Capital Markets and Investment Banking 2016: Time for Tough Choices And Bold Actions

Global Corporate & Investment Banking Practice
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Introduction

Despite Improved Performance, Challenges Remain for CMIB

Amid Persistent Strong Headwinds, Tailwinds Emerge

Tough Choices: Four Business Models for the Future

Bold Actions: Attaining Sustainable Profitability
Introduction

Nearly a decade after the global financial crisis, the capital markets and investment banking (CMIB) industry remains under pressure amid weak profits, high costs and lingering strategic uncertainty. The inescapable reality is that the industry’s restructuring efforts to date have failed to produce sustainable performance. A more fundamental change is required, based on the realization that for most banks, the traditional model of global capital markets and investment banking is no longer an option.

Globally, the average return on equity (ROE) for the industry in 2015 was around 10 percent, unchanged from 2014. U.S. banks outperformed, with the biggest banks generating an average ROE double that of their European peers (10 percent versus 5 percent). The top 10 global CMIB banks posted declining revenues for the third straight year. This decline was driven by fixed income. Equities and
investment banking actually experienced some revenue growth in the last three years. Many national and regional banks were notable outperformers, winning clients and taking a bigger share of industry revenues.

For global banks saddled with high operating costs and complexity, the macro environment is particularly challenging, with persistently low interest rates and slow economic growth undermining returns. The key fixed income, currency and commodities sector (FICC) is under particular pressure in terms of revenues, capital charges and costs, and FICC accounted for just 46 percent of revenues for the top 10 banks in 2015, compared with 61 percent in 2010. Across the industry, the FICC price-to-book ratio was about 0.6x at the end of 2015, implying value destruction of $105 billion based on the book value of equity allocated to the business.

In the face of adversity, many banks have retrenched, scaling back some businesses and exiting others, which has led to liquidity concerns in some asset classes. Nonetheless, high costs continue to undermine performance. New technologies remain underutilized, and many banks are struggling to make fundamental changes in their operating models and embrace the potential benefits of digitization. Moreover, CMIB clients are challenging the value added by banks today, with many reporting that they feel overserved by sales in an electronic/flow products world, and that banks are struggling to provide critical liquidity in products when it really matters. Clients are increasingly unbundling their decision making and selecting the best provider in each product and region.

Persistent and formidable headwinds continue to hinder CMIB performance, including lackluster revenue growth, relentless waves of regulation, entrenched product complexity, new competition and increased uncertainty following the UK’s vote to leave the European Union. Nonetheless, McKinsey sees some encouraging tailwinds beginning to develop. These include a growing digital toolkit, the emergence of specialized FinTech players with which the industry can collaborate and new industry utilities that are poised to drive economies of scale. In addition, fines and litigation costs have fallen over the past year and may be set to decline further.

Based on proprietary data sources, including McKinsey’s CMIB Revenue and Profit Pools, the most comprehensive data set in the industry encompassing 175 banks, and on interviews with 200 industry leaders, McKinsey sees a new market structure emerging for CMIB over the next three to five years. Four business models are likely to succeed as economic, regulatory and technological trends play out:

- Global full-service players at scale across products and services (three to five banks).
- Focused global players with scale in chosen product bundles (eight to 12 banks).
- National and regional commercial banks with strong corporate franchises and CMIB product factories.
- Non-bank competitors starting out in specific areas and then expanding into related businesses.

Many banks will need to undergo transformative change to transition to
Despite Improved Performance, Challenges Remain for CMIB

a successful operating model, scaling back their aspirations for their CMIB businesses and reducing their product set, client mix and regional footprint, accompanied by a commensurate change in their cost structure. Hard decisions must be made, particularly with regard to costs and banks’ commitment to the CMIB business. Amid increased price competition, banks must differentiate themselves based on value propositions that meet segmented client needs. Part of the solution is to make better use of data and analytics, along with financial technology and electronic execution and distribution.

There are eight key initiatives bank leaders need to implement regardless of which of the four operating models they choose to pursue:

- Defining the long-term business portfolio; for many players this means canceling the call option on revenue growth.
- Optimizing the balance sheet, leveraging integrated tools to address multiple constraints simultaneously.
- Developing a clear client value proposition and allocating scarce resources to clients that are willing to pay for them.
- Implementing a new cost framework, fully leveraging digital technology across the organization.
- Participating in industry utilities, including distributed ledgers (blockchains).
- Leveraging advanced analytics, machine learning and robotics.
- Upgrading management skills and winning the war for talent.
- Addressing conduct risk, risk culture and incentives.

These eight areas together provide a framework for action, with implementation based on banks’ individual resources and strategic purpose. The road to a sustainable future remains open for CMIB banks, but only if they make tough choices and take bold actions now.
Despite Improved Performance, Challenges Remain for CMIB

CMIB has been travelling a slow road toward sustainable performance, amid challenging market conditions, regulatory burdens and increased competition.

Industry ROE was flat in 2015, at around 10 percent, in line with the cost of equity, but the critical FICC business remained under pressure, generating a declining share of revenues for the third straight year.

European CMIB earnings were especially weak, with the largest banks generating an average ROE of 5 percent in 2015, half that of their U.S. counterparts. High costs were a significant drag on returns.
U.S. banks benefited from a healthier domestic market and leading positions in key product franchises.

Continuing the trend seen in recent years, the top 10 global banks struggled the most, posting a combined ROE of 7 percent (Exhibit 1). For some of these banks, all three components of the ROE equation were headed in the wrong direction—revenues declined, costs rose and the capital denominator became ever more onerous. While almost all of these banks had major cost-cutting efforts underway, as a group they were only able to reduce their cost-income ratio (CIR) from 79 percent in 2014 to 76 percent in 2015. This compares with a CIR of 52 percent for regional and national banks in Europe and 53 percent in the U.S.

The leading banks’ share of the income pie also declined. The top 10 accounted for 51 percent of global fees in 2015, compared with 57 percent in 2012.

Niche and regional players have gained share and have significantly lower cost-income ratios. This reflects their simpler product sets and business models, as well as strong retail and corporate franchises. Some of them have also benefited from lighter capital burdens, and most have lower litigation and compliance costs. Attractive domestic market structures, for example in Canada and Australia, have also worked to the advantage of a number of banks.

The top 10 banks struggled more than others in fixed income and investment banking, but less so in equities. Their rates businesses contracted significantly, compared with national and regional banks. In FX, the top 10 banks’ revenues rose from $16 billion in 2012...
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Regional and national banks grew revenues from $22 billion in 2012 to $31 billion in 2015, driven by expansion in Asian. In repo, a key enabler of success in fixed income, regional and national banks increased balances as many of the top 10 banks cut back significantly.

