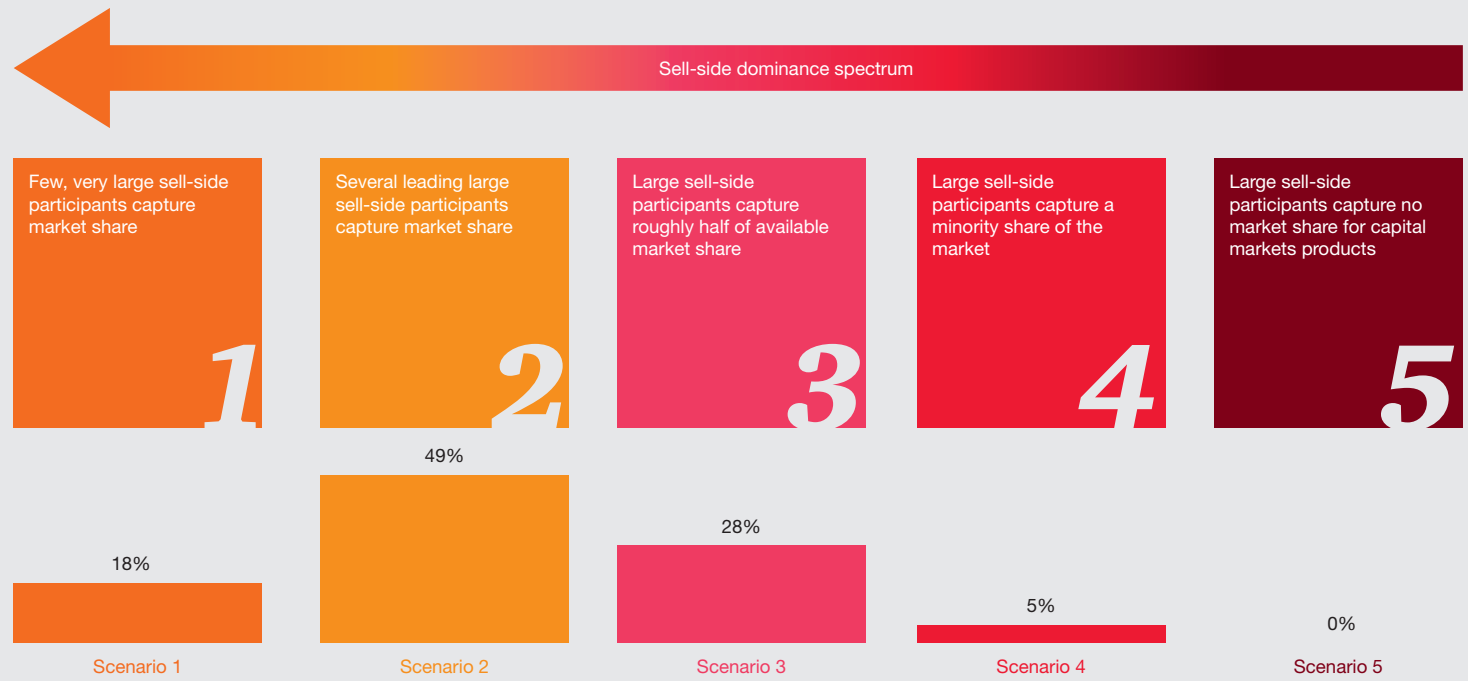


Base: (261)

(2) Please note that executives were able to respond with their top three choices.

Source: PwC Capital Markets 2020 Survey

Figure 4: Which of the following scenarios do you believe to be the most likely to occur through 2020?



Source: PwC Capital Markets 2020 Survey

The future landscape

The demands of this new equilibrium will require businesses to transform. Technology and straight-through processing (STP) are rapidly morphing from being expensive challenges to becoming critical-to-success components that create client value and enable efficiency. Meanwhile, both non-traditional players and regional broker-dealers (many with little legacy infrastructure) are challenging the established order by supplying capital and becoming leaders in product innovation.

To ensure that capital markets in 2020 are able to function efficiently and freely to provide financing to corporations and returns to investors, both participants and users will need to take on a leadership role within the capital markets ecosystem. Being reactive to regulators, public opinion and market idiosyncrasies is no longer an option.

Participants, as well as users, need to address the reputational damage that the financial services (FS) sector has suffered through a fundamental transformation of conduct and culture. Risk, regulation and capital all need to be managed holistically – taking into account implications to business priorities and operating constraints. Meanwhile the business model needs to be refocused to emphasise the clients and their needs. Given the business strategy, the operating models should be re-engineered to enable simplification and reduction of costs.

All these changes cannot happen in a silo of an individual organisation. Collaboration will be crucial to extend reach and capabilities, especially as many players are simplifying and refocusing themselves around a core set of products, customers and geographies. For example, utilities that have started to arise in recent months, bringing together participants, users and technology vendors, are an illustration of players realising the critical role of partnerships. To drive the success of these joint ventures, there will need to be real and embracing industry leadership among some of the key participants and users of capital markets.

Before we continue advocating for the changes that must occur, we need to take a step back to understand the potential composition of the new equilibrium. We need to consider that between now and 2020 there is a possibility of certain events happening that could have a substantial impact on the future trajectory of the capital markets industry. The following are just a handful of scenarios to consider:

- As the full consequences of new capital, liquidity and other measures emerge, firms realise that new regulation is restricting the ability to generate profitable business. Negative impact on economic growth also becomes apparent. As a result governments consider the cause of economic stagnation. If regulation can be demonstrably shown to be the cause, the regulatory tide may begin to recede, with rules loosened at both global and local levels.



1 Bank of International Settlements (<http://www.bis.org>)



- A crippling global cyber attack will shut down global markets for some period of time, prompting a new round of government interventions and unprecedented focus on cyber-crime, terrorism and their perpetrators, including state actors. From a trust perspective, a series of cyber attacks on systemically important FMUs would have harmful consequences for capital markets participants. Depending upon the perpetrators, this could lead to a serious fragmentation of the global financial system, which is already underway as we speak.
- The majority of the technology and operational infrastructure will be operated not by the banks but by financial technology (FinTech) companies, outsourcers and industry utilities (both bank and publicly owned), bringing both new management and regulatory challenges, along with cost and efficiency benefits.
- A large macro and idiosyncratic event that hurts global economies will cause the failure of a SIFI or FMU, prompting a re-evaluation of systemic risk concentration as well as measures to manage these risks.
- As governments meet mounting resistance to austerity measures (designed to address sovereign debt payment shortcomings), key central bankers will agree to tolerate multiple years of higher inflation in order to erode the real value of the debt as well as wages, wreaking havoc on capital markets. This will eventually lead to an imposition of even harsher austerity measures to prevent hyperinflation and panic in a number of G20 countries.
- A combination of reduced bank-lending capacity, the unprecedented need to build urban infrastructure and the requirements of investors to earn greater returns will fuel a new capital markets boom and help revive securitisation markets, as local financial institutions and capital bases cannot support this activity on their own.
- A convergence of old-age population growth and rising healthcare costs vis-à-vis the lowering of uninsured rates in Western economies will drive capital markets innovation, as insurance companies and governments look for new ways to offset risk. Combined with the growing need to address unfunded liabilities (e.g. pension, etc.), investment banks will lead the development of new and creative investor-based solutions to fund these challenges.
- The overregulation of financial markets will stimulate significant additional growth in the shadow banking system, which will further magnify growth for monoline finance companies, hedge funds, private equity firms and other buy-side players. Traditional financial institutions will lose share to non-traditional players.

Within shadow banking, competition will mount and the classic result will unfold: risk will be mispriced, poor decisions will be made, and as a result debt will accrue at an accelerating pace. This will lead to another series of failures and potential government intervention and regulation of the sector.

Given the transformation that is occurring, banking and capital markets executives will need to understand how global trends impact the industry in order to develop their winning strategy. They realise the importance of having a view of where the industry will be in 2020. A crippling global cyber attack, new regulations restricting the ability to generate profits, and/or a large macro idiosyncratic risk that hurts global economies are thought to be the more likely scenarios, as indicated by the executives in our survey, and these may alter the industry's current trajectory. What is absolutely clear, given the wide range of potential outcomes, is that developing an analysis of the impacts of potential future scenarios and their likelihoods will be essential.

In Section 2, we address these questions and concerns, and consider how global macro-trends will impact the industry.

Figure 5: Top five scenarios survey participants saw as being most likely to occur



Source: PwC Capital Markets 2020 Survey

2

Impact of global macro-trends on capital markets

Envisioning the future of capital markets – like forecasting the winning and losing stocks of the equity indices – is an extremely arduous task. So when we began thinking about the industry in 2020, we first had to characterise the current trends and transformations occurring globally. It was obvious to ground our assessment in the global macro environment. Additionally, we leveraged PwC’s extensive proprietary research and the Capital Markets 2020 survey to help shape our perspective. Finally, using PwC’s Project Blue Framework, we envisioned potential scenarios and disruptors that could shift the industry off its current path. We then leveraged the global macro-trends to shape and structure our perspective on capital markets in 2020.

It is highly likely that the trends identified will be the driving forces behind any changes in the capital markets industry. This context should serve as a guide, for both capital market providers and users to navigate the uneven landscape of tomorrow.





Four global macro-trends will be crucial in shaping the new equilibrium for capital markets in 2020: global instability, the rise of state-directed capitalism, technology and War for resources. Beginning with this top-down perspective not only helps to better understand where capital markets will be in 2020, but also to structure the expected microdynamics and scenarios for the future, which we describe later in this paper. Furthermore, it should be noted that the drivers of these trends range from the regulatory environment, fiscal pressures, and political and social unrest, but the impact while far-reaching, affects users and participants at a fundamental level.

1 Global instability – the winds of change

A polarised world, with its tensions and fragmentations, will create more balkanised capital markets, reshaping participant business models and creating opportunities for new players (e.g. users of capital markets) to evolve their roles within the ecosystem.

2 Rise of state-directed capitalism – regulation reshaping the industry

Through 2020, the consequences of today's policies and regulations will lead to a more fragmented and regionalised financial markets ecosystem. Players will need to adapt to understand and navigate local regulations.

3 Technology – an enabler of change

Technology will be the disruptive force for the next five years, permeating innovation and change. We will see it as a disruptive enabler of new products, services, business models and operating structures, as well as a catalyst for the entry of new players which we would not have seen just five years ago.

4 War for resources – the filling of the gaps

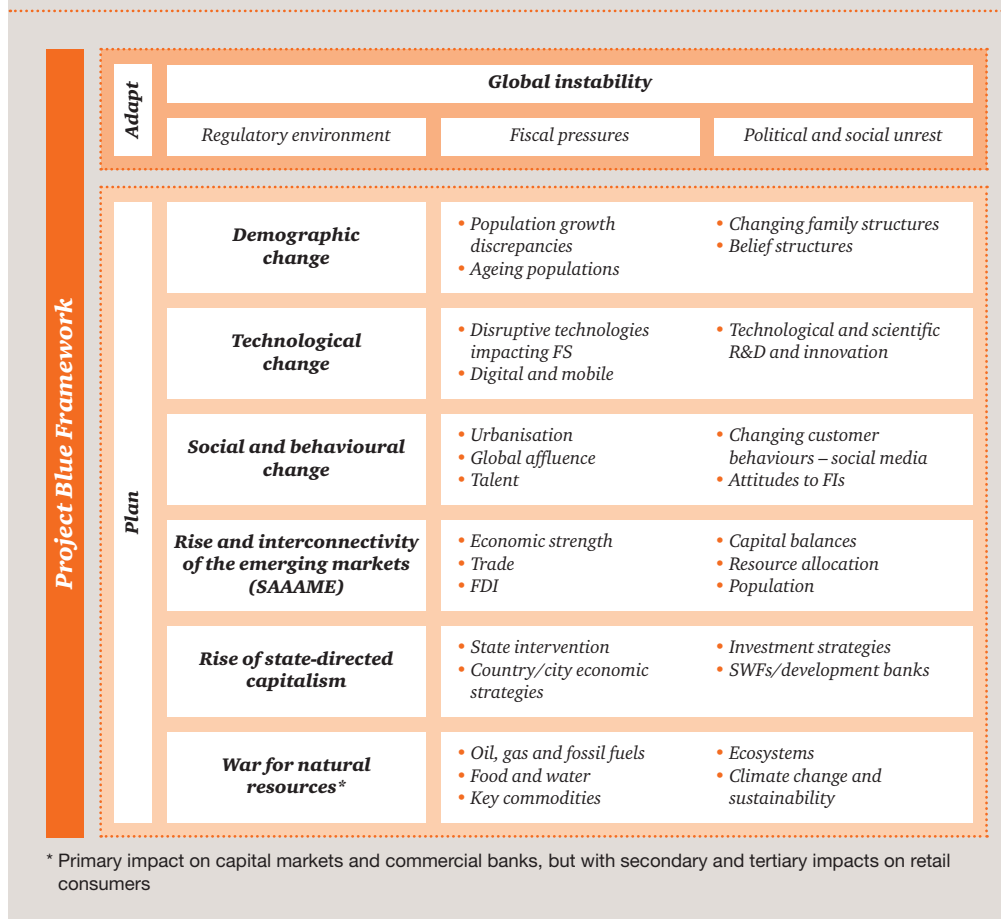
Scarcity of resources is of paramount importance for the next half century, contributing to future geopolitical tensions. Capital markets will help to alleviate some of these tensions through a reallocation of resources to where they are most needed.

In the following section we navigate the trends above in depth and we consider scenarios relevant to the capital markets industry in 2020. As mentioned, PwC's proprietary Project Blue framework has helped guide us in identifying the key themes and drivers of change within capital markets.

Project Blue framework

Many industry professionals (particularly in the West) are focused on adapting to global instability; however, the market is changing and opportunity exists for those who see it.

Figure 6: Project Blue – Framework and impact on banking landscape



Project Blue draws on the experience of the PwC global network and has been developed through interaction with FS leaders around the world. It provides a framework to help industry executives organise their assessment of a world in flux, debate the implications for their business, rethink their strategies and, if necessary, reinvent their organisations. Seeing the future clearly, being first to adapt strategies and business models and breeding a culture that shapes, rather than reacts to the changing business environment will be the building blocks of a sustainable competitive advantage in the future.

As such, the Project Blue framework (see Figure 6 opposite) considers the major trends that are reshaping the global economy and transforming the behaviour of consumers, businesses and governments. These are the fundamental underlying drivers, but business opportunities may be defined by a combination of these trends.

This proprietary framework has helped guide us in identifying the key themes and drivers of change within capital markets. The general framework makes sense of the capital markets world through seven influential macro themes or drivers of change. Although each trend is important, for discussion here we have picked the four that have shaped our thinking the most when it came to the future of capital markets. Where we think the trends are too uncertain to decipher, we explore the potential sources of disruption and leave you with leading questions to consider as you prepare for 2020.