Regional disparities persisted in 2015 among regional and national banks. Domestic Asia-Pacific (APAC) banks outperformed their rivals in the U.S. and Europe. APAC ROE was 16 percent, on the back of 8 percent CAGR. U.S. and EMEA banks outside the top 10 posted ROEs of 12 percent and 13 percent, respectively, against a relatively stable revenue base (Exhibit 2).

**FICC undermines top 10 banks**

Despite significant restructuring efforts, FICC last year remained one of the most challenged businesses in terms of revenues, capital charges and costs. Among the top 10 banks, trading volumes declined significantly, and FICC accounted for 46 percent of revenues in 2015, compared with 61 percent in 2010 (Exhibit 3, page 8). The business generated $59 billion of revenues for the top 10 banks in 2015, compared with a $92 billion peak five years ago.

According to McKinsey analysis, the FICC price-to-book ratio for the top...
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10 banks was about 0.6x at the end of 2015, implying value destruction of $105 billion compared with book value of equity and suggesting that more restructuring is required. In the past six months, several banks have launched additional rounds of cost cuts, reducing front-office staff by 5 to 20 percent.

Four structural trends continue to inhibit the economics of FICC:

- Regulation is constraining capital, encouraging balance-sheet contraction and reducing trading inventory.
- Limitations on principal trading are tempering banks’ ability to generate significant risk-driven returns.
- Electronification and market structure changes (e.g., SEF trading and central clearing) are driving continued margin compression in flow markets.

- New entrants are taking market share by exploiting cost and capital arbitrage in asset classes without barriers to entry (i.e., areas with central clearing, impartial access and central trading venues such as SEFs or exchanges).

Over the next few years, the FICC business is likely to remain challenged by a combination of structural and cyclical factors. Capital requirements will continue to increase, as the latest wave of regulations come into force (e.g., Fundamental Review of the Trading Book [FRTB]). The economics of new agency models do not compensate for lost principal business, and continued slow economic growth and low interest rates may make the business—especially rates—less attractive.
Crosscurrents on costs

CMIB operating costs have declined by just 2 percent since 2010, with efficiency efforts offset by stranded costs caused by incomplete exits, increased compliance and regulatory expenses and fines.

Efforts to reduce costs have accelerated, with the largest banks in particular divesting assets or exiting select sub-businesses or lines of business. Banks have also cut headcount, with FICC numbers falling 33 percent across the top 10 banks between 2010 and 2015.

Still, crosscurrents have impeded progress, as banks have sought to disentangle complex global operations. Cost cutting in technology and support functions has been particularly challenging, with platforms often deeply embedded and decommissioning programs tending to run over long periods.

In addition, banks often take a front-office view on restructuring and cost-cutting, e.g., they try to reduce costs but salvage as much revenue as they can, often preserving the option to return to a business when conditions improve. Managers making these decisions are often incentivized by revenue targets and do not always fully understand the downstream cost implications. When a trading desk is closed, for example, its supporting technology may be necessary for other parts of the franchise, leading to a smaller revenue base supporting the same level of fixed costs. The economics of this scenario and the stranded costs are sub-optimal. The cost challenge has been particularly severe for the top 10 CMIB banks, where average CIRs rose to an estimated 76 percent in 2015 from 61 percent in 2010 (Exhibit 4).
Compulsory expenses have also increased, driven by regulation, IT investment and fines. Large banks have spent hundreds of millions of dollars a year on regulatory costs related to stress testing, the comprehensive capital analysis and review, requirements under Basel III for improved oversight and reporting and compliance and conduct-related investments. Expenditure has increased both in FTEs and systems, and firms have not yet realized the benefits of automation.

Fines and litigation costs have amounted to more than $175 billion over the past seven years, averaging more than 8 percent of revenues.

Capital impact on balance sheets

Higher capital requirements have been a drag on ROE for all CMIB banks, but for global banks the amount of capital required per unit of revenue has risen by up to 500 percent in businesses such as repo, structured credit and some areas of rates.

The top 10 banks (five in Europe and five in the U.S.) reduced their collective CMIB balance sheet from a peak of almost $13 trillion in 2008 to less than $8 trillion in 2015. This calculation includes the absorption of Bear Stearns, Lehman and Merrill Lynch. The vast majority of the cuts came from European banks, which reduced their collective balance sheets from around $9 trillion to $4 trillion (Exhibit 5).

Banks’ efforts to reduce balance sheets and cut costs have paid some dividends, but the largest players continue to struggle with legacy portfolios and sub-optimal product offerings. High costs and relatively weak performance in FICC are continuing concerns, and with interest rates low net interest margins are likely to remain under pressure.
Amid Persistent Strong Headwinds, Tailwinds Emerge

Over the past five years, low interest rates, heightened regulation and economic uncertainty have undermined CMIB profitability. Banks have responded with major cost-cutting, but these measures have failed to significantly improve performance. The chances of a cyclical macroeconomic upturn in the medium-term appear slim. That suggests that top-line growth will remain constrained, while regulation will continue to dampen earnings. Regional and national banks, along with alternative broker-dealers, are intensifying competition, and the still evolving impact of Brexit may lead to new strategic challenges.

Still, some tailwinds are starting to emerge, with digitization offering a potential 30 percent P&L boost over the next
Formidable headwinds continue to blow

No relief from the top line
As the global economy began recovering in 2012, many in the CMIB industry expected revenues to resume growing and possibly jump back to pre-crisis levels (e.g., $326 billion in 2006; $362 billion in 2007). Since then, however, the industry revenue pool has remained stubbornly flat. Global CMIB revenues in 2015 were $282 billion, and performance for the top CMIB banks has shown no signs of improvement thus far in 2016. Matching 2015 revenues would be a best-case scenario, and would depend on a potential rate hike in the U.S. to boost some of the most challenged parts of the FICC business.

Relentless waves of regulation
Regulation continues to be a primary challenge, increasing the cost of some businesses beyond economic sustainability and dampening ROEs. McKinsey estimates the unmitigated effects of pending regulation could cut ROE at the top 10 banks to 3.4 percent, from 6.6 percent in 2015 (Exhibit 6). Mitigation efforts, including in the extreme case the closure of some businesses, could offset the impact. The most important impending regulations include the following:

Fundamental Review of the Trading Book
FRTB overhauls the market risk framework introduced under Basel 2.5. It is vast in scope and touches on a number of complex and pivotal issues, from the design of internal market risk models to a new mandatory standardized calculation for trading book assets.