Global instability – the winds of change

Let us start off our discussion with what we believe is highly probable in the world of capital markets through 2020; there will be quite a bit of uncertainty, instability and volatility, both in capital markets, and in the world at large. Over two-thirds of our surveyed respondents agree or strongly agree that there will be increased instability in the capital markets over the next five years. To date this instability has been primarily due to the aftermath of the Financial Crisis of 2008–2009 and more recently, due to the significant drop in oil prices. Moving forward we see macro-geopolitical trends and the increasing use of financial market access as a policy instrument contributing to future instability. An overwhelming majority of executives in our survey (93%) believe there will be continued geopolitical tensions through 2020 and countries such as Russia, Iran, Syria and the Middle East region could pose the greatest risk globally. We believe that four structural factors will be particularly important in driving global instability through 2020:

- **Continued geopolitical tensions** – the conflicts between sovereign nations will continue to rise, heightening the risk that certain countries will be restricted or entirely cut off from access to capital markets and financial infrastructure.
- **Evolution of severely balkanised regulation** – the implications of regulation and their divergence across

regions are only beginning to be understood; the full impact on the global real economy will be felt over the next five years or so.

- **Evolution of fiscal policy** – many governments will inevitably be forced to abandon fiscal stimulus programmes and raise interest rates, potentially undermining fragile stability and throwing markets into a state of volatility.
- **Political and social unrest** – a range of factors including fiscal austerity, scarcity of resources, corruption, social media and religious conflict will continue to challenge existing political structures, contributing to global economic and market instability.

Through the following scenarios, we will explore the transformations that are likely to occur within the capital markets ecosystem – to capital markets participants (e.g. broker-dealers, custodians, and market utilities) and to users (e.g. hedge funds, mutual funds and other buy-side players). In many cases volatility and instability will create an impetus for the transformation of player roles and business models, creating opportunities for some and challenges for others. In light of these considerations, we believe that the nature of the capital markets ecosystem will be reshaped in the following ways:

- **In the short- to medium-term, capital markets players will continue to experience staccato-like volatility, as various markets undergo surges and retreats.** Subdued average economic growth and government-imposed low interest rates have resulted in global investors desperately seeking alpha – chasing ‘flavour of the day’ instruments, and then abandoning them just as quickly. Both institutional and retail investors have recently increased risk exposures and shifted more assets to alternatives. The early 2015 drop in oil prices has been another source of volatility and sovereign stress and is likely to continue for the foreseeable future. If some of these asset classes or specific governments themselves experience troubles, sovereigns, with looming fiscal pressures, may have difficulties in softening the blows, given that interest rates are at an all-time low and sovereign debt is at historic highs.
- **Given continued geopolitical tensions, capital markets participants and users will need to be vigilant regarding sovereign risks.** Over the past few years we have seen numerous examples of spikes in sovereign risk, ranging from the Greek debt crisis to the United States flirting with a technical default. The developing world has not been immune either, stricken in some places by internal unrest and in others by cross-border tensions. Our survey participants agree

Global instability – the winds of change (continued)

that this should continue to be a focus, with two-thirds of our survey respondents noting that structural changes related to political and social unrest will drive global instability through 2020. Leading players on both sides will need to manage sovereign risk on multiple dimensions: firstly by optimising their global footprint, taking into account geopolitical considerations; secondly by managing their entity structure; and thirdly by deeply understanding local specifics where they have exposure and then carefully monitoring associated sovereign risks.

- **Liquidity pools will continue to aggregate in established global financial hubs.** An Asian hub is likely to gain prominence. New York and London are today's two main epicentres of capital market activity, handling nearly 45%² of global capital markets activities. London and New York provide a combination of stability, transparency, and rule of law that will continue to lead the global financial ecosystem through 2020. However their dominance may be questioned by the continued rise of the Chinese economy and the Asia-Pacific region as a whole. 76% of our surveyed capital markets executives agreed, expecting a financial centre rivalling London and New York to emerge in the years through 2020. They are divided on the most likely location: Hong Kong (28%); Shanghai (20%), Tokyo (19%) and Singapore (18%). We see a financial

hub bifurcation between Hong Kong and Singapore, as participants and users of capital markets seek to diversify and hedge their bets in the region.

- **Business models of regulated banks will increasingly shift from principal to agent in the face of the rising cost of capital and regulatory restrictions.** We have seen this start to happen, as participants have drastically cut inventory in fixed income and have pulled back from principal activities. Through 2020, we will see this trend accelerate and business models will noticeably shift; participants will reduce scale and introduce agency-driven innovation, such as dealer-owned trading platforms (“Ebay-ification” of trading desks), cross-player consortiums, collateral optimisation, and riskless principal through optimisation of available global inventories. The effects of such changes will be broad and will impact more than simply regulated banks, creating opportunities for new entrants (e.g. FinTech firms and market utilities).

Within financing, we will see similar scenarios playing out as participants continue to reduce lending capacity to non-priority client segments. Through 2020, we will see the re-emergence of capital markets-based alternatives to bank lending (e.g. greater use of securitisation and direct access to markets). Users of capital markets such as pension funds, hedge funds, private equity firms, as well

as other non-bank financial intermediaries will play a critical role. Meanwhile regional and national banks will have a pivotal role as well. They will fill gaps by providing specialised and tailored services to the under-served segments, such as middle market corporates and SMEs.

- **As costs continue to rise and revenues remain subdued, the market will face the ‘Jaws of Death’ (i.e. returns that barely surpass the hurdle rate cost of capital).** The pressures faced by market participants will not be even. Within our Capital Markets 2020 survey, 43% of executives believe that only a few capital markets players will fully master redefining their business models to generate mid-teen returns on equity, while 40% believe that some early adopters will master the objective of redefining their business model. As our survey points out, not all players will be affected equally, as each will face unique challenges. Larger institutions will be challenged by heightened regulatory scrutiny that stems from G-SIB³ or D-SIB⁴ designations. Some may be forced to pare down certain activities or hold extra capital. Meanwhile, smaller institutions will be hard-pressed by scale limitations: challenged to on the one hand, absorb rising compliance requirements and, on the other strip out fixed operating expenses.

² Based on a ratio of domestic market capitalisation of stock exchanges of New York and London and global market capitalisation

³ Global systemically important banks

⁴ Domestic systemically important banks

On the revenue side, most players, whether large or small, will continue to rethink their business models, given the regulatory-driven changes to the fundamental economics of certain asset classes. Some of these changes will include transition to agency models (as we mentioned earlier), or building more client-centric organisations. Regardless of the path that an organisation chooses, these changes will be critical to position the business for longer term success. However over the short-term, in many ways the macroenvironment will continue to dictate annual top-line.

On the cost side, there is still much to do. We believe that aggressive outsourcing, consolidation and streamlining of technology and organisational models will allow industry leaders to operate at about 50% of the current cost per trade. However in our view, despite all of these measures the industry will not revert to the 2006–2007 highs of 20%+ RoEs. Rather, the industry will settle around pre-boom returns of 12–14%.

- **Challenges faced by traditional capital markets participants will create growth opportunities for others.** While regulatory reform and technological advances in particular have challenged traditional participant models, these dynamics have created opportunities for other institutions. Particularly, we anticipate four types of players emerging as winners in 2020: (i) FMU providers, such as clearing houses, market utilities, and exchanges as they expand beyond their current offering set, diversify vertically and consolidate horizontally; (ii) electronic trading platforms that capitalise on traditionally voice only markets (e.g., fixed income); (iii) financial technology companies that are able to capitalise on participants' and users' drive to simplify and streamline; and (iv) new (shadow banking) entrants acting as capital markets participants (more on that in the next scenario).

Each of these players will be able to capitalise on not only the changing market structure, but the changing business models of traditional broker-dealers that are looking to shed non-profitable and/or operationally expensive activities as well as optimise their use of capital. They will be able to carve out niches

and potentially expand into activities that were hitherto dominated by capital markets participants.

- **Risk taking and capital facilitation will increasingly move into the shadow banking system.** Like the balloon effect, risk when squeezed or reduced in one sector of the capital markets ecosystem, will emerge in another. We anticipate that for regulated capital markets participants reduced risk-taking and financing activities in the aggregate will shift them to a different set of players and create risks in new and perhaps unexpected places. As such, assuming no significant changes to regulation, shadow banking will continue to expand into the capital markets arena, growing through its service of taking on otherwise avoided risk by regulated institutions.

New entrants such as PE firms, hedge funds and asset managers as critical sources of capital and are looking for ways to interact directly with the consumers of capital and at times, without using banks as intermediaries. These players will continue to participate in the primary and secondary markets, lowering trading costs and increasing overall liquidity. We anticipate that the extent of financing

opportunities will be vast and will come in both traditional and new forms of capital sourcing, including: (i) partnerships between participants and users for sourcing and funding opportunities; (ii) return of 'safe' securitisation, aided by revived government interest; (iii) sovereign wealth funds, private equity, hedge funds, as well as non-financial entities providing loans to credit squeezed but high-grade corporates and specific projects; (iv) crowdsourcing and peer-to-peer lending for SMEs and middle-market start-ups; and (v) BDCs⁵ and REITs. By 2020, there is a strong likelihood that these new providers of capital and structures that support them will have experienced a cyclical downturn in the credit cycle. We believe that when this downturn comes, the impact of these stresses will reveal both sources of strength and areas of improvement, relative to our post-financial crisis global financial architecture.

⁵ BDC – business development company; REIT – real-estate investment trust

Rise of state-directed capitalism – regulation reshaping the industry

We have mentioned the effects of state-directed capitalism and regulation upon capital markets participants, particularly in the regulated banking sector. One of the impacts has been a search among nations for increased control over domestic financial systems and institutions. Nations have undertaken prescriptive rule-making, as they learned that a global banking system is local in a crisis. As a result, regulation has shifted focus even more to promoting domestic policy agendas (e.g. fighting terrorism and exerting geopolitical power; supporting housing markets; ensuring growth in preferred segments) and protecting sovereigns, rather than facilitating the efficient movement of global capital flows. Although much of the regulation and policy is here to stay, the proverbial tide may begin to recede through 2020. Of course, major changes will only occur if other policy measures (e.g. monetary) fail to deliver economic growth and regulation can be demonstrably shown to be the cause. Although such a scenario is not likely, we do anticipate a degree of regulatory harmonisation across regimes and the softening of some of the more onerous aspects of the regulatory agenda as memories of the financial crisis fade. Such trends in our view have a number of years to play out and will impact the nature of the industry in 2020 and beyond:

- **In contrast to the original G20 intention of eliminating ‘too big to fail’ institutions and dispersing risk in the financial system, regulation will likely result in an unforeseen concentration of certain types of risks.** The G20’s intention of reducing risks will lead to unintended consequences that will become more apparent with time. By 2020, there will be fewer capital markets participants who will be able to successfully meet regulatory hurdles with sufficient economies of scale to maintain profitability on a cross-border basis. Mid-tier universals (e.g. regional banks) will find room to expand in domestic markets while meeting local regulations, but their ability to serve international clients will be constrained as costs of cross-border compliance will be just too high. This regulatory overhead, rather than promoting a more diverse banking sector, is forcing banks to further consolidate everywhere, even in places that have traditionally had a significant number of smaller banks, such as the United States and Germany, leaving a more concentrated banking sector behind.
- **The playing field will shift from global to local. National and regional institutions will dominate.** Banks, especially in the EU, have been in retreat to their home markets since the crisis, and we expect this to continue. Historical advantages, such as economies of scale,

will be overcome by local regulatory constraints, such as US-driven foreign bank regulation, the Vickers rule in the UK, and Switzerland’s FINMA⁶ proposal for rules governing non-Swiss banks. In addition to curbing cross-border financing activities, changing regulation will impose friction costs for the capital markets industry, driving a retreat of liquidity from certain markets, especially emerging ones. In turn, banks will focus on providing intermediation services in key markets where liquidity is deep, minimal use of balance sheet is required, and sufficient scale is needed to overcome profitability hurdles.

- **Access to local financial markets will become more restricted to cross-border institutions.** Geopolitical uncertainty and the balkanised nature of financial regulation will continue to swing the pendulum away from the globalisation of financial markets. Traditionally restrictive markets such as China, India and Korea will be joined by others (even developed countries) that limit the presence of foreign institutions through local policy and subtle preferences for domestic institutions. Under such restrictive rules, multinational players will be forced to either increasingly regionalise operations and seek local partners to intimately understand and comply with local rules, or exit these markets altogether. Cross-border investment and capital flows will

⁶ FINMA – Swiss Financial Market Supervisory Authority

lag, particularly to emerging financial markets, as access remains restricted, either through direct regulation (e.g. limitations on foreign ownership) or more indirect rule-making (e.g. US enhanced prudential standards rules). Interestingly, the eurozone is moving against this global trend with the introduction of the Single Supervisory Mechanism and other steps outlined in the recent EU Green Paper, “Building a Capital Markets Union”. We expect this to drive increasing movement towards greater use of the single passport concept within the zone to reduce overall regulatory compliance costs.

- **The size of a country’s banking sector will be more correlated with GDP.** With the reversion of the globalisation trend, smaller countries with relatively large institutions will have shrunk their banking sectors, relative to their GDP, through a combination of asset reduction, business sales and write-offs. Focus will shift away from global proprietary trading to client-driven businesses, which will increasingly also be more local. Financial performance of capital markets players will be linked to a greater extent to domestic demand and domestic growth dynamics. Those institutions that historically drew a significant portion of their revenues from international operations will either return to more of a domestic focus – consequently shrinking their international breadth – or turn significant overseas businesses into subsidiaries to further insulate these activities from the home country.

- **State-backed banks will peak in terms of importance, with governments influencing more through policy than direct ownership.** The last three decades have seen the rise of state-owned banks particularly in emerging economies, as governments have sought to channel credit, based on policy objectives. The financial crisis increased government ownership as bailouts took place in many developed markets. However through 2020, the continued wind-down of government stakes in banks of developed economies, combined with the adverse impact of rising non-performing loans, capital constraints and weaknesses exposed by subdued growth in emerging markets, will diminish the importance of these enterprises, forcing them to scale back their activities. Ambitions of global prominence on the capital markets stage will be curbed, with state-backed banks returning to local pressing agendas, realigning internal capabilities and pursuing more conservative growth trajectories that are rooted in the core needs of their local clients and macroeconomic fundamentals. Instead, governments will increasingly look to policy – both in the form of regulation and engagement of the regulators – to control and shape the activities of capital markets participants and users.



Rise of state-directed capitalism – regulation reshaping the industry (continued)

- **Regulation propelled a significant rise in the role of FMUs. As a result, FMUs will be well-positioned and at the heart of almost all capital markets investment flows.** In response to new regulation, FMUs have expanded and new players will emerge. While the introduction of new utilities and services is designed to create greater transparency and provide for risk reduction benefits such as netting of exposures, it does lead to a shift and, at times, arguably, a concentration of risk into these entities. By 2020, we will see a significant increase in the types of available utilities, expanding from mandated FMUs – e.g. trading, clearing and settlement activities – to market consortiums that facilitate and lower the cost burden of core functions such as client onboarding, regulatory reporting and other non-strategic activities. Many, if not most of these emerging utilities will be owned by different consortiums of financial institutions, existing FMUs and financial technology players.