McKinsey anticipates a substantial impact on capital requirements, with market risk weighted assets rising to more than $1 trillion by 2020, from about $650 billion at the end of 2015, absent mitigating actions.\(^2\)

The overall impact of FTRB, prior to mitigating actions, could require the top banks to hold approximately $40 billion to $65 billion of additional capital to maintain current Common Equity Tier 1 (CET1) ratios, likely reducing ROE by 0.7 percentage points on average.

The top banks also had to establish budgets of as much as $100 million to $150 million to ensure compliance, and are working on actions including targeting technical improvements (RWA optimization) and business levers (redesign of products, hedging approaches, business model adjustments). Maintaining a trading risk infrastructure and managing required data will be cost intensive. Therefore, it is crucial for the industry to find ways to work together; for example to address some of the underlying data challenges, such as un-modelable risk factors, to reduce implementation and running costs. McKinsey believes that there will be a race to the finish line in 2019. Not all players will be able to get their advanced models approved in time and so will have to revert to the more punitive standardized models.

risk capital based on standardized approaches and higher Tier 1 capital requirements, may reduce the top 10 banks’ ROE up to 0.6 percentage points by 2019.

- **Revised IRB credit risk modeling and standardized approach floors.**
  The current Basel consultation paper on the Internal Rating Based (IRB) approach for calculating credit risk reduces the scope of IRB models for some exposures (e.g., banks/financial institutions, large corporates, specialized lending and equity), introduces input parameter floors for core credit risk parameters (probability of default, loss given default and credit conversion factors), and specifies other parameter requirements. Overall, an aggregated output floor based on the standardized approach is envisaged. In derivatives, calculation of the CVA capital charge will be limited to standardized and basic approaches. The internal model method (IMM) for counterparty credit risk will remain, but there will be a standardized approach floor.

- **Mandatory operational risk standardized approach.** Banks will no longer be able to calculate operational risk capital using internal models, and
the Advanced Measurement Approach will be abolished. The Basel Committee has published a consultation document on the Standardized Measurement Approach (SMA) for operational risk, which will replace current approaches as a "single non-model-based method." Due to their currently low operational capital charges, European banks will likely be impacted more than their U.S. peers.

- **Dual capital constraints: RWA and leverage.** Capital ratios and the leverage ratio will be phased in by 2019. U.S. Global Systemically Important Banks (G-SIBs) face a capital buffer of up to 4.5 percent and a 5 percent enhanced supplementary leverage ratio. G-SIB surcharges may be added to Comprehensive Capital Analysis and Review (CCAR) requirements in 2017 or 2018, which could significantly restrain ROEs.

**Derivative rules**

A wave of regulation is increasing capital requirements for over-the-counter (OTC) derivatives and pushing trades onto regulated venues and into central clearing. The latter is expected to reduce the top 10 banks’ ROE by 0.4 percentage points by 2020. In addition to the Dodd-Frank Act Title VII, which is largely in effect, the primary drivers are:

- **European Market Infrastructure Regulation:** Central clearing for mandated OTC products, new risk management standards, reporting and margining of non-cleared derivatives.

- **Markets in Financial Instruments Directive II (MiFID II)/ Markets in Financial Instruments Regulation (MiFIR):** Trading of shares and certain classes of derivatives moves to regulated markets, multilateral trading facilities or organized trading facilities, mirroring in Europe the requirements of the Dodd-Frank Act.

MiFID II and MiFIR have six broad implications for CMIB businesses:

1. MiFID II changes the revenue model for sell-side research and is likely to reshape the sales revenue model by concentrating trade execution. McKinsey expects an increase in hard currency payments for research and advisory services and a reduction in the number of brokers used for research, as clients reassess value and consider administrative costs. Several brokerage firms have already started to adjust by downsizing and "juniorizing" research teams, while some smaller broker dealers have exited the research business.

2. Product and sales trading processes will change, due to extended trade transparency and transaction reporting.

3. Streamlined market platforms will result in higher minimum professional and operational market standards. Transparency of fixed-income organized trading facilities might also decrease market efficiency and liquidity.

4. Banning inducements in retail and private banking could result in revenue losses in a relatively attractive client segment.

5. Cross-border market access will lead to increased competition, with more third-country and non-discriminatory access to central counterparties and trading venues.
6. Tighter regulation of commodity trading will result in clearer position limits and increased reporting requirements for commodity derivatives.

**IFRS 9**

Banks switching to IFRS 9 accounting standards for financial instruments (replacing IAS 39) by 2018 will incur a one-time hit, due to a new impairment model (one of three core IFRS 9 changes). IFRS 9 requires loan loss provisions based on expected credit losses instead of incurred losses for assets held at amortized costs and measured at fair value through other comprehensive income. The strategic and business implications of IFRS 9 have been largely ignored, the primary focus being on achieving compliance and technical and methodological issues.

**XVA derivatives valuation adjustments**

In recent years, the growing number of fair-value adjustments, collectively called XVAs, has prompted institutions with active trading books to examine their pricing and infrastructure capabilities. In addition, banks must now measure and effectively manage the KPIs of sales and trading units. Long-dated business, uncollateralised or with “dirty” credit support annexes (CSAs)—i.e., non-cash collateral—are particularly impacted, where most institutions are looking to review CSA collateral terms in a restructuring and simplification effort.

Banks also view various valuation adjustments differently. While credit valuation adjustments, funding valuation adjustments and initial margin adjustments have become commonplace, there is less consensus around the treatment of regulatory capital cost adjustments, known as KVAs.

McKinsey sees three important near-term themes for the industry to address:

1. The typically large upfront derivatives P/L, which is driven by accounting rules, versus the economic value of the trades over time as a function of capital costs.

2. Organizational challenges involved in having an XVA desk separate from individual trading desks and capital management, particularly in the context of business selection, hedging and collateral management.

3. The large computational effort required to evaluate the XVA bundle and smart optimization methods available for real-time decision making.

Banks should focus further on desk governance, business steering methodology and enabling analytics. Banks can review their XVA desk operating model, with increased focus on standardized KPIs across desks, additional management transparency and centralized reporting. They can start by creating a map of stakeholders and decision points for trade approvals, CSA negotiation, hedging and collateral. In addition, banks often have opportunities to standardize approval procedures and centralize reporting capabilities of capital hurdles, XVA trade pricing, and KVA consumption per line of business. Banks should also assess opportunities to optimize derivatives portfolios to significantly reduce the overall XVA calculation burden, and review options for cost-efficient implementation of calculation frameworks.