In response to these dynamics we expect significant activity around feasibility analyses and the eventual launching of a number of new ventures. Eventually we see the consolidation of a number of these entities in order to reach acceptable scale to operate efficiently in the new environment. In fact, we do not discount the possibility of the formation of a network of regional mega-utilities and FinTech players that provide infrastructure

along the entire capital markets value chain. As such, FMUs and the entities that own them will be both highly acquisitive and open to new partnerships, looking to adjacencies (e.g. reference data or trading technology) to complement core offerings and create ‘mutualised’ service models.

- **Leading institutions will be in a position to practice more proactive regulatory management.** Twelve years after the financial crisis, the relationship between banks and regulators will have reached a new equilibrium as banks more fully integrate policy objectives of governments into their day-to-day business. Leading banks will take a comprehensive approach to managing regulatory change – both internally and externally. Internally they will look at integration strategically, managing programmes holistically, regularly checking interdependencies and validating the implication on their business models. Externally banks will continue to engage with their regulators in meaningful dialogue, as well as facilitate lobbying efforts where necessary.

Technology – an enabler of change

For the past 50 years, technology has changed society in unpredictable ways. As the changes in technology accelerate, so will the impact on capital markets, both from the perspective of the markets themselves and the technological platforms of capital markets participants and users. In terms of the markets themselves, we could write an entire paper on the impact of technology in terms of the creation of new companies, financing opportunities and on the prices of basic commodities. The impact of fracking, for example, on the oil markets and capital markets as a whole is a great example of how new technology is creating both opportunities and disruption in the capital markets themselves. New technology-driven companies in nearly every industry will continue to drive M&A and IPO opportunities across the board and present challenges to the incumbents.

From the perspective of capital markets participants and users, past changes have largely affected the trading side of businesses, but left the way that capital markets players relate to their clients, manage their internal operations and access their own data, largely untouched.

Over the coming years financial institutions will finally be forced to address two technology-driven challenges that necessitate the need for disruptive thinking. Firstly, many players have a huge dispersion of current technology platforms, with no

centralised view by geography, product and client. Secondly, age is a major challenge: outdated systems are often not compatible with the current business and regulatory environments, requiring significant upkeep; a large chunk of legacy systems will have to be replaced, necessitating a substantial technology spend sooner rather than later. While seemingly daunting, tackling these issues will require and certainly spur innovation.

Importantly, the impact of technological change on the capital markets industry will be different in comparison to the retail and commercial banking sectors, which as mentioned in PwC's Retail Banking 2020 paper, is focusing on bolstering analytical capabilities and mobile access to better serve and understand the customer. The vast majority (93%) of our surveyed respondents agree that it is important for their organisations to use technology as a tool to gain a competitive advantage, as well as to facilitate operational and regulatory change. Furthermore, nearly three-quarters of the respondents expect to invest more than 11% of their capital budget into technology. Within capital markets, the notable effect will be the complete transformation of the cost base and business model, as well as the rise in prominence of industry utilities to reduce costs and drive efficiency.

More than three-quarters of our surveyed executives indicate that they will need an efficiency ratio of 50% or less to remain competitive for the longer term. Use of big data and analytics will be paramount to gaining advantages in increasingly competitive markets, either to guide better investment opportunities and improve customer service or to better manage operations and risk through the organisation.

Of course, this will only be possible if regulation does not continue to ring fence local operations in the hopes of greater regulatory control. Regulators will need to become comfortable with technology-enabled business transformation. Meanwhile, regulated firms will need to earn the trust of the regulators in this area by working together to mitigate any crisis driven concerns around areas such as cross border operations and third-party vendor management.

How each player responds to the changes in the technology landscape will depend on its strategic objectives as well as legacy technology considerations. Regardless, we believe that cost reduction opportunities and pressures to stay ahead of market trends will force capital markets players to stretch towards new partnerships in order to look for efficiencies from third-party services, such as cloud computing and reference data management. As a result the financial technology vendor market will be

Technology – an enabler of change (continued)

a burgeoning growth area, something that is already becoming apparent as over the last 12 months venture funds in the financial technology space have more than tripled.

Predicting which technological innovations and changes will be the most disruptive is difficult, if not impossible. However we believe that whatever changes may occur they will be far-reaching, giving rise to new products, value drivers and players across capital markets. For example, it is unclear how the rise of Bitcoin and electronic currency in general will impact the foreign-exchange markets and the payments business overall. These changes of course affect some markets and geographies more significantly and faster than others.

In 2020, we consider a handful of scenarios:

- **Operations and technology will form the basis of the next generation of core vs. non-core capabilities, giving rise to the ‘utilisation’ of these functions.** A combination of declining revenue pools and higher compliance costs is creating an urgency to solve deep-rooted operational inefficiencies in a fundamental way. Leading players will ultimately need to address these issues in a more revolutionary rather than evolutionary way; both capital markets participants and users will look increasingly to spin off or carve out their operations and technology functions that do not provide a measurable competitive advantage. Virtualisation or ‘utilitisation’ has become a widely accepted way to reduce and
- **Multi-asset platforms will change the client experience.** The business models of traditional capital markets participants will go through a fundamental shift with the introduction of multi-asset class, integrated and in many cases, broker-neutral platforms. The single-dealer/asset class platforms for each product silo and large data warehouses at the back end to consolidate risk, financial and client data are unsustainable. The new platforms that emerge will provide capital markets participants and their clients (capital markets users) with a single source for many of their trading and risk management needs. At the same time the classic trader model will continue to be marginalised, ushering in

componentise operating costs, as well as to increase the reliability of enterprise IT. By 2020, it is quite possible that we could see for example nascent utilities in areas such as Know Your Customer (KYC), anti-money laundering (AML), surveillance monitoring and valuation services operating on utility-like platforms for a large number of institutions. Beyond 2020, we will see a number of operations and technology carve-outs run as separate companies that provide specialised services to multiple players across the capital markets landscape. While the challenge will be to maintain control in a cost-efficient manner, we believe that the entire industry will benefit, due to greater transparency and better risk management – something that regulators will favour.





new front office functions, increasingly consisting of a smaller group of IT-savvy traders, supported by an army of data scientists and technologists. In terms of players, there will be significant flux and disruption with new, unexpected, entrants such as technology-led players. Technological innovations will also allow firms to equip their sales teams and managers with increased amounts of information, predictive analytics and decision-making support. Such additions to the front office will ensure an enhanced client experience.

- **Technological innovation will disrupt capital markets participants' competitive advantages.** As we have discussed in the "Global Instability" section, regulation is causing disruption and uncertainty. However, it is also creating opportunities for new players. In many ways technology is making it possible for new entrants to compete or become additive to existing players and value chains – examples include the use of artificial intelligence to displace 'voice' -dominated markets and alternative research providers that leverage unstructured data to generate deeper insights into existing trends and market opportunities. In short, technology will touch and transform business models in a vast array of areas, such as data management, market surveillance, cyber security, regulatory reporting, funding and alpha capture.

- **Harnessing big data will be paramount to remain competitive in capital markets.** Historically the capital markets industry has faced challenges in harnessing data – both structured and unstructured. Within institutions, data is typically not managed well across business and geographical units, leading to an inordinate amount of time spent on conducting reconciliation activities and creating unmanageable data warehouses. Across institutions, participants, although recognising the power of data, struggle to leverage it in meaningful ways and in a timely fashion. Forthcoming advances in technology (such as wider adoption of cloud computing and predictive analytics) will enable speedier organisation of structured data and will allow large pools of unstructured data (e.g. blogs and social media) to be indexed and searchable in shorter periods of time. Sophisticated analytics tools will be created to enable organisations to analyse vast stores of big data easily and quickly, focusing on the importance of clean data and using fewer resources in the process. As such big data will serve as an important platform for knowledge, insight and ultimately, a data-enabled competitive advantage that can be monetised across markets.

- **Technology risk shifts from managing operational and implementation failures to controlling cyber risk.** Historically the capital markets industry has focused the vast majority of its technology risk activities on new infrastructure launches, change management and operational performance. While these activities will continue to remain important in 2020, the emergence of cyber risk is a potentially mortal threat for all capital markets participants and users. As we have seen with recent hacker-driven thefts and disruptions, nation-states, criminals and terrorists are devoting an increasing amount of resources to disrupt, steal from, and manipulate the capital markets. As world instability grows in the years leading up to 2020, managing cyber risk will not only be a matter of national security, but one of the greatest risks facing free and fair capital markets.

War for resources – the filling of the gaps

Scarcity of resources and the impact of climate change are already of paramount importance. More obviously, growth in global population and rapid urbanisation will put potentially unsustainable pressures on global resources. The ‘war for resources’ (e.g. water, food, minerals and capital) will increase market volatility, generate new regulation, and re-enforce protectionist behaviours in many countries and regions. However we see a bright side to these trends as free and fair capital markets will remain the most effective means to help alleviate some of the global tensions by assisting in allocating resources where they are most scarce, utilising market-based disciplines.

The opportunities for the financial sector to support this transition will be significant and lead to both new markets and clients. These trends, in our view, have a number of years to play out and will impact the nature of the industry in 2020:

- **Funding needs for an unprecedented series of infrastructure projects due to growing urbanisation and rising affluence will create a massive opportunity for capital markets participants.** The pace of urbanisation is set to accelerate as China, Africa, South America and India continue to support and embrace growth. Demand will skyrocket in cities for basic services such as power, water, sewage systems, roads and sanitation. Both government and private investment are providing funding; however a large gap will remain

as a consequence of shrinking government budgets and the limited capacity of local institutions and investors to finance these projects. Several years ago the OECD estimated that around USD 50 trillion in worldwide infrastructure funding would be needed in the years leading up to 2030.⁷ Given the state of public finances globally, which has only been accentuated by the drop in oil prices in a number of countries, economic investment has been trending at lower than historical levels since the financial crisis. The good news is that infrastructure projects, given the massive funding gaps, social appeal and yield, are attractive to pension funds, SWFs, insurance companies and other institutional investors. In particular, we believe that the partnership between participants and users is part of a long-term solution to close the pervasive funding gaps, helping invigorate local and national economies. Leaders across markets will be the ones who recognise this opportunity and develop well-established platforms to broker and configure infrastructure financing in the markets they serve. Our survey results re-enforce this point, with many capital markets executives expecting to see this opportunity all over parts of Africa (ex. South Africa), and specifically, they expect infrastructure funding needs to manifest in the areas of transportation, roads and bridges and natural resource development.

- **Capital markets participants will (finally) create effective marketplaces to facilitate the exchange of climate-related instruments.** There is a growing belief among policymakers that our planet’s climate is changing. This belief has significant political, economic and social implications for capital markets participants. Governments will have increasingly taken action through additional taxation and other policy initiatives. In turn, this will create new financial markets; we have already seen inklings with the deepening of carbon credit and weather derivatives trading. While climate-related markets and instruments have largely remained inefficient and ineffective to date, we view these as growing pains.
- **Capital markets will drive innovation around the pricing and allocation of scarce commodities, especially food and water.** Despite their volatility, world food prices have risen over the past decade. Water is becoming scarcer – by 2030 the demand for water is estimated to almost double against 2005 levels,⁸ which is significantly greater than the existing supply. China in particular is facing tremendous demand for water as it currently has 21% of the world’s population, but only 6% of its fresh water according to a United Nations report. At the same time, there are estimates that current transportation and consumption methods waste a significant amount of fresh water resources.

⁷ OECD Infrastructure to 2030

⁸ Charting our water future: Economic frameworks to inform our decision-making, 2030 Water Resources Group, 2009

Given the unprecedented urgency around water as well as food, capital markets will help drive solutions: firstly, by facilitating investment into agriculture and desalination technologies; and secondly, by facilitating trading to reallocate these resources where they are most needed. When surveyed about the pricing and allocation of scarce commodities (e.g. food and water), 81% of executives agreed or strongly agreed that their institutions were in a position to help drive innovation through the financial markets.



3

Potential disruptions

As we have mentioned in our paper on the future of retail banking in 2020, it is always easier to take the trends we see today and model their impact on our world in the future. However, the future is by definition uncertain, which means that agile business models will gain an upper hand. We have thought about a couple of these 'big disruptions' and posed some leading questions, both to ourselves, as well as to our readers.



Shifting global resources

For example, what happens when the US – the largest economy in the world – becomes energy self-sufficient? This is clearly a possibility. Or even more radically, what happens if technological developments mean that every country could be self-sufficient as extraction and renewable technology advances combine to provide a new era of plentiful low-cost supplies? What would that do for economic development and how would it change trade flows and economic activity? Does this stop or slow the relative rise of the East? Does this allow China to grow without importing energy? What do oil-rich but undiversified economies do when the world does not buy their oil and gas? How would financial markets react and evolve? What happens to the climate change debate?

War

Could a terrorist strike or hostility between two major sovereigns cause isolation of a significant region from others and essentially create two or more blocs of financial systems? We are already seeing how financial and economic sanctions are increasingly being used as a policy weapon across the globe. In a bifurcated world, could a financial institution even operate across both blocs? Would it be allowed to by the home governments? Could a cyber attack on a major financial institution or an FMU send shockwaves throughout the system and lead to new regulation? Can governments afford

to sit outside of financial markets during periods of heightened global hostility? Or should they become a part of the financial market infrastructure security solution?

Technology

Technology may not only prove to be an enabler but could be incredibly disruptive. What if advances in technology (e.g. quantum computing) create an unfair advantage for individual players? Could this cause significant disruptions to global capital markets? Could it lead to the emergence of a new financial crisis? In a digital age could regulators/market intervention move fast enough to avoid creations of technology-enabled monopolies by first movers?

Sovereign crisis

In 2013 we experienced an unexpected shutdown of the US government amidst dysfunction and partisanship of the Republican and Democratic parties. More importantly the United States was hours away from hitting its debt ceiling. Although the markets did not believe that the US government, despite its myriad of problems, would allow the country to default, the probability was certainly not zero. Now looking to 2020, what would happen if markets do eventually lose confidence in a major sovereign, like they did in Greece in 2012? Is the eurozone crisis really over or will it reappear? What would happen if a sovereign does formally default? What kind of market contagion would that spread? Should governments intervene? And

importantly, will banks, corporations and governments be able to withstand this type of far-reaching shock?

Rising interest rates

Nearly 80% of the respondents in our poll agreed that we should expect to see an increase in interest rates and inflation by 2020. What will happen when interest rates rise beyond current all-time lows? Will central bankers be able to control market interest rate levels or will inflation follow, creating unanticipated upward pressure on rates? Are sovereigns prepared to service their highly leveraged economies amid higher interest rates? If they are not, what would be the implications on global economies and the FS sector? Will inflation become a serious issue? What about the prospects for a strong global recovery? Will the industry as a whole win or lose?

Regulation

We said before that regulation is the most important factor shaping banks and the financial markets today. What if the regulatory burden on the financial sector becomes so great that it is no longer possible for the financial system to function efficiently and effectively? What if the current rule set constrains the supply of credit and risk management tools to the point of significantly damaging the real economy and creating social unrest? Do nation states begin to pull out of international agreements such as Basel III and ‘go it alone’ for economic survival, so they can loosen the

constraints and gain short-term economic advantage? Does this begin to unwind the improvements in global regulatory cooperation and consensus-building after the financial crisis and further fracture the cross-border universal bank model while accelerating the movement towards national vs. cross-border banks? Does it spur a new era of innovation in some countries and regions where alternative risk management and regulatory approaches allow for banks to safely increase lending and economic growth, or does this simply begin the process of creating the next financial crisis?

Financial crisis

What if the next financial crisis occurs between now and 2020? One can see a number of potential areas of risk: from a potential sovereign crisis in the eurozone to a re-emergence of problem loans in emerging markets.

Even more than the previous breakdown, another financial crisis could be truly gamechanging, not only for financial institutions around the world, but for the post-World War II geopolitical order that has underpinned the world for the last 70 plus years.

An imperative for change

The changes we have seen in capital markets over the last five years or so were largely a result of the financial crisis. As such, capital markets participants' and users' actions in response to these changes have largely been tactical in nature – aimed at fighting the most pressing fires. And there have been many fires to fight.

Now as the fires subside, we can begin to see the shape of capital markets in the aftermath of the crisis. New regulations – far-reaching and intrusive – are a staple of the new capital markets landscape. Global economic growth remains inconsistent and in some regions elusive. A combination of technology and product standardisation has increasingly commoditised capital markets products and services.

Efforts to cut costs, while successful in the short-term, have not been transformative in reorienting banks towards sustainable profitability. As a culmination of all of these trends, bank returns (ROEs) while improving, still remain well below their cost of capital in much of the world. For example, since 2009 the top 13 capital markets-focused banks in the US and Europe have announced over USD 50 billion in planned expense reductions through 2016⁹. These cuts barely get the industry above its cost of capital. For these players to achieve an industrywide 15% return on tangible equity (ROTE), banks will need to increase their previously announced expense reduction programmes by USD 30 billion more. In

aggregate, this USD 80 billion plus figure represents approximately 8% of pro forma operating expenses.

The bottom line is that, as organisations continue to struggle to reduce costs they have only begun to take into account fundamental business and operating model issues. The majority of expense reduction initiatives to date have focused on headcount in investment banking and capital markets as well as some further outsourcing and offshoring of existing processes. However in order to improve ROE, institutions must implement new initiatives focused on core re-engineering and front-to-back strategic business renewal. Given that the easiest cost reduction opportunities have largely been addressed, capital markets players need to look differently at their businesses and align overall cost-cutting and growth agendas with their corporate strategy and operational capabilities.

We believe we are at the precipice of an inflection point and not on a sustained trajectory of slow decline. It is a call for transformative change. The objective: redefine businesses and return to healthy profitability. The hurdles will be high, requiring a coordinated response on multiple fronts. Financial institutions will need to simultaneously juggle evolving regulation, immediate client demands, internal operational requirements, stagnant growth and the imperative for innovation to stay competitive over the long-term.

The expectations of the market are vast, and the road ahead is long and fraught with uncertainties. In the next section, we discuss what we think the priorities are for shaping the leading banks of 2020.

⁹ Source: Public Company Filings and PwC Analysis

4

Priorities for 2020

*As we pointed out in a 2012 PwC publication, **Banking Industry Reform: A New Equilibrium**, there is a permanent shift in terms of performance benchmarks, industry structures, business models, products, pricing, conduct and remuneration.*

Today's new equilibrium with an industry average RoE of 9–11%, will impact both participants and users of capital markets. Policymakers and regulators are leading the reform agenda and are forcing its pace, but they are only the catalysts. The real drivers – the expectations of a wider set of stakeholders and the realities of a new economic and commercial landscape – will fundamentally and permanently reshape the capital markets landscape. We believe a new equilibrium will emerge in terms of innovation, technology, industry structures, business models, financial structures, products and remuneration. As such, players must prioritise responding to the aftermath of the financial crisis, meeting new client demands, adapting to technological advances and adjusting to the industry reform agenda. Otherwise, participants and

users run the risk of emerging from the crisis recapitalised, restructured and reformed, but irrelevant.

To stay competitive through 2020, we have identified the following six priorities that financial institutions must confront now in order to emerge as leaders:

1 Proactively manage risk, regulation and capital

Regulatory response must be proactive and increasingly integrated into business-as-usual practices. Risk and capital should be managed holistically throughout the enterprise and with an end-to-end analytical rigour to succeed in a complex and dynamic ecosystem.

2 Establish stronger culture and conduct

To respond to regulatory and market criticism, participants must 'change for good' and embrace a cultural transformation that fosters transparency and high professional standards while minimising conflicts of interest. These changes will increasingly become key value drivers and differentiators of the future as society assesses the social utility of capital markets and its participants.

3 Redefine the business model

A shift in business model enabled by technology is occurring. Financial institutions will look to rationalise their offerings, country footprints and the clients they serve on the way to building simpler business models.

4 Strategically renew the operating model

IT automation, consolidation and utilisation of middle office and back office activities will simplify operating models, reduce costs and improve profitability.

5 Enable innovation, and the capabilities to foster it

Innovation will need to come to the forefront to drive excellence and to fill profitability gaps. Much of this innovation will come in the area of risk, capital and collateral management as opposed to the product level, which has been the historical source of innovation in capital markets.

6 Obtain an information advantage

By harnessing power of big data, leaders will be able to create competitive advantages in client experience, operational design, risk management and profitability.

To succeed in the world of 2020, participants and users need to have a clear sense of the posture they wish to adopt – whether to shape the industry or to follow rapidly behind the leaders. We believe that industry leaders need to have a clear strategy to deal with these challenges and to address these priorities.

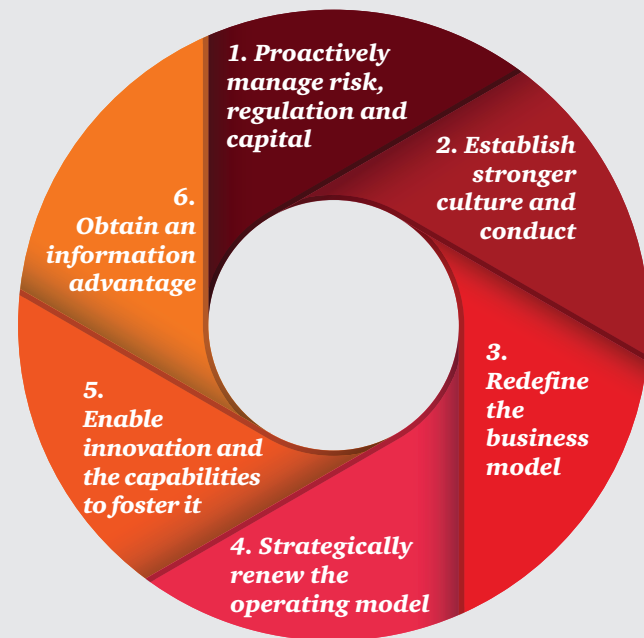
Clearly, every institution is at a different starting place, yet all institutions need to be focused at some level on these priorities to succeed.

Focusing on one or two of the below priorities will not be enough, nor will it be sufficient to manage these efforts in siloes. Institutions will need to look at issues strategically and holistically and manage their transformation efforts in a coordinated manner. This means understanding interdependencies, analysing the impact on

future performance and estimating the net benefits – both tangible and intangible – in a top-down and consistent manner. A primary objective for management will be to consider its core competencies vis-à-vis these priorities in order to understand the impact on its competitive position and ability to successfully tackle obstacles of tomorrow.

In the following section, we discuss each in turn. However, in this summary paper we are only able to scratch the surface of these complex issues and solutions. We welcome the opportunity to have a deeper and tailored conversation with you on any of these topics.

Figure 7: Six priorities for capital markets players for 2020



Proactively manage risk, regulation and capital

The post-crisis flood of regulations signals a major change in mindset for the capital markets industry – from regulators, capital markets participants and users. In the past regulation was just one of many considerations; now, regulatory and compliance issues are at the top of the agendas of every capital market participant. Today, not only are the rules much more complex, but the attitude of regulators, supported by politicians and public opinion, is deeply suspicious of financial institutions. Regulators are increasingly less flexible in their demands to improve compliance, reporting, risk controls and the underlying business processes and data.

The rationale is clear: regulators do not want financial institutions to simply look at rules as they are written. Rather, they want institutions to embrace intent and to create sound, secure, straightforward business models, supported by strong governance and risk and capital management frameworks, where regulatory compliance is embedded in the processes and values of everyday operations.

As such, we believe that not all regulation is created to be equal or even to have the same end goals. At PwC we think of regulation in two major categories:

- **‘Social good’ regulation:** structural reform and resolution that aims to fundamentally change the ‘rules of the game’ but either restricting or curbing certain activities (e.g. higher capital and liquidity ratios). The purpose is to reduce activity in areas that regulators have deemed to be too risky for society. Examples of these would be the Volcker Rule, Vickers report and Liquidity Coverage Ratios in Basel III.
- **‘Participant good’ regulation:** policy-based oversight that directs players into transforming the way they operate and make decisions with the aim of improving

governance, infrastructure, controls, and culture. The aim of these types of rules is to create an ecosystem in which all participants make fair and optimal market decisions based on sound risk management practices. Examples of these regulations would be Governance structure requirements under Basel III, Dodd-Frank and MiFID II.

While regulators (and media) have largely focused on ‘social good’ regulation for the past several years, priorities will shift such that ‘participant good’ regulation will become much more important, as shareholders and regulators become increasingly aligned through 2020.

To address the upcoming pipeline of requirements and to assuage public sentiment, players will need to be proactive in terms of managing risk, regulation and capital. The importance of these activities will not be simply to keep regulatory watchdogs at bay, but to build a truly competitive and profitable business for the future. Sound decision-making supported by proper risk management principles, internal oversight and ‘strong’ culture (more on that later) will be a fundamental building block of a lasting capital markets business model in 2020.

Proactive regulatory management

For capital markets participants and users, the regulatory landscape is evermore complex and more difficult to navigate. Under normal circumstances, the appropriate response to regulatory change would be to wait until the rules are finalised and where appropriate, to ask for clarifications from regulators and key stakeholders. However, not only has the political atmosphere changed, but also the sheer volume of the emerging rules has significantly stressed regulatory resources and compressed timelines. Complying with the newly mandated regulations (e.g. Dodd-Frank, Basel III, MiFID, EMIR) is an ongoing effort – our survey shows that 90% of industry executives expect it to take between one and five years to execute on these regulations. Adding to the complexity of compliance, there are now more stakeholders involved; many are finding themselves regulated by new supervisors to whom they have not previously had to report. Therefore, capital markets participants and users have been working on regulatory compliance early – before all of the regulation has been written – basing their plans on assumptions and expectations. This is further underscored in our survey of industry executives, as

Proactively manage risk, regulation and capital (continued)

nearly all of them (94%) believe that it is important to proactively manage regulatory risk. Meanwhile, they are also burdened with complex (and often unexpected) implications on business models that are difficult to identify and interpret at the onset. During implementation, interdependencies between different regulatory requirements and internal implementation projects increase execution risks, especially against the backdrop of stretched resources, tight timelines and constrained budgets.

In short, the ad hoc approach to regulation that has been prevalent to date, cannot and should not be a viable long-term solution; the level of regulatory scrutiny is here to stay until 2020 and beyond. Over half of executives in our survey allocated roughly 10% of headcount and 4% to 6% of revenues to these efforts and most are looking to maintain (or increase) this level of investment for the foreseeable future. Both capital markets participants and users need to systematically embrace and embed regulation and compliance into their core business processes in order to be well-positioned for success in the future. Overall, regulation and compliance has become embedded in many new parts of the industry's operations and strategies, posing distinct hurdles. Our survey shows that nearly half of industry executives see talent constraints, market constraints and operational constraints as the primary obstacles to managing risk, regulation and capital.

In our work with leading clients, we have seen a number of institutions take a more innovative approach to managing their regulatory obligations. This approach is increasingly proactive in nature, with a goal of integrating this mindset into 'business as usual' (BAU). Some institutions have even taken it a step further by integrating a new role into the front office – Senior Regulatory Liaison – to help broker productive dialogue among regulators, shareholders, and management, as well as to shape business decisions and strategy within the context of regulatory requirements and intent. As the new regulatory context becomes the baseline, an institution's ability to efficiently manage its regulatory obligations will become a fundamental component to driving excess returns in 2020 and beyond.

To succeed in addressing the complex problems of embracing regulatory change, an integrated solution is needed. We see three key elements of making this solution optimal for institutions going forward:

- **Portfolio controlling** – Delivery of implementation initiatives, both at the programme and project level, should be managed in an integrated manner. The scope of the programme includes comprehensive, forward-looking, global regulatory change while regulatory affairs are closely aligned with a sustainable BAU operating model. There must be a balance between corporate level project governance and business-driven change.

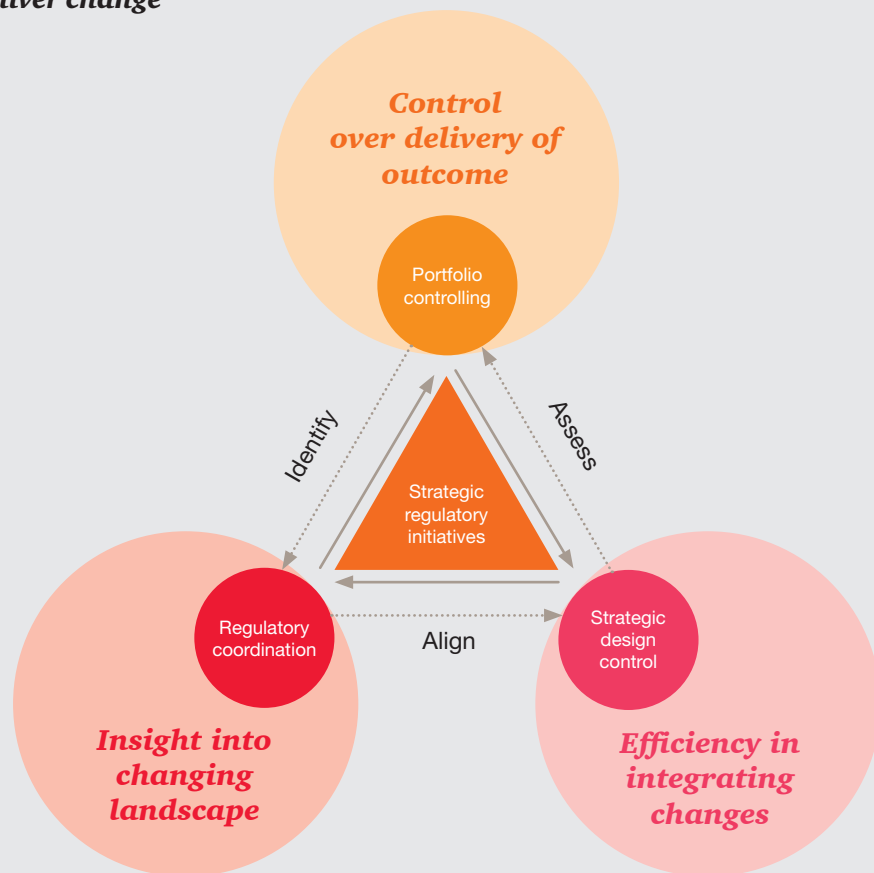
- **Regulatory coordination** – Financial institutions should understand and respond to the evolving regulatory landscape in an agile manner. There must be a balance between global coordination and regionalised impact and execution. Today more often than not, regulatory response actions are fragmented and focused on the immediate issues raised by home and host regulators.