**Capital Markets Union**

Europe’s planned Capital Markets Union aims to lower the cost of funding across the eurozone and make the financial sys-
tem more resilient. In September 2015, the European Commission adopted a plan for 33 actions to establish the building blocks of an integrated capital market in the European Union by 2019. The Capital Markets Union might create a new business opportunity for securitizations and alternative funding for small to medium enterprises, moving Europe closer to the funding structure mix seen in the U.S. (banking book versus debt capital markets), assuming securitization is still economically attractive post-FRTB.

The positive news for CMIB banks is that the major building blocks of the post-crisis regulatory framework are falling more clearly into place. The final act has yet to play out, but at some point banks should start to feel the benefits of regulatory certainty in setting business priorities and allocating capital.

New entrants and rising competition

New entrants are leveraging technology, a lower cost base and lighter capital loads to make inroads into the CMIB industry.

- Asset managers, high-frequency trading firms and technology players are competing in derivative markets including swaps, options, futures and FX.
- High-speed traders dominate U.S. equity and government bond trading volumes (two-thirds of NYSE traders are non-traditional players).
- Private equity funds are entering the collateralized loan obligation (CLO) management business (mainly originate-to-distribute).
- Commercial and national banks are using their stronger balance sheets and higher credit ratings to offer repo as larger banks withdraw.

Whether disruptors will gain market share at the expense of full-service rivals remains to be seen. Established players have strong franchises and valuable resources (balance sheet, research, corporate access).

Uncertainty surrounding Brexit

The UK vote to leave the European Union on June 23, 2016 has created high levels of uncertainty and is another factor to consider with potentially far-reaching medium- and long-term implications.

Light tailwinds gather strength

While CMIB businesses face numerous headwinds, there are also some encouraging tailwinds emerging. These include tech-enablement as a tool for both growth and cost reduction, the potential for collaboration with specialized FinTech players and new industry utilities that are poised to deliver economies of scale. Fines and litigation costs are also set to diminish, as long as banks continue to focus on strong operational risk management and improvements to risk culture.

Tech-enablement comes of age

While it has yet to be fully realized, digitization has the potential to deliver an estimated 20 to 30 percent P&L improvement or a 2 to 3 percent improvement in ROE over three years for CMIB banks. There are two paths banks can take in pursuit of these benefits. The first, the “all-in” approach, makes sense for a few institutions with a strong focus on electronic trading and a track record of technology delivery. Successful transformation for these banks will lead to improved electronic market-making, execution and analytics, and an increased share of liquid
asset classes. All-in banks implementing digital solutions throughout the value chain could achieve 30 percent-plus growth in digital businesses, even in a low-growth environment.

A more effective path for the majority of banks is the less risky and less expensive “targeted” approach, with digital investment focused on protecting client franchises and reducing operating costs. Unlike the all-in banks, targeted institutions will not view technology as a competitive advantage and may decide to outsource in certain areas.

Digitization has the potential to produce revenue upside of 4 to 12 percent, enhance customer relationship management and increase cross-selling. On the other hand, 6 to 12 percent of the top 10 banks’ revenues are at risk of digital disruption.

On the cost side, digitization could deliver savings of 25 percent on the applicable cost base (Exhibit 7), which would translate into a P&L impact of 16 percent at a 65 percent CIR.

Technology has the potential to deliver benefits across the entire value chain. However, the current focus of bank investments in digitization initiatives varies widely based on the “e-maturity” of the asset class. For example, in highly electronic asset classes like cash equities and G10 spot FX, banks are investing in differentiated client-facing functionality to drive revenue and share gains (e.g., enhancements to dealer platforms, including customization, integration with wealth management and transaction-banking platforms, crossing against internal flows, and value-added services). However, in less electronically mature asset classes (e.g., credit, securitized products) banks’
investments in digitization are less focused on revenue and share gains and much more heavily geared towards driving cost efficiencies.

Banks can reduce front-office costs through electronic onboarding, KYC and e-CRM tools. They can leverage e-tools that reduce manual work and enhance front-line productivity, and put machine-learning and analytics at the fingertips of front-line sales and trading staff.

Another current focus is front-to-back automation. Many banks are applying machine-learning and robotics to areas including product control, operations, middle-office and risk management. Some are exploring new technologies to dramatically lower the cost of transacting; for example blockchains in securities services.

At the same time, the infrastructure underlying capital markets is becoming fundamentally more efficient and scalable. Leading banks are utilizing public cloud infrastructure to a more significant degree than ever before, as risk management policies related to this area are changing and executives are getting more familiar and comfortable with this relatively newer technology. Banks taking this route have seen dramatic results. In one example, a CMIB business used the increased capacity of a cloud service to reduce the time needed to compute a derivatives pricing grid from 8 hours to 15 minutes, and the cost to under $10. Broadly, 30 to 40 percent of workloads could be migrated to public cloud and see similar improvements.

Most leading CMIB banks have embraced the open source and unstructured data management environment, leveraging Hadoop and other platforms to rapidly derive insights from both structured and unstructured data. In a recent example from retail banking, a UK bank collaborated with Google to use the internet giant’s Cloud Platform (and analytics tools such as Google BigQuery) to analyze customer behavior and reap actionable insights in minutes as opposed to days.

Another important technology development for CMIB businesses is the shift to an external, software-as-a-service model for technology. Where once the norm was heavily customized installed services, banks are moving to an industry utility or “business-process-as-a-service.”

Banks are also digitizing customer journeys in areas such as sub-fund onboarding, credit risk management and derivatives servicing, using agile development methods.

Technology and digitization are not new topics for the banking industry. In some cases, promises of increased revenues and cost savings have outpaced the reality. Today, however, tech-enablement has become a true tailwind for the CMIB industry. Not every digital investment will deliver a return (particularly in the front

“It will probably not happen because of structural issues, but if someone could create a buy-side to buy-side venue for credit that had real liquidity, I’d be the first person on it.”

Real money investor
office), but many of the digital tools and technologies emerging today will become the foundational infrastructure for a more streamlined and cost-effective industry.

**FinTechs not as disruptors but as partners to drive improvements**

The question of how disruptive FinTech firms will be for the CMIB industry is a subject of frequent debate, but there is a different way to view the rise of FinTechs. Most FinTech firms are focused not on disrupting the banking model but on enhancing the client experience or enabling specific elements of the value chain (Exhibit 8). Many are seeking to partner with banks and drive revenue upside, cost reduction or capital optimization. And a significant percentage of banks are taking a similar view. Fifty-three percent of CMIB leaders surveyed by McKinsey in April reported that their institutions were partnering to develop and customize FinTech solutions, and 32 percent of the firms are minority investors in FinTechs.