- **Strategic design** – Lastly, to execute change effectively, capital markets participants need to drive innovation across projects and programmes, coordinate scope and conduct ongoing business-impact analysis. Specifically, they must focus on identifying relative competitive advantages and/or business opportunities – not just regulatory burdens and costs. Moreover, this regulatory assessment must facilitate connectivity between regulatory initiatives and other corporate programmes and initiatives.

The key point is that these activities cannot be managed simply as a regulatory compliance exercise. Instead, players must embrace the reality of regulatory change – this is the new 'business as usual' going forward.

Figure 8: Three key elements of regulatory assessment for capital markets participants

Structuring an integrated function to quickly draw insight from an evolving regulatory landscape, understand impacts and effectively deliver change



Source: PwC

Proactive risk and capital management

In the post-financial crisis world, the basic principles of risk management have not changed, as risk appetite and capital considerations continue to be two of the most important constraints when developing and executing on a business strategy. However, the complexity associated with these two fundamental concepts has changed and evolved. There are more constraints (e.g. supplemental leverage ratio) and new analytical factors. As such, through 2020 we see proactivity becoming an even greater imperative. Nonetheless, most institutions today – understandably strained by the plethora of regulatory requirements and cost pressures – are merely reactive. A select few capital markets participants are beginning to take this a step further and are considering the implication of risk and capital on business strategy. They are making explicit decisions about the nature and extent of their businesses. Our survey further underscores that industry leaders feel that integrating risk and regulations on an enterprise level is a great challenge; less than 3% of executives expect that many capital markets players will fully master and recognise risk/regulatory enterprise integration by 2020.

Creating a stronger link between risk, capital and strategy is a transformation that needs to happen in the operating model and within a business’ infrastructure. Data

and information will play a crucial role in enabling more holistic risk and capital management. Furthermore, efforts to improve the level of timeliness, accuracy and consistency of risk information will be front and center. Capital markets participants and users will need to take a sober look at their current operations – with potentially fragmented data/systems, inconsistent models and control mechanisms – and develop workable solutions to create better transparency and flow of information.

In short, when thinking about managing financial risk and capital, both capital markets participants and users must think of this period of time as a new inflection point. The next five years will fundamentally transform the way leading players handle, measure and manage both risk and capital. The trend will be to move towards a more integrated, holistic and analytically rigorous model of risk and capital management, while unifying supporting infrastructure. Meanwhile, the outputs of analysis will be evermore important in real-time business and strategic decision-making.

To prepare for this future, we have identified the following priorities for moving forward, and corroborated their importance through our survey of industry executives:

- **Linkage of risk appetite framework to business strategy and capital planning** – As noted earlier, aligning business strategy to risk appetite and capital

Proactively manage risk, regulation and capital (continued)

planning is a key priority in determining the appropriate set of businesses, geographies, products and clients for maximising the institution's risk-adjusted returns. This is especially true as new capital restrictions are introduced (e.g. the supplementary leverage ratio) and, in turn, are redefining the economics and profitability of business lines and asset classes. As such, better understanding and management of portfolio and interdependencies within related entities (especially given changes to governance and holding structures as mandated by global regulations) are only in their earliest stages of development at most capital markets participants. And this is only the first step. The next big challenge will be looking at the interdependencies at the client level and managing them appropriately to ensure relationships are not disrupted. Within this context, alignment of the continuum of risk appetite, capital planning/budgeting and adequacy assessments, resolution planning, stress testing and liquidity risk management will all be crucial for managing capital and risk at the enterprise level. To do all of these things however, institutions will need to begin with more granular and integrated data and analytics capabilities.

- **Model and analytics improvement for individual risk types** – The current efforts towards model simplification and consistency, aided by regulatory changes, will continue to be a major priority for

capital markets participants and users as we approach 2020. We anticipate seeing improvements/innovation in the way players assess and quantify risk, particularly in well-established areas – e.g. credit and market risk. In certain parts of risk measurement, particularly at an enterprise-wide level and in regulatory capital, the regulatory-driven push will be towards standardisation. Additional advances will be made in the ability to create an increasingly sophisticated model and data infrastructure that facilitates timely and accurate decision-making across the organisation regarding pricing, financial planning and allocation of scarce capital. All of the mentioned changes will be aided by greater adoption of big data for risk management purposes, including traditional data sources (e.g. internal bank data and market reference data), as well as novel ones such as social media.

- **Managing technology risks** – In recent months, technology and cyber security in particular have become major priorities for all market players – from banks to exchanges and trading platforms to government entities and FMUs. Cyber risk has led to major losses from both a financial and reputational perspective. We expect this trend to continue to accelerate as hackers stay on the forefront of tech innovation. Imagine the danger ultra-fast quantum computing poses to encrypted data transfers. Moreover, as geopolitical tensions continue to rise, the activities of state-sponsored attackers and

increasingly sophisticated economic and political terrorists will not only dominate the headlines, but also consume more of the senior management agenda and risk management resources. The bottom line is that leading institutions will need to be proactive in managing these concerns and other technology-related risks. They can do so by creating new partnerships with technology providers, national security enforcement and security services in order to effectively operate as critical components of the capital markets infrastructure.

- **Addressing third-party risk** – With service providers often numbering in the thousands, capital markets participants work with a variety of vendors, partners and other third parties. Take outsourcing, for example. While these activities often lower costs, increase efficiency and allow businesses to focus on core objectives, the operational, regulatory, fiscal, and reputational risks are natural by-products of such relationships. With the need to aggressively reduce the cost base while simultaneously improving customer value proposition across an increasingly fragmented global landscape, we expect a new wave of outsourcing, partnerships and the creation of new industry utilities. Taken as a whole, these trends will drive an even greater focus on managing third-party relationships from a risk and control perspective.

- **Working with non-traditional risks**
 - Previously unmeasured or lightly managed risks will serve as more material for capital markets participants and users, given the strategic changes outlined. There will be a new imperative to design and build analytics to support the measurement and management of emergent risks outside the traditional silos of market, credit and operational risk. For example, through 2020 we see more rigour emerging in quantifying the following risk types, among others: trader surveillance, reputational risk and (as we have mentioned) cyber risk. Meanwhile, quantification and measurement of risk will be only one component of the equation; capital markets participants will need to become better at qualitatively assessing, understanding and having productive conversations around these ‘hard-to-measure’ risks. Both the qualitative and the quantitative pieces of the equation will need to align, enabling truly grounded decision-making around non-traditional risks.



Establish stronger culture and conduct: Change for good

Over the last few years, the capital markets industry has seen its collective brand suffer greatly. The 2008 financial crisis continues to cast a long shadow on the industry. Further, individual institutions and the industry as a whole, have lurched from one reputation-damaging headline to another, without a clear end in sight. In many ways, the negative publicity is just a symptom of broader challenges faced by the industry: fragmented subcultures, lack of true partnership between business and risk, as well as misaligned incentive structures that create conflicts of interest and often disproportionately reward financial performance to other performance measures.

The topic of people and change to date received only peripheral attention and typically only during times of M&A activity. Even then, our anecdotal observations reveal that within the focused integration planning context, many questions relating to culture often do not get fully addressed, as firms struggle to successfully define and apply a common and consistent set of values and behavioural norms. All these issues have or continue to plague almost every major capital markets player.

Despite challenges and drawbacks, the pressure to maintain this status quo has been significant. Individuals or groups that drove sizeable revenues and received sizeable remuneration were often given wide latitude and influence within the organisation. As previously mentioned, attracting and retaining talent remains a top priority among our surveyed executives. If an institution tried to choose a different path it risked losing talent, clients and revenues. However, the financial crisis and the public relations misdeeds stemming from issues associated with misaligned incentive structures and conflicts of interest have now fundamentally shaken these arguments. Rather, we believe that culture in some ways, will become a source of competitive advantage: attracting clients, reducing unwanted regulatory and market scrutiny and helping curb operating losses over the long-term.

It appears that senior executives and boards have understood this as well. Many, particularly larger institutions, have launched formal culture programmes, but there remains a long way to go. Within our Capital Markets 2020 survey, 90% believe that it is important to establish a strong culture and conduct focused on higher ethical standards. However, 71% don't believe that this will be pervasive within their businesses through 2020. The main question remains: How can the industry 'change for good', in a way that restores confidence in the very institutions we depend upon for capital formation and economic growth?

To make culture and conduct change effective, it cannot be treated just as a separate set of initiatives or workstreams. Each organisation needs to envision its own identity and drive toward it relentlessly in everything it does. More than that, cultural change needs to be embedded and integrated into every other transformation that a capital markets institution embarks upon. For example, redefining the business model or operating model, transforming technology or rethinking the geographic footprint all need to be evaluated in the context of their impact upon culture and conduct.

When thinking about cultural and behavioural change, we believe that leading institutions will think, act and incentivise differently. As mentioned, these elements should not be treated as a 'one time' transformation, but rather as an ongoing process with checks and balances to ensure that the institution keeps true to its envisioned identity. Among our executives surveyed, the majority felt that this would be a one- to three-year process, while an additional 19% believed this shift in culture would take beyond three years to become established. The most noted challenges executives expressed were regarding personnel and organisational constraints, as well as general market constraints.

Culture and conduct challenges facing capital markets players

Type of challenge	Current challenges	Best practices
<p>Leadership culture Top-down implicit senior guidance on values and behaviours that are acceptable within the organisation. Definition of incentives and rewards appropriate to motivate desired outcomes.</p>	<ul style="list-style-type: none"> Management communication and actions are inconsistent, e.g. over 30% of respondents to PwC's 2014 Global Risk Survey believe that management actions do not match their communications regarding risk Staff do not believe that their firm lives its explicitly stated values and does not hold itself accountable Individuals are compensated primarily on financial reward, with little priority given to other behaviours 	<ul style="list-style-type: none"> Senior team 'lives' the culture and the values of the organisation, leading by example rather than rhetoric Open channels for escalating issues exist for every level of the organisation with zero-tolerance policy for retaliation Explicit policies, processes and incentive structures are consistent with implicit expectations set by management Communication between leadership and internal and external staff is open, transparent and frequent
<p>Risk culture Expectations around risk management for both business and risk functions, i.e. roles, policies and accountability. Establishment of formal processes, controls and escalation mechanisms.</p>	<ul style="list-style-type: none"> Inadequate authority and influence of risk function: as many as one-third of survey respondents believe that there is no appropriate balance of power between the business and risk Change programmes have been tactical and at times lacked a clear understanding of desired outcomes Underlying incentives and consequences have not been changed to promote the right risk behaviours Fragmented risk reporting is preventing real-time risk identification and management 	<ul style="list-style-type: none"> Leading institutions are shifting the way the risk function is viewed – away from policing role to advisory partner Risk is embedded into business decisions: clarifying roles, defining risk triggers and seeking counsel in day-to-day decisions Change becomes more embedded in the organisation through better alignment of incentives to desired behaviours Institutions build greater access to information on an enterprise-wide basis to identify and act upon risk violations in a timely manner
<p>Conduct Clarification and formalisation of explicitly expected set of ethical behaviours for every level of the organisation.</p>	<ul style="list-style-type: none"> Communication and conduct training are seen as 'check the box' exercises Policies and expectations are inconsistent across the global organisation Underreporting and fear of retaliation makes it difficult for firms to spot violations in real-time 	<ul style="list-style-type: none"> Firms employ a consistent approach, globally, to conduct violations Firms implement a zero-tolerance policy for retaliation to reports of misconduct Leaders 'walk-the-walk,' responding fairly and consistently to conduct violations Open dialogue is established to provide feedback and report misconduct

Establish stronger culture and conduct: Change for good (continued)

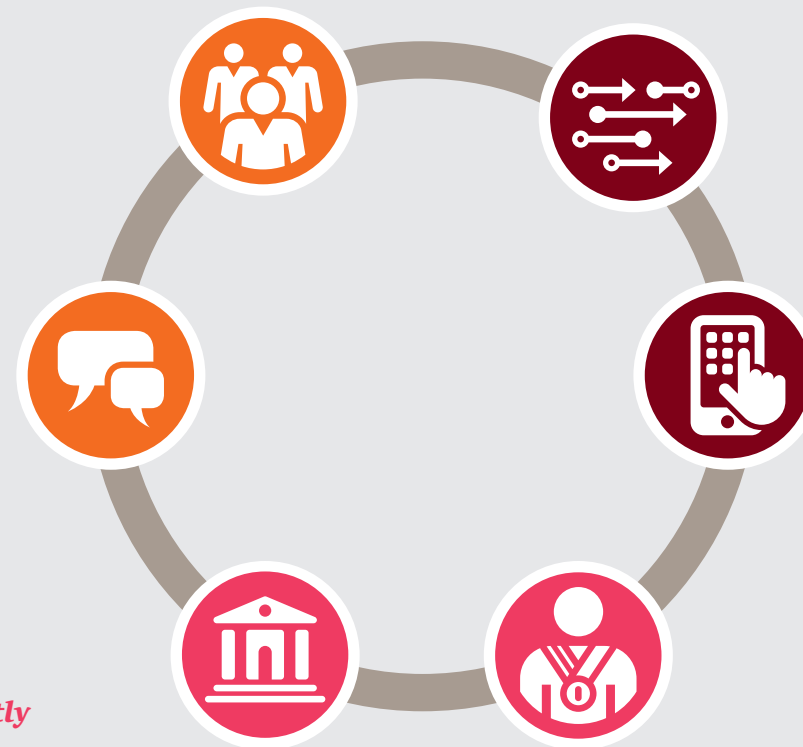
Figure 9: To establish a stronger culture and conduct focused on ethical standards, we believe that leading institutions will need to follow a three-pronged approach

Thinking differently

- **Leadership:**
 - Make clear that leaders are role models who are expected to embrace, exemplify and influence the culture and values of an organisation.
- **Communication:**
 - Promote and sustain the firm's culture through a clear communication strategy, transparency and open dialogue with staff.