In the pre-trade space, big data and next-generation analytics are giving banks an enhanced understanding of client needs and enabling them to offer predictive “next best” products. One firm has developed a natural language market data analytics system capable of answering complex financial questions posed in English. Several banks and new entrants use in-house or FinTech solutions to provide insights for traders based on social media postings.

Further down the value chain, there are applications for confirmations and reconciliation, reference data operations, product identities, trade cost analysis, and systems to optimize cash and collateral. Efforts are also underway in the blockchain arena to develop “smart securities,”

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**Exhibit 8**

**Three types of FinTech models**

<table>
<thead>
<tr>
<th>Description</th>
<th>Examples</th>
</tr>
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<tbody>
<tr>
<td><strong>“Disrupt the model”</strong></td>
<td>~20% of FinTechs in CIB looking to <strong>fundamentally disrupt the business model</strong>&lt;br&gt;Examples: peer-to-peer lending, bond and equity issuance, securities services</td>
</tr>
<tr>
<td><strong>“Own the relationship”</strong></td>
<td>~20% of FinTechs in CIB playing an <strong>intermediary role</strong>, providing enhanced client experience&lt;br&gt;Examples: FX and payments processing, trade finance</td>
</tr>
<tr>
<td><strong>“Enable the value chain”</strong></td>
<td>~60% of FinTechs in CIB have <strong>financial institutions as customers</strong>, enabling efficiency and effectiveness&lt;br&gt;Examples: leveraging machine learning, workflow, distributed ledger, big data and analytics</td>
</tr>
</tbody>
</table>

Source: McKinsey Panorama FinTech
programmable financial contracts aimed at reducing reconciliation costs and increasing security and transparency.

Other innovations include alternative distribution models for research, crowdsourcing of data, sentiment and opinions, shared platforms, and “segment of one” mass customization of client preferences and behavior.

### Utilities in CMIB

<table>
<thead>
<tr>
<th>Platform</th>
<th>Value proposition</th>
<th>Key reasons for success</th>
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<tbody>
<tr>
<td>SmartStream</td>
<td>Reference data at a lower cost</td>
<td>• Established data management system</td>
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<td></td>
<td></td>
<td>• Reference data supplied by trusted third party</td>
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<tr>
<td>DTCC</td>
<td>Clearing, settlement custody</td>
<td>• Broad customer base: U.S. and worldwide</td>
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<td></td>
<td></td>
<td>• Neutrality and risk capabilities</td>
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<tr>
<td>CLS</td>
<td>Sell-side clearing</td>
<td>• High multi-tenant capability</td>
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<td></td>
<td></td>
<td>• Specialized service offering: only FX</td>
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<tr>
<td>Markit</td>
<td>Data, trade processing, platforms</td>
<td>• Best-of-breed applications</td>
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<tr>
<td></td>
<td></td>
<td>• High multi-tenant capability</td>
</tr>
<tr>
<td>SS&amp;C GlobeOp</td>
<td>OTC derivatives trading and lifecycle management</td>
<td>• Flexible services and customization options</td>
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<td></td>
<td></td>
<td>• Bringing implementation expertise</td>
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<tr>
<td>AcadiSsoft</td>
<td>Compliance/processing</td>
<td>• Messaging linked with reconciliation</td>
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<td></td>
<td></td>
<td>• Experience</td>
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<tr>
<td>DTCC GlobalCollateral</td>
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<tr>
<td>TriOptima</td>
<td>Post-trade processing</td>
<td>• Industry-standard software</td>
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<td></td>
<td></td>
<td>• Anchor client; still to gain significant scale</td>
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<tr>
<td>FIS Derivatives Utility</td>
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<tr>
<td></td>
<td>Listed derivatives post-trade</td>
<td>• Lower unit cost per trade</td>
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<tr>
<td></td>
<td></td>
<td>• Avoidance of upgrade/regulatory spend</td>
</tr>
<tr>
<td>KYC.com</td>
<td>Know-your-customer</td>
<td>• Still gaining traction with buy-side clients</td>
</tr>
<tr>
<td>Clarient</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Media coverage, expert interviews, McKinsey analysis

### Industry utilities on the rise

Continued margin pressure is fueling interest in shared services for standardized CMIB activities, and a number of multi-tenanted platforms are emerging in response. Service areas that have benefited include data management, transaction processing, KYC, clearing and settlement, trade lifecycle management, compliance and collateral management (Exhibit 9).
In addition to delivering cost and efficiency benefits, utilities could help catalyze banks’ technology upgrades and lead to higher-quality services, fewer breaks and fails and additional scale. Despite those significant potential benefits, adoption of utilities in CMIB is moving slowly. Establishing collaboration rules and governance is a challenge and it is often difficult to determine which operator is best.

Key success factors for shared utilities include focusing first on core competencies and then broadening the offering; a clear value proposition with immediate cost benefits (if possible); neutrality of platform/user ownership; broad customer base to achieve scale; flexibility in servicing clients; and implementation expertise.

**Legal costs and fines may decline**

Fines and litigation costs for banks have fallen over the past year (Exhibit 10). Fines as a percentage of revenues were 5 percent in 2015, compared with 18 percent in 2014. McKinsey expects fines will continue to abate over the next few years, contingent on banks continuing to prioritize operational risk management and risk culture.

---

**Exhibit 10**

Non-financial risks remain a focus, but fines decreased in 2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Fines as a % of revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2%</td>
</tr>
<tr>
<td>2011</td>
<td>5%</td>
</tr>
<tr>
<td>2012</td>
<td>10%</td>
</tr>
<tr>
<td>2013</td>
<td>17%</td>
</tr>
<tr>
<td>2014</td>
<td>18%</td>
</tr>
<tr>
<td>2015</td>
<td>5%</td>
</tr>
</tbody>
</table>

---

¹ Overall banking, not just CMIB business

Source: Media coverage, SAS OpRisk losses, McKinsey analysis

<table>
<thead>
<tr>
<th>Primary sources of fines</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgages</td>
<td>~$140bn</td>
</tr>
<tr>
<td>Anti-money laundering</td>
<td>~$15bn</td>
</tr>
<tr>
<td>LIBOR</td>
<td>~$10bn</td>
</tr>
<tr>
<td>FX</td>
<td>~$10bn</td>
</tr>
</tbody>
</table>
Tough Choices: Four Business Models For the Future

Even in a challenging environment, some CMIB businesses are performing well, generating ROE above the cost of equity with sustainable and profitable business models. National and regional banks are notable outperformers, despite increasing pressure from difficult trading conditions recently. Many European and Asian regional and national banks that performed well in 2015 are experiencing a more challenging market environment in 2016.