Incentivising differently

- **Talent management:**
 - Emphasise the firm's identity and values in hiring and training programmes.
 - Create levers in remuneration structure to reward desired 'the how' (behaviour) vs. 'the what' (outcome behaviours).
 - Develop and report on a culture scorecard that includes both qualitative and quantitative measures.
- **Governance and organisation:**
 - Foster formal alignment between risk and business through closer organisational relationships and dialogue with staff.



Acting differently

- **Consistent global norms:**
 - Establish and enforce a single firm identity, culture and global explicitly defined operating norms.
- **Technology and infrastructure:**
 - Deliver infrastructure that facilitates dialogue and promotes staff education.
 - Leverage innovative technologies to proactively survey behavioural patterns and identify cases of misconduct.

Source: PwC's 2014 Global Risk Culture Survey

Redefine the business model

As we have already highlighted in this paper, the actions most institutions have taken to refine their businesses in light of regulatory and other changes, with few exceptions, have largely been tactical in nature.

Moving forward, significant structural changes to existing capital markets participants' business models will be required, particularly for the larger institutions. Among the many actions capital markets players will have to consider are determining which clients to prioritise, geographies and businesses to stay within the long-term (and at what levels) and which products to shed in the medium-term. An overwhelming number of executives surveyed are planning to redefine their business models to adapt to the changes in the industry environment through 2020. The executives surveyed, who were looking to sell assets or wind down businesses feel that they have only completed 50% or less of the necessary sales or firmwide consolidations needed.

In the financial crisis and its aftermath, financial institutions have often been required to operate like firefighters: responding urgently to liquidity squeezes, market panics and capital shortfalls. In addition, many institutions reacted in an ad hoc fashion to regulatory requirements, probes and sanctions. Now comes the hard part as capital markets players conduct a more fundamental review of products, clients, geographic footprints, capital allocations and legal entity structures. Of the industry players surveyed, most perceive that banks (national, regional and state-owned) have the most to benefit in redefining their business and operating models. On the other hand they feel that

the models of broker-dealers and smaller community banks may be the most threatened by market changes.

As we mentioned in the 'Global instability – winds of change' section, we believe that the competitive landscape will fragment rather than unify, as players both large and small increasingly abandon the 'everything to everyone' service model and carve out unique niches within the capital markets ecosystem. As such the considerations and the end result will be unique for each institution and will inherently depend on intrinsic capabilities, client needs, local regulatory overlays and ambitions of individual institutions. The end state will be such that participants will create business models that are more focused on what is deemed to be 'core' (or differentiating), with 'non-core' activities shed or marginalised. Additionally, building a more client-centric/service-oriented model and moving further along the value chain (i.e. expanding into adjacent areas such as clearing, settlement, collateral management, electronic trading and distribution) were cited in our survey as ways participants are thinking about strategically redefining their businesses.

Finally, executives recognise the associated risks in these business model transformations and expect to encounter varying degrees of market, regulatory and talent limitation obstacles when looking to enhance their

current business models. The majority felt that such an initiative would be a one- to three-year process, while an additional third believed this would take beyond three years.

Given this paradigm to rethink and redefine the business model, each institution will need to define its own set of 'core' differentiators. Firstly, it will need to consider the role of capital markets within its broader franchise. Secondly, each institution will need to think about whether it wants to be a 'scale' or 'bespoke' player, given capital constraints and finally, what kind of business platform is required to support this strategy.

We believe these considerations are important because they fundamentally determine the nature of the business that the institution wishes to build/refine and will inform all other key strategic decisions, such as target client segments, geographies and products.

For example, institutions that compete by being bespoke providers of advisory services would need to focus on attracting high-quality front office personnel that can deliver value-added products to priority client segments, while simplifying all other operations not critical to this strategy. Meanwhile, 'scale' players that aggregate flow should focus on diversifying distribution, simplifying sales coverage and ensuring the platform is 'best in class'.

Redefine the business model (continued)

Because the challenges and capabilities of each institution are unique, there is no single answer. However, we see a three-step process that each institution can take to (re)define its business model:

- 1. Strategic view** – What are the overall objectives of the business and in which geographies will it operate? What is its capital structure and target ROE?
- 2. Portfolio mix** – What are the key products and client segments it will serve? What are the margin goals per product? What do firms do with non-core products and businesses?
- 3. Business design** – How do you align the business design to the strategy and portfolio mix? How much capital will it allocate to what businesses? What is the most cost-effective support model for the businesses?

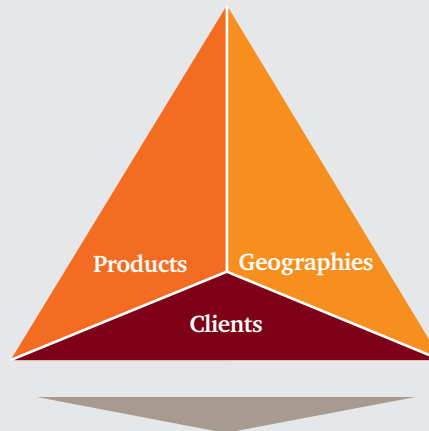
Figure 10: Key steps to business model optimisation

Capital markets players will need to make significant structural changes to their business models, rethinking their strategic scope, portfolio mix and business design

Business model redesign should be driven by the organisation's strategy and adapted to the context of available capital and in-house capabilities:

1. Strategic vision

Review of business and definition of strategic priorities:

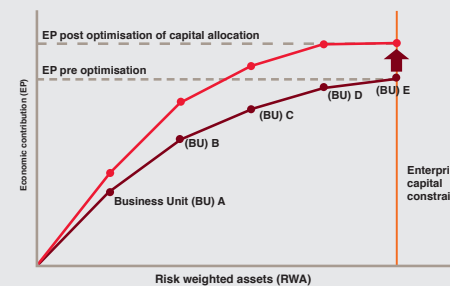


Defined set of core and auxiliary businesses

Business lines identified for core vs. non-core portfolios consideration

2. Portfolio mix

Optimisation of portfolio against capital (risk weight) constraints:



Allocation of capital to support optimum portfolio mix

Definition of non-core portfolios

3. Business design

Alignment of front office to support vision and portfolio mix:



Organisation and governance



Coverage models and incentives



Booking models

Optimum allocation of resources

Business model aligned to strategic vision and capital allocation

Source: PwC

Strategically renew the operating model

When looking at the operations of financial institutions, to date the focus has been on reducing costs to both match smaller revenue pools and higher regulatory expenditures. Almost every organisation has launched some form of cost reduction and business re-engineering effort; yet privately, executives confirm to us what we are seeing in the market: little ‘real’ re-engineering has been achieved. Expense ratios remain high in a declining revenue environment and RoEs are below the cost of capital in many institutions.

Over the last couple of decades capital markets participants and users – particularly the larger ones – have developed highly intricate operating models, fuelled by a flurry of mergers, acquisitions and integrations, leading to a labyrinth of technology platforms to support various processes. As a result, each product often has a unique complex process flow and it is not uncommon to have redundancies and misaligned technology platforms simultaneously supporting an individual trade. Across asset classes there is often little consistency in the way trades are executed. Because products run on different systems, it is often difficult – if not impossible – to aggregate and analyse cross-asset class positions and risk measures. Solutions to these inconsistencies are either ad hoc add-ons or worse yet, spreadsheet-based manual exercises. The result is obvious: a bloated cost structure comprised of decades of disparate cultures, technologies and redundant processes and a veritable tangled mess. Surveyed executives are in agreement and have cited simplifying internal processes and reducing redundancies, training personnel to operate cross-functionally, and simplifying or changing the organisational structure as high priority actions to focus on when defining operating models through 2020.

Despite the imperative for change, we believe that operating model renewal cannot be done for the sake of pure cost reduction. It needs to be done intelligently – taking interdependencies and implications into consideration. In the previous section we spoke about refining and retailoring the business model to capitalise upon an institution’s differentiators and core capabilities. As such, it is critical that the operating model supports and enables the selected business model. Specifically, not every institution will need to have low-touch, fully automated operations. For example, bespoke players focusing on high-touch financial instruments will be more focused on flexible and nimble technology, supported by a high-skilled staff base, with non-value adding functions outsourced to a third-party provider. Meanwhile, those building a business upon scale and trade flow where margins are slim should aggressively drive down operational complexity and errors to minimise ‘cost per trade.’

With that said, despite nuances in business model and strategic priorities of each organisation, we believe that today’s capital markets participants and users can use a healthy dose of fresh perspective. A strategic holistic renewal of players’ operating models across the enterprise is needed to simplify the way capital markets players operate to maximise profitability. The most successful

capital markets participants and users will be those that think innovatively and take cues from other industries. Many consumer products companies (such as Nike or Apple) think about their core competencies and differentiators, and strategically engage third party providers. Leading financial institutions will need to learn to think similarly – defining their points of differentiation (e.g. client relationships, risk management, capital facilitation, etc.) and reduce complexity in non-essential functions.

When designing such an organisation, we see five guiding design principles that should dictate the strategy for the new operating model:

- 1. Business model alignment:** the operating model should support and enable the firm’s strategy and business model, as well as its competitive market differentiation.
- 2. Functional design:** where possible, the operating model should be defined first by value chain functions and then by business line and entity siloes to maximise economies of scale and reduce duplication of efforts, process flows and supporting technology.

Strategically renew the operating model (continued)

3. **Simplification:** reduction of complexity within processes and systems networks to lower error rates and losses, as well as to increase operational efficiency and speed.
4. **Transparency:** improved use of technology infrastructure and data to facilitate enterprise-wide data-driven decision-making.
5. **Automation:** increased use of systems and technology to lower reliance on manual processes that are prone to errors and duplication, as well as to reduce costs over the longer term.

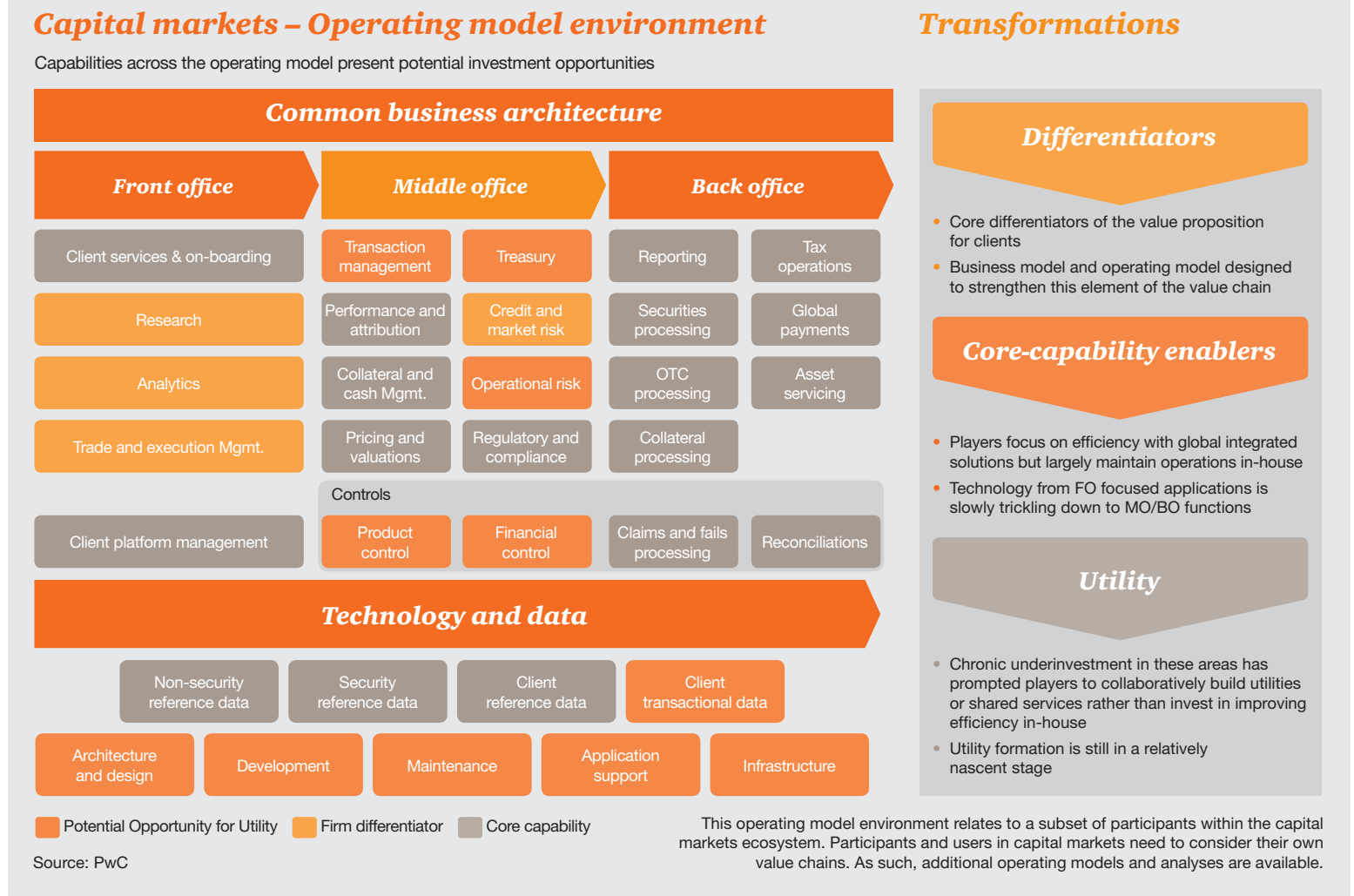
Application of these design principles will not yield a single solution that will apply to all organisations. Specificities such as business strategy, culture and other considerations will need to be taken into account. What we do anticipate is that there will be two operating model ‘archetypes’ that will emerge across capital markets participants and users, with nuances and differences that govern how each model is executed.