Many of the largest banks, on the other hand, are struggling, with insufficient ROE and a lack of strategic coherence. For most of these big banks, the days of being a global universal player are gone, as evidenced by the large-scale retrenchment seen over the past two years,
particularly in FICC, where the majority have reduced headcount and exited non-core businesses. The sharp reduction in global universal institutions goes hand-in-hand with a number of business model changes that are set to emerge. McKinsey expects four new models to take hold:

- **Global full-service players at scale across products and services (three to five banks)**
- **Focused global players with scale in select product bundles (eight to 12 banks)**
- **National or regional commercial banks with strong corporate franchises and CMIB product factories**
- **Non-bank competitors starting out in specific areas and then expanding into related businesses.**

$15 billion or ideally closer to $20 billion in annual revenues to cover the cost of an expensive and complex global operating model. The natural candidates at present are U.S.-based banks, given their stronger starting positions and more attractive home market.

This select group of global banks will make a virtue of strong balance sheets, scale and operational efficiency. They will dominate in markets where less efficient rivals can no longer operate profitably (Exhibit 11, page 24). Outperformance on the back of balance-sheet size has already become evident in fixed income and equities, where the top three players have gained market share in revenues at the expense of the next tier. Balance sheet/RWA commitment drives revenues, which provide scale; operating leverage and a cost advantage that can help generate superior returns in excess of the cost of capital. Scale also enables these banks to invest in new technologies that will drive additional cost advantages.

**Focused global banks**

Banks that can no longer compete as full-service global players will need to narrow their scope to areas where they can outperform and have leading franchises, based either on scale or intellectual property. This business model does not exist to date. Many banks are trying to move to this model, but it will likely take several years to get a sustainable business model. Banks that have already started down this road have done so primarily from necessity, rather than strategic intent.

Many banks are in the midst of transition, having exited some businesses but remaining in others where they will...
Global investment banking divisional economies of scale

Evidence shows that smaller divisions perform poorly against their larger counterparts. The CIR of the bottom-tier banks among the top 10 banks averaged 74 percent in 2015 and generated revenue per head of $2.4 million. The top-tier banks had a CIR of 59 percent and generated revenue per head of $3.3 million.

The implication is that to succeed, banks need to provide a product set that is broad enough to reach scale, but not so broad that it creates too much complexity and associated cost.

Banks aspiring to become focused global players must decide where to compete and confront the problem of stranded costs. Many are still maintaining IT, operations, finance, compliance and risk

“\text{I look at each product separately. Someone good in options could be terrible in cash. We’ll use them for options, not for cash. The world is unbundling.}”

\textit{Hedge fund investor}
functions that were built to support businesses they have exited.

To be effective, focused global banks will need to identify niches where their scale and competitive advantage can be profitably leveraged. The biggest challenge is to develop a compelling client value proposition. The good news is that industry leaders realize the strategic necessity for second-tier banks to focus and are willing to trade with smaller players in areas where they are competitive. In fact, many would even encourage these second-tier banks to allocate their scarce capital and other resources to their strengths, becoming a source of liquidity in those areas. These banks must also be rigorous in shutting down sub-optimal legacy businesses, and current depressed valuations (e.g., in FICC) should encourage banks to find better owners for some of their legacy positions and assets.

Restructuring may be a short- to medium-term drag on reported earnings for global focused banks, but the opportunity for shareholder value creation is significant, and the change in focus may uncover new opportunities. For example, banks may form alliances to widen distribution or partner to source liquidity and scale from leading players or new entrants in market-making in select products.

**National or regional commercial banks with a CMIB product factory**

A number of regional and national banks have a sustainable CMIB business model based on serving local clients, including retail and private franchises, corporations, pension funds, insurers and asset managers. Their business is often centered on a solid lending franchise, with sufficient provision for solutions in fixed income and FX, focused on local currency and natural trade flows.

The biggest challenge for these banks is growth, as they often have limited growth potential in their home markets, with an increasing cost of doing business. But experience shows that regional growth can be tough. It is crucial for these banks to be extremely focused on areas of strength and avoid “me-too” strategies. Otherwise, they risk expanding beyond their core competency and creating fixed costs for years to come, without a sustainable franchise with a clear client value proposition. McKinsey sees four—not mutually exclusive—potential growth paths for national or regional commercial banks:

- **Bring domestic products to the world and follow clients abroad.** National and regional banks have a natural growth opportunity in selling their home market products to international investors and setting up small sales teams in large financial centers. They can also track the geographic expansion of domestic market clients. The most successful will build on client insights and focus on sales efficiency.

“Banks need to review their strategy – they don’t need to be good at everything. Where do they want to play? Win the battles, not the war; otherwise, there’s nowhere to go but down.”

*Asset manager*
Build specific sector expertise. On this path, banks focus on developing superior client franchises and sector capabilities.

Build a specific product or content expertise. Focus on becoming a world-class operator in niche areas that reflect specific skill sets.

Identify a second home market, potentially through acquisition. Making inroads in a new home market can be a quick win, but challenging, particularly in a large financial center.

Non-bank competitors starting out in specific areas and then expanding into related businesses

Non-bank competitors are gaining market share in a range of product areas, from leveraged loans, where private equity firms have become more active, to boutique investment banking services. Non-bank market makers are increasingly active in equities and, more recently, in Treasuries, FX and interest rate swaps market-making. In recent years, these firms have been able to attract top talent from established players, as they have built targeted business models using state-of-the-art technology unencumbered by legacy systems. Often these players also benefit initially from lighter regulatory and capital burdens (e.g., being excluded from GSIB surcharges, SLR constraints, or other time and resource intensive regulatory processes like resolution planning and CCAR or other stress tests outside the U.S.). Some of these benefits are likely to diminish over time, as the firms grow and need to upgrade their support processes and functions. Their overall governance will also become more complex as they build their franchises and staffing levels. A major question is whether these firms will be able to find other areas for profitable growth, as they venture outside their core areas of expertise. There is clear client demand for additional providers, but often they face operational and regulatory challenges; for instance, when they try to enter into areas without central clearing where they need to onboard clients with all the related complexities such as establishing ISDA/CSA agreements, or where longstanding credit relationships are key (e.g., attractive FX business with commercial and corporate clients).
Bold Actions: Attaining Sustainable Profitability

Nearly 10 years after the financial crisis, CMIB banks understand the strategic necessity of adapting to a more expensive, highly regulated and low interest rate environment. But progress has been slow, and the longer the situation persists, the less willing capital markets are likely to be to fund CMIB businesses.

A multi-pronged approach is required across costs, risk-weighted assets and margins to forge a path to sustainable ROE above 12 percent (Exhibit 12, page 28).

McKinsey has identified eight key initiatives that bank leaders need to undertake in order to transition to a successful operating model, regardless of which of the four business models they pursue.
Multi-pronged approach to increasing ROE required, with more cost reduction

<table>
<thead>
<tr>
<th>Post-tax(^1) return on Tier 1 equity for the CMIB divisions(^2) of top 10 CMIB banks</th>
<th>Illustrative mix of actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percent</strong></td>
<td></td>
</tr>
<tr>
<td>Baseline 2015E</td>
<td>7</td>
</tr>
<tr>
<td>Post regulation (2019)</td>
<td>3</td>
</tr>
<tr>
<td>Cost reduction</td>
<td>3</td>
</tr>
<tr>
<td>RWA reduction(^3)</td>
<td>2</td>
</tr>
<tr>
<td>Portfolio restructuring/ business exists(^3)</td>
<td>2</td>
</tr>
<tr>
<td>Repricing(^3)</td>
<td>2</td>
</tr>
<tr>
<td>Post mitigation(^3)</td>
<td>12</td>
</tr>
<tr>
<td><strong>No mitigating efforts</strong></td>
<td></td>
</tr>
<tr>
<td>20% cost reduction</td>
<td>(~US$ 2.5 billion on average for top 10 bank)</td>
</tr>
<tr>
<td>20% RWA reduction</td>
<td>(~US$ 60 billion reduction on average for top 10 bank)</td>
</tr>
<tr>
<td>15% asset reduction and 25% RWA reduction</td>
<td>(~US$ 150 billion reduction on average for top 10 bank)</td>
</tr>
<tr>
<td>9% margin increase ex-client attrition</td>
<td>(~US$ 1 billion increase on average for top 10 bank)</td>
</tr>
</tbody>
</table>

\(^1\) Assumes tax rate of 30%
\(^2\) Includes both core and non-core (bad banks) CMIB divisions of top 10 banks
\(^3\) Impact modelled assumes sequence of mitigation actions
Source: McKinsey analysis

- Defining the long-term business portfolio; for many players this means canceling the call option on revenue growth.
- Optimizing the balance sheet, leveraging integrated tools to address multiple constraints simultaneously.
- Developing a clear client value proposition and allocating scarce resources to clients that are willing to pay for them.
- Implementing a new cost framework, fully leveraging digital technology across the organization.
- Participating in industry utilities, including distributed ledgers (blockchains).
- Leveraging machine learning, advanced analytics and robotics.
- Upgrading management skills and winning the war for talent.
- Addressing conduct risk, risk culture and incentives.

**Defining the long-term business portfolio; for many, canceling the call option on revenue growth**

Too many banks continue to wait for salvation from revenue growth based on traditional CMIB business models. After seven years of underperformance, the time for waiting is over.

Banks should abandon hope of a cyclical upturn and focus on structural change. In doing so, they must unravel the product linkages that in some cases have served as an excuse for maintaining unprofitable businesses.

An added benefit is that by unbundling products, they will also be responding to customer needs, which increasingly indicate a preference for price advantage and “cherry picking” services.
A key objective is to generate sufficient scale in bundles of related solutions. For example, a strong equities franchise supports cash, prime brokerage and equity capital markets.

“Look, I actually want banks to make some money trading with me. I’ve actually had conversations with them around how we can be more helpful. This isn’t altruism. I need them to be there to do my job.”

Hedge fund investor

Optimizing the balance sheet: Leveraging integrated tools to address multiple constraints simultaneously

In response to numerous regulatory mandates, banks in the U.S. and Europe have developed robust risk management and stress-testing capabilities, investing hundreds of millions of dollars in compliance, oversight and reporting.

As a result, banks are capable of identifying discrete risks in individual businesses and can increasingly calibrate those risks to numerous factors and scenarios. Advances in modeling have created efficiencies, and better data marshaling has helped create a more accurate picture across business lines.

The next step is for banks to convert those capabilities into actionable strategic assets.

Tools currently used for capital management, risk and pricing should be re-purposed for business forecasting; for example, using CCAR pre-provision net revenue (PPNR) models to estimate profits in likely business scenarios (versus the current focus on extremely severe, adverse stress scenarios) and enabling intelligent long-term cost/benefit decisions.

Banks must speed up the strategic optimization of their balance sheets to reflect the new regulatory playing field and pending rules, such as FRTB.

The goal is to integrate capital, liquidity and revenue frameworks to optimize leverage and RWA ratios with limited revenue impact (Exhibit 13, page 30). To do so, banks need to upgrade their overall balance sheet management and related tools. It is nearly impossible to keep track of all constraints simultaneously. Actions taken in one area of the business, such as deposits, cannot be assessed without linking them to actions in another (e.g., what assets will be funded with those deposits). Such combinations of actions need to be assessed along a number of dimensions. Without a model of the balance sheet that captures these connections and constraints, banks are either flying semi-blind or running ad-hoc analyses. Having robust balance sheet management tools is a must for planning and scenario analysis in today’s world. Such tools also enable business leaders to see how the balance sheet could evolve under various scenarios—for instance, different regulatory and business environments—which is a critical capability given multiple constraints and other pending actions, such as FRTB, and inclusion of GSIB surcharges in CCAR. Several banks have increased ROE by 1 to 2 percent, using integrated tools.
Developing a clear client value proposition and allocating scarce resources to clients that are willing to pay for them

A deep understanding of client needs and resources is a prerequisite for sustainable returns, and many leading CMIB players have initiatives underway to better understand their clients. However, few have a clear view of revenues and expenses at the individual client level.

The task is more challenging than meets the eye. In many CMIB businesses, pricing is based not on commission schedules, but on variables such as the client’s ability to influence pricing and the trader’s discretion in hedging and holding positions.

Cost attribution is no easier, as most accounting systems allocate expenses, often subjectively, to trading desks or business units, rather than to client accounts. Charges for capital and risk are typically aggregated across portfolios. Moreover, compensation is often benchmarked to trading desk bottom lines, rather than client contribution to profit.

Still, useful technological solutions do exist. Most dealers have processes that identify priority clients and the actions necessary to maintain and grow activity, but their effectiveness is uneven.