Figure 11: Operating model ‘archetypes’

	Model A: ‘simplify and share’	Model B: ‘become the platform’
Description	<ul style="list-style-type: none"> Capital markets participants and users that will consider outsourcing all or parts of their operations and technology along the sales and trading value chain 	<ul style="list-style-type: none"> Capital markets participants and users that will industrialise and provide operations and technology as a service (either internally or to the market)
Types of players adopting the model	<ul style="list-style-type: none"> Small- to medium-sized broker-dealers/ regional banks Some of the larger broker-dealers – particularly those without significant prime and/or clearing businesses Majority of users of capital markets – such as hedge funds, asset managers and mutual funds 	<ul style="list-style-type: none"> Largest broker-dealers with significant prime and/or clearing businesses and universal banks A select group of largest mutual funds/ asset managers Several of the large FMUs (e.g. exchanges, clearing houses, depositories) Leading financial technology vendors with sufficient scale to mutualise industry costs
Key characteristics	<p>Operating model:</p> <ul style="list-style-type: none"> Dramatically simplified and ‘multi-disciplinary’ across asset classes, geographies and entities Focus is on ensuring rapid operational response to new products and services <p>Technology:</p> <ul style="list-style-type: none"> Emphasis on flexibility and front office and/or client technology In middle to back office, the focus is on workflow, simplicity and low costs <p>Data:</p> <ul style="list-style-type: none"> Common data/middleware layers across products to interface with providers Dependent on high-data standards to monitor and manage services 	<p>Operating model:</p> <ul style="list-style-type: none"> Operations and technology becoming a client-driven model, with increased focus on client management and services Push for the right balance of onshore and offshore to meet client demands <p>Technology:</p> <ul style="list-style-type: none"> Industrial platform with very high capacity, interoperability and flexibility Increased emphasis on exception management, data and connectivity <p>Data:</p> <ul style="list-style-type: none"> Highly robust data architecture and governance Improved ability to bring in diverse data types and message formats

As a result of these changes, what we will see practically, is the creation of shared service and utility models – something that we have already begun to see in the market. Figure 12 is an illustration of changes that we have seen or expect to see along the value chains of capital markets participants. For the most part, we anticipate that non-differentiated elements (e.g. client onboarding or securities post-trade processing) will move towards a shared service and/or utility-type model, while core activities will be refined and strengthened in house (e.g. risk management or trade execution). Our views have been further solidified in the survey, as the majority of executives have indicated that shared services and utilities will impact their value chain across a variety of functions, from both a technology and fully managed service standpoint. Specifically, respondents continue to identify the importance of driving client-centric initiatives and have indicated that they are likely to leverage utilities and shared services to support activities related to client reference data and client platform management functions. For users of capital markets, we anticipate similar operating model transformations with middle and back office functions becoming increasingly standardised and many players moving to outsourced delivery (e.g. by using custodian/broker-dealer prime or fund administration services). Meanwhile, utilities themselves will have to consider similar operating model questions: Which parts of their value chains are ‘core’ to their value proposition or revenue model, and which parts could be outsourced to technology vendors?

Figure 12: Capital markets – Operating model environment



Strategically renew the operating model (continued)

We concede that transforming an institution's operations is an enormous and costly endeavour, one that few players have gotten right over the years. A foreseeable challenge to the transformation that we have outlined above is organisational lethargy: executives that we have spoken with have said that lack of end-to-end knowledge and front office accountability have been consistent roadblocks to their change programmes. Without the right leadership model, complex cost structures and deep-rooted redundancies will be tough to eliminate. Even with the right oversight and leadership, the road will not be easy: institutions will need to commit to (and manage) multi-year programmes that go beyond most management's planning cycles. More than that, the risk involved in decommissioning certain systems will be high, potentially having a material and unpredicted impact on the operation of the business.

With this in mind, it is no surprise that operational model transformation is perhaps one of the most daunting of the six priorities that we have identified. To succeed, capital markets players will need to change their frame of mind and approach to managing these types of projects. The large-scale programmes need to be treated as an investment and managed separately from day-to-day operations, yet holistically and with a unique set of 'success metrics' to ensure that the programmes are implemented in a timely manner and with the right types of outcomes.

Enable innovation, and the capabilities to foster it

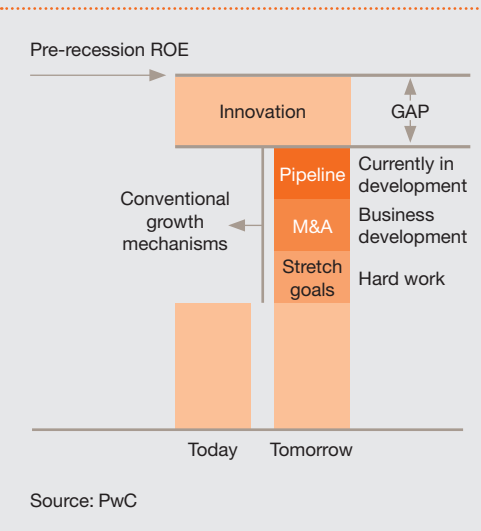
“I can’t understand why people are frightened by new ideas. I’m frightened by the old ones.”

John Cage¹⁰

Many FS executives could argue that the pressing challenges of the last several years – from the financial crisis to regulatory pressures – have forced innovation within FS to take a back seat. This answer however, is only partially true. The other half of the answer lies in the way financial institutions have managed innovation to date; PwC’s *Global Innovation Survey* reveals that FS falls well below other industries in its ability to manage innovation effectively. Only 27% of FS institutions surveyed stated that their innovation activities are coordinated and managed efficiently. In fact, the majority of surveyed executives feel that only some (or fewer) capital markets players will have mastered a client-focused approach to innovation through 2020, while less than 40% indicate that they are currently investing in this. The greatest barrier according to our respondents, remains commitment of capital and financial investment when promoting innovation. We see cultural challenges such as the acceptance of failure and regulatory restrictions as more significant barriers.

While innovation traditionally has not been part of the ‘recipe for success’, all of the changes that we have already discussed – challenged revenue pools, complex legacy operations and technology, rising regulatory requirements – have created a need to incorporate innovation into capital markets players’ long-term strategy.

Figure 13: For financial institutions, breakthrough innovation is needed to pre-recession levels of RoE



¹⁰ Richard Kostelanetz (1988 *Conversing with Cage*)

Enable innovation, and the capabilities to foster it (continued)

So what does innovation mean? We believe it means thinking differently about the product set, the way business is done and about how it is executed. Not all innovation will be created equal – some will be progressive and other more far-reaching. When thinking about what is required for success, we think that a financial institution needs to create the right mix of innovation types and link it to overall business strategy.

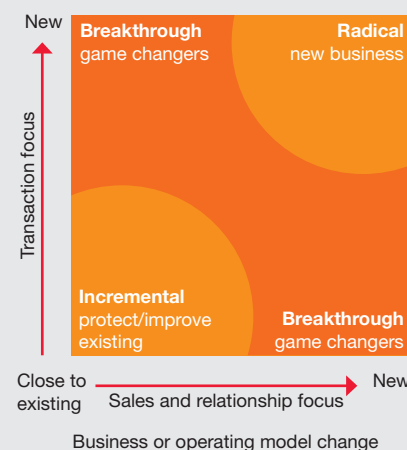
Within capital markets, we see innovation as being a crucial component of success. Through 2020, we believe that it will need to permeate throughout not only the product set, but also the business and operating

model of both capital markets participants and users. From the client and product perspective, institutions will need to think differently about how they can differentiate themselves outside of the traditional product set. This can be through expansion of services (e.g. into data-driven solutions), or improvement in their quality (better user-facing platforms that understand and respond to clients).

Further, a business model that supports an institution's products will also require innovative thinking. We mentioned that redefining and simplifying the business model will be a top priority; innovation will

be a crucial component of this evolution, from rethinking coverage models to optimising returns through nimbler capital allocation. In terms of operating model design, leveraging innovation to think differently will enable players to tackle and overcome their tough legacy challenges (e.g. implementing new technology layers while repurposing parts of existing architecture) or more radically, to reinvent the entire capital markets ecosystem by re-shifting activities across different players (e.g. outsourcing of operations to emerging market utilities).

Figure 14: Categories of innovation



Three categories of innovation

Incremental:

- Small changes characterised as better, faster, cheaper products and services that do not drive above average revenue growth.

Breakthrough:

- Significant change to technologies or business model of a product or service which creates significant new competitive advantages and drives above-average revenue growth.

Radical:

- Substantial changes to technology and business model. Creates new basis of competition in existing markets (such as a new technology platform or cost basis) or creates entirely new markets that provide customers with new value.

Applicability of innovation to capital markets (examples)

Offering set:

- Banks leveraging anonymised retail data to develop new offerings for corporate clients.

Client service:

- Developing integrated (cross-offering) client platforms to enable better self-service.

Business and operating model design:

- Spinning off operations and technology into a legal entity that mutualises costs over several clients.

Risk management:

- Leveraging market data in real time to improve counterparty credit risk assessment.

Source: PwC's Breaking the rules: Achieving breakthrough innovation in financial services, 2014

Nonetheless, there cannot be success unless innovation is applied with rigour and commitment. At PwC, we believe that the best way to do this is by fostering a robust innovation capability that is aligned and linked to overall business objectives. In our work we have developed a four-stage framework to help foster financial innovations and to establish sustainable capabilities, presented in Figure 15.

The transformations laid out to the right need not require huge investment. The majority of surveyed executives indicate that they are primarily concerned with finding the right talent and fostering a culture when it comes to promoting client-focused innovation. The most successful firms are able to assess their capabilities and keep the best parts of their current model and organisational structure while weaving a strategy for innovation into that paradigm.

Figure 15: A four stage plan to align corporate objectives and innovation execution



Obtain an information advantage

There has been a lot of talk in the news about big data, the future of information and the like. Though trading has been quick to understand the benefits of utilising big data, this concept has not yet proven itself on an industrywide scale; these are still early days for big data among capital market participants and users. In fact, surveyed industry executives suggest that banks (global, national-commercial, regional and state-owned) have the most to benefit from big data and its integration into the market landscape.

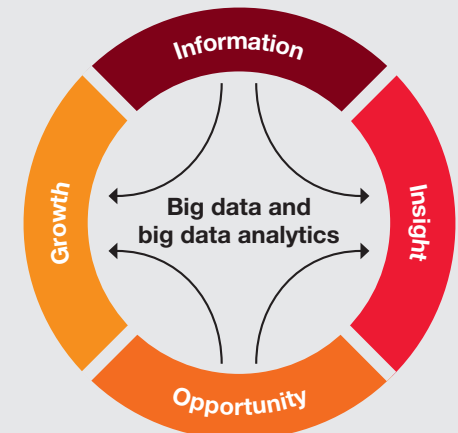
So is big data a long-term trend or just a fad? We believe the ability to aggregate enormous amounts of data, analyse and interpret it will be an absolute minimum requirement to be in the game. Almost all of surveyed respondents believe big data is important, and nearly a third believes it to be a key priority. Nonetheless, the surveyed respondents believe the industry is far from seeing many players master the uses of big data. Remarkably, 45% are not investing in big data capabilities. Challenges are perceived to be stemming from many angles; the most widely cited constraints to truly achieving a big data advantage are related to talent, technology and market forces. The organisational framework and process by which players turn information into knowledge – leveraging structured and unstructured data across all facets of the organisation to make informed decisions about markets and clients – will be the competitive advantage.

Both capital markets participants and users have become massive and sophisticated users of big data for their trading activities. Players will continue to use data, both structured and unstructured, to better understand market movements, identify arbitrage opportunities and improve trade execution strategies. Big data and associated analytics will make it possible to continue to automate

the trading value chain, even in products such as credit and Wall Street research that historically have not lent themselves to ‘electronification’. The trading floor of the future will increasingly look like a server station, with information analysis and trade execution being monitored and tweaked by data scientists, rather than a floor full of traders plugging away at multiple computer screens. The majority of surveyed executives suggest that technology and big data will be primarily used to reduce all manual tasks associated with products and their distribution globally. This may take form through access to broker-neutral, multi-asset trading platforms, which allow clients to take greater control of their trading requirements, or through big data-driven research that delivers subtle but valuable insights, which could not be easily unlocked.

Mastering big data for trading purposes is one area already being aggressively addressed by capital markets participants and users. However, the real challenge going forward will be to apply that same focus to areas outside trading. We see use and applicability of big data across a broad spectrum of financial institutions’ internal activities: from credit analysis and instrument pricing, enterprise risk management, regulatory reporting to nimbler capital allocation. More than

Figure 16: PwC’s four essential pillars of big data and analytics



At the root of big data lies an important value chain

Historically, financial institutions collected copious amounts of data. However, they were unable to use that data to generate meaningful information in a timely manner, which fragmented their view of business insights. Because they were unable to develop big data analytics and process the data in real-time, they had difficulty predicting and responding to changing business needs and rising opportunities. As a result, business opportunities and related growth were tied to a much slower roadmap. This value chain is at the foundation of big data.

Source: PwC, ‘Where have you been all my life? How the financial services industry can unlock the value in Big Data’ October 2013

becoming a mere tool, we believe that big data will drive change and necessary innovation throughout the capital markets ecosystems.

However, benefits will likely not be reaped by all – and certainly not equally. Senior executives expect that the largest global and regional institutions will master big data capabilities, in line with their capacity to invest. Furthermore, there is an expectation that leaders who continue to make progress in this area, either by investing resources towards in-house development or by partnering with technology specialists, will gain significant competitive advantage early on. Nearly half of surveyed executives suggest that their big data technology budget is up to a third of new technology investments. Additionally, surveyed executives suggest that in addition to investing financially, they can also prepare themselves further (and benefit from this trend) by increasing focus on obtaining information through non-traditional sources and utilising data sources to better target risks. This upward projection and commitment to big data will define the landscape until such capabilities become broadly commercialised and offered on a cost-effective basis to the whole market. Unlike previous technology cycles however, larger leaders will be able to hold on to such competitive differentiation for a much shorter time, as technology and analytics specialists continue to lower costs of these new tools.

Figure 17: How the financial services industry can unlock the value in big data

Topic		Key benefits of big data
Customer data monetisation	Customer centricity	Institutions with global footprints can apply big data to develop a single view of the customer, which can promote delivery of an enhanced customer experience and in turn, improve branding and increase revenues.
	Customer risk analysis	Financial institutions can also apply big data to analyse behaviour profiles and trading patterns, thereby gaining a 360-degree view of the customer that will further enhance the firm's risk management capabilities.
	Customer retention	Using big data, financial institutions can analyse their internal customer logs and social media activity to generate indications of customer dissatisfaction, allowing time to act.
Transactions and operations	New products and services	Social media analytics generated from big data can be leveraged in various stages of new products and services, from conceptualisation to launch. Institutions can use social media to ascertain pre-launch sentiments and expectations to effectively define marketing strategies.
	Algorithmic trading and analytics	Institutions can leverage big data to store large volumes of historical market data to feed trading, predictive models and forecasts. Institutions can also use big data to perform analytics on complex securities using reference, market and transaction data from different sources.
	Organisational intelligence	Institutions can use big data to measure organisational intelligence using employee collaboration analytics. In addition, a big data-based culture of innovation empowers workers to learn more, create more and do more.
Risk management and regulatory reporting	Risk management	Increased regulatory focus requires institutions to manage enterprise risk across risk dimensions. Big data can enable market events across geographies to be captured in real time via unstructured data sources such as news, research, graphs, audio, visuals and social media.
	Regulatory reporting	To respond more efficiently to regulatory demands, institutions can combine regulatory data with supporting documents, contracts and attestations, thereby enabling better risk management.