Those business lines with greater insight into client profitability generally take a more empirical approach. In cash equities, for example, most dealers have an understanding of client spend on research and sales costs relative to commissions and can incorporate profitability metrics into client management.

Conversely, in FICC and other OTC business lines, client account management is more art than science. Often, sales

---

**Results of balance sheet optimization**

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Δ%</th>
<th>2%</th>
<th>5%</th>
<th>10%</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td></td>
<td>6%</td>
<td>4%</td>
<td>7%</td>
<td>25%</td>
</tr>
<tr>
<td>Optimum</td>
<td></td>
<td>28%</td>
<td>32%</td>
<td>25%</td>
<td>-25%</td>
</tr>
<tr>
<td>Assets</td>
<td>Δ%</td>
<td>25%</td>
<td>25%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>Current</td>
<td></td>
<td>11%</td>
<td>35%</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td>Optimum</td>
<td></td>
<td>28%</td>
<td>33%</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: McKinsey analysis
and trading are at odds, and resources are apportioned to clients based on estimated revenues, leading to mismatches in revenue and service.

When properly designed and implemented, client profitability frameworks can reveal misallocations and deliver useful insights. Businesses can also unlock significant value by changing their approach to booking profits, shifting the focus from products to clients. By applying data analytics to resource allocation, it should be possible to add 10 to 30 percent to the bottom line.

**Implementing a new cost framework, fully leveraging digital technology across the organization**

Despite years of cost-cutting and significant headcount reductions in the front office, high costs remain stubbornly in place in the CMIB industry.

Other industries have adapted better than CMIB to changing market conditions (Exhibit 14). The automotive industry faced profitability challenges as a result of the late 1990s downturn, embarked on a 20-year transformation, and achieved sustainable 20 percent cost reductions. The telecommunications industry in the late 1990s and

<table>
<thead>
<tr>
<th>Industry/challenge</th>
<th>Actions</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecommunications / 1997 end of monopoly</td>
<td>・ Network cooperation  ・ Reduced product portfolio  ・ Consolidation  ・ Full cost transparency</td>
<td>📈40% cost 📈30% FTE costs 📈50% throughput time</td>
</tr>
<tr>
<td>Semiconductor / 2001 collapse</td>
<td>・ Postponed upgrades  ・ Optimized equipment  ・ Introduced target pricing  ・ Switched to reverse auctions</td>
<td>📈40% cost 📈15% FTE costs</td>
</tr>
<tr>
<td>Automotive / late 1990s downturn</td>
<td>・ Cost cuts for suppliers  ・ Integrated supply chain planning  ・ Lean manufacturing  ・ Modular toolkit strategy</td>
<td>📈20% cost 📈15% FTE costs 📈30% throughput time</td>
</tr>
</tbody>
</table>

Source: McKinsey analysis

“I track everything. For every subproduct, I’ve ranked the performance of every bank I trade with on the dimensions that I care about. And I’m not afraid to let them know where they stand. It’s become a very rigorous process.”

*Hedge fund investor*
the semiconductor industry in the early 2000s achieved cost reductions of about 40 percent.

In CMIB, most players continue to pursue a variety of tactical cost opportunities, and many are now in their second or third round of cost cuts. However, a more fundamental review is required, with the aim of cutting overall costs by at least 20 percent ($2.5 billion for the average top 10 bank). These fundamental cost-cutting initiatives should be focused on 10 areas:

1. **Take out entire verticals**—product lines and/or geographies—to eliminate fixed costs. Rigorous vertical, as opposed to horizontal, full business exits, with a “back-to-front” focus versus the current “front-to-back” approach, are required. A back-to-front approach starts with the main IT platforms to understand which ones are shared across business lines. Business lines to be closed can be grouped accordingly. Or the product set can be simplified based on the targeted IT platform architecture, that is, if a product does not fit, it is eliminated.

2. **Work on allocated costs**—simultaneously managing supply and demand. This entails focusing on three elements: (1) Transparency: front-office management usually has a clear line of sight into only one third to one half of what they pay to the functions; they need a clearer understanding of which teams within the functions actually work for them, which services they provide, and at what unit cost; (2) Demand: the front office needs to provide their functional partners with a clear forward-looking view of what they will need; (3) Supply: the functions need to provide clarity on the implications of front-office choices before they are implemented. One example would be control functions (e.g., compliance, risk), which house overlapping, limited value-added activities. Primary emphasis needs to be on an effective first line of defense that owns and manages the risk and is focused on the 60 to 70 key process breakpoints.

3. **Tackle front-office costs**, for example by revisiting relationship management and high-touch sales for some customer segments or products.

4. **Implement next generation end-to-end streamlining and automation.** (Exhibit 15).

5. **Continue digitization of client journeys** front-to-back at scale. Many banks do not understand which front-office or client behaviors drive complexity and costs in the middle and back offices. Use front-to-back cost maps with key metrics as a first step.

6. **Reduce IT spend.** Adopt new ways of working and leverage public cloud infrastructure.

7. **Leverage big data analytics, machine learning and robotics** to drive operational improvement. Drive significant savings by disrupting data management, reconciliation, settlement and corporate action event processing, leading to 50 percent savings in some processes.

8. **Use platform utilities and next-generation outsourcing contracts** to eliminate redundant platforms, harmonize functions and reduce some categories of operations spend by 70 percent to 80 percent.
9. **Employ agile/distributed workspace options** for staff, leveraging lower-cost locations.

10. **Review the scope and monetization of specific data assets** (e.g., transaction or client data).

These proposed actions are not easy to execute, and experience shows that just 30 percent of transformations succeed in delivering full potential. However, banks can increase the chances of success if they:

- Set high performance aspirations that challenge the organization based on full potential, not a consensus target.
- See improvement levers and decisions as an “and,” and do not accept “or.”
- Address “will” and “skill” issues fast across all levels, and set examples that are not business as usual.
- Align the enablers (e.g., metrics, incentives, evaluation) with new performance goals.
- Develop and communicate a compelling change story.

---

**Exhibit 15**

**Potential benefits of end-to-end automation**

<table>
<thead>
<tr>
<th>From...</th>
<th>...To</th>
</tr>
</thead>
<tbody>
<tr>
<td>175 handoffs, 20+ teams</td>
<td>10 steps, 2-3 teams</td>
</tr>
<tr>
<td>One size fits all coverage</td>
<td>Low-touch sales for e-only clients</td>
</tr>
<tr>
<td>100s of EUDAS, &gt;15% admin time</td>
<td>&lt;5% admin time through flexible tool</td>
</tr>
<tr>
<td>High re-work rates, 260x cost