Source: PwC, 'Where have you been all my life? How the financial services industry can unlock the value in Big Data' October 2013

5

Capital market users' perspectives

What about the users of capital markets? Since the financial crisis the world has been watching how banks, sovereigns and citizens cope with the changing economic landscape. However, as we transition to a new equilibrium, more emphasis should be placed on the users of capital markets (i.e. corporates, pension funds, asset managers and other non-bank financial intermediaries). These players have an integral role in ensuring stability and efficiency of both capital markets and the real economy.

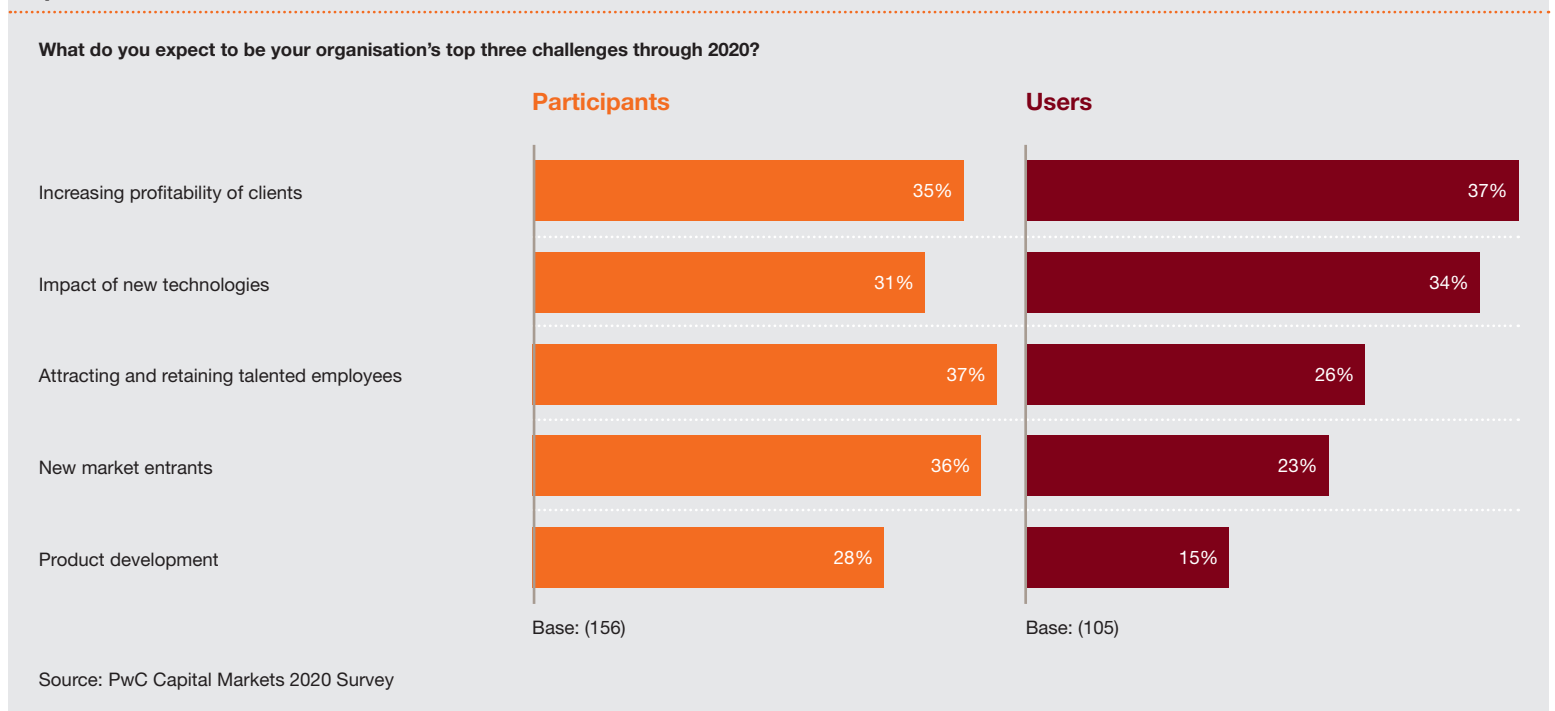


Business priorities and challenges

The priorities and challenges that users face, in terms of running their businesses, should be considered and juxtaposed against perspectives of capital markets participants. Through our survey, we have tried to do just this, with over 40% of our respondents representing firms that fall within this classification.

The views of both the participants and users are roughly aligned in terms of their perspectives on major market dynamics and changes. For example, both expect staccato-like volatility and instability that will cause markets to experience booms and retreats, and both anticipate that strong financial performance will require business focus. As such, to be successful players need to drive client-focused innovation and holistic management of risk, regulation and capital. Furthermore, users and participants both view the business impact of technology similarly. On the one hand they view it as a source of risk if managed improperly, and on the other as an enabler of competitive. This can be further extended to executives' perceptions on the ability to gain an information advantage through big data, as both expect it to be a significant driver going into 2020.

Figure 18: Attracting and attaining talent was the top challenge for participants, with increasing client profitability top for users



Where the two groups differ however, is in their interpretation of how market changes will shape individual investment priorities and challenges. While both users and participants agreed that client-focused innovation was an important investment focus, users were more concerned about implications of technology and compliance investments than their participant counterparts. This stems from the fact that participants have embarked on big

transformation programmes, some 3–5 years earlier, while many users are only starting to consider the implications of these market structural changes. As such, users still have a long way to go in terms of financing their strategic initiatives. Of the survey respondents, over half of the users indicated that they have to raise additional capital to fund their regulatory initiatives (whereas this was less than a third for participants).

Furthermore, with these areas of focus also come challenges. Users of capital markets see significant challenges in maintaining their foothold and positioning with clients. This makes sense – particularly in an environment where it is increasingly difficult for managers to outperform market benchmarks, and end-clients are evermore precocious and discerning. Meanwhile, participants viewed attracting and retaining employees, and the threat of new market entrants as their top challenges.

Overall, the road ahead for both users and participants will be challenging as they navigate the business implications of the current market trends. By staying proactive and vigilant now, they can create discrete niches and competitive advantages to position for success through 2020.

Evolution of needs and market role

The world of 2020 will be more complex for the users of capital markets. More fragmented providers, fewer products, less customisation and higher costs of services will be the order of the day. To access funding and services as well as to ensure fair pricing, users will need to exercise greater focus, devoted attention and enhanced creativity than ever before. In many instances they will need to step in and reshape their role in the marketplace.

Figure 19: Where do you see client-focused innovation coming from within the capital markets industry?

Potential development	Overall	Participants	Users
National commercial banks	56%	53%	60%
Global banks	51%	47%	55%
Non-traditional financial services providers	33%	24%	48%
Regional banks	30%	33%	26%
State-owned banks	21%	25%	14%

Source: PwC Capital Markets 2020 Survey

Beyond safety and soundness, users want access to funding. This funding will be paramount to supporting the development of the real economy. Basel III, G-SIFI requirements and national bailouts however, have caused significant shrinkage of participants' balance sheets and reduced financing capacity. In some ways this is good for capital markets, as banks and other providers will be forced to become facilitators rather than principals in a number of transactions, as the shadow banking system steps in to fill the gaps. Practically though, this means that users of capital markets will need to form new

relationships with these providers of capital and to be more flexible in their procurement of financing, advice and risk management services.

In terms of services, capital markets users, particularly those that are cross-border, want consistency and access to the full spectrum of products and offerings from their provider of choice. The post-financial crisis world is moving in exactly the opposite direction. Nationalisation, subsidiarisation and regulatory preference have left us with an increasingly fragmented financial system, and presently there are few institutions that

can provide global coverage to corporate and institutional clients other than in transaction banking. At the same time, every provider has had to pare back on markets, products and client coverage to realign businesses to face the changing economic environment. As such, forming global alliances and partnerships among different financial institutions will be an imperative to provide seamless cross-border service, and access to capabilities will be a key to success in 2020.

Capital markets users want fair pricing for the services they buy. Unfortunately, pricing pressure continues as capital markets participants struggle to earn their cost of capital. Among our surveyed executives, 51% agree that RoEs will only be in line with banks' cost of capital for the foreseeable future. As competition is whittled down, due to new rules and charges, pricing will have to rise for users of capital markets. Again, this will trickle down into aspects of everyday life. If farmers are unable to fully lock in the price they receive for next year's harvest, supply will be reduced and prices will rise. This makes it an imperative for users to understand and to control their cost bases, and to seek out product creation and partnership opportunities in order to be competitive.

As we have reiterated many times in this paper, the capital markets ecosystem continues to become more complex. Users of capital markets have an integral role to play as they facilitate evolutions within the real economy. As such, in focusing on their priorities and in addressing their challenges, users will ensure that businesses run efficiently and interactions with participants as well as with the broader global economy flow more seamlessly.



6

Conclusion

Powerful forces relating to regulation, innovation, technology, changing client expectations, stiffer competition and issues with business and operating models are drastically reshaping the capital markets landscape. The challenges are clear, even if the ultimate endgame is not.



The majority of surveyed industry representatives expect to see a positive transformation in the capital markets and within their own organisations through 2020; however, capital markets participants need to understand the impact of these challenges on their businesses to develop a game plan to address the challenges in order to win in the coming years. They need to make hard choices about which markets to serve, how to win and where not to play. They need to evaluate and separate core from non-core activities on a continued basis. Players need to simplify their organisations, rebuild and structurally reduce cost. They need to learn to be innovative and adaptable in order to execute effectively. They need to do things differently and no longer run full speed, just to be standing still.

What is clear is that the financial markets in 2020 will be even more globally interconnected (yet organisationally fragmented) and that technology and regulation will continue to be at the forefront of change. Adapting to new regulation has proven to be a costly and difficult undertaking for capital markets players. We do see a world in 2020 where some of the negative impacts of the post-financial crisis regulations on the real economy (and users of capital markets) have become apparent in the marketplace to both regulators and politicians. The ability and will of these

constituencies to reduce and/or simplify the regulatory burden on institutions is difficult to judge at this point. As a silver lining, the regulatory changes have created some new opportunities, particularly for regional banks that desire to bolster their capital markets businesses, new entrants and financial markets utilities. Each institution must evaluate their current position, aspirations for the future, desired client focus, organisational capabilities, capital constraints and brand value. Market participants should consider the posture they wish to adopt. Do they want to shape this future, or rapidly follow the leaders? Status quo is not an option.

The industry needs a new way of thinking about strategy, a strategy that takes an end-to-end view and that understands how it all fits together – markets, clients, risk, regulation, operations, technology – and a strategy that overcomes the challenges of implementing real-world large-scale change. Each capital markets participant needs to develop an innovative strategy to tackle these challenges. To develop this strategy, one needs to have both a detailed understanding of the current business, including drivers of cost, revenues and profitability, and a view of the future competitive environment and its impact on your business strategy.

PwC has worked with a number of clients to better understand their current businesses, from process flows, technology and data and client profitability. After years of mergers, expansion, outsourcing, technology and operations changes, as well as new regulation, many management teams are having difficulty gaining the types of end-to-end view of their businesses that they desire. As such they are looking for ways to improve the data upon which they are making critical decisions, not wanting to do so based upon incomplete or flawed information. Given the significant business model challenges and decisions faced by institutions across the board today, it is more important than ever that management teams have a proper baseline for decision-making.

To help respond to this challenge, PwC has developed its Fit for Growth* methodology. This analysis focuses on not only understanding the product, country and client profitability, but also the elements of the support infrastructure such as technology, data and process flows. The latter are often not only key drivers of cost, but also the prime sources of obstacles in terms of executing agreed upon business strategies.

With PwC's Fit for Growth Index in hand, our clients have been able to make better decisions about their optimal client, product and country footprints.

As noted, the second foundational element to developing an effective go-forward strategy is to understand how the future of capital markets applies to your organisation. PwC has worked with dozens of clients to reimagine their companies in a practical, results-oriented way and to take big-picture trends and priorities and translate them into tangible actions. Through a series of facilitated workshops where business and functional leaders are asked to think differently about evolving forces and define their 'fiercest competitor', we facilitate in rapidly crafting an integrated strategic response to these forces.

This is what we do. We formulate strategy that works. We help our clients leverage their strengths to capture and sustain advantage. We help them redesign and simplify their business and operating models to enhance client experience, restructure the cost base and reduce operating risk. We help them test, learn and adapt – and build the agile, innovative organisation needed to make it happen. We help them get things done. We will be with you for the long haul.

We hope this perspective has been provocative, and provides insight as you consider your own strategy to thrive in 2020.

* Fit for Growth is a registered service mark of PwC Strategy& Inc. in the United States.

Understanding competition through PwC's Fiercest Competitor Workshop – a powerful and practical tool to rapidly craft an integrated strategic response to these evolving forces.

Given the intense competition among firms and the continued industry complexity ahead, players need to develop and implement a forward-looking strategy to assess competitive threats and respond to new industry trends. PwC has a workshop to address these needs.

Figure 19: The Fiercest Competitor Workshop contains four distinct segments to build momentum towards actionable results

Part 1: Fiercest strategy

- Discuss industry perspectives, gain insights on market challenges and potential disruptions
- **Result:** Quickly get past biases that may distort your market view and cause you to miss potential competitors

Part 2: Fiercest business model

- Design the Fiercest Competitor and strategies for a new business model
- **Result:** Rapidly assess impact to your business model, and determine the best strategic path forward

Part 3: Closing the gap

- Make the organisation become the Fiercest Competitor
- Learn to quickly work through business model challenges
- **Result:** Avoid polarising viewpoints while quickly identifying and resolving the root causes of problem areas

Part 4: Prioritised path forward

- Turn the discussion takeaways into action items
- Gain expertise in roadmaps, mobilisation and execution
- **Result:** Work through challenges and prioritise the solutions as part of a long-term go-to-market strategy

Source: PwC

Our proprietary workshop accelerates the creation of solutions, promotes executive alignment, and defines the path forward.

Accelerated approach. Quick alignment of large groups of people in very complex design work and development of solutions in 1–4 days that would typically take 4–7 months.

Highly collaborative. Brings together and actively involves 20–80 participants in the development of the solution so that alignment is reached together with real ownership.

Creates change-enabling culture. Creative, engaging approach to solving complex problems, creates excitement and interest; an instant way to create a room full of change-enablers.

Rapid and intense. A rich, challenging, fast-paced experience, allowing senior executives to rapidly debate and challenge the strategies they need to win.

Results-focused. Output is a clear vision, with a defined roadmap of tangible initiatives, thoroughly vetted by a cross-functional team.

Strategy that works.





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Powerful forces are reshaping the banking industry. Customer expectations, technological capabilities, regulatory requirements, demographics and economics are together creating an imperative to change. Banks need to get ahead of these challenges and retool to win in the next era. Banks must not only execute on today's imperatives, but also radically innovate and transform themselves for the future.

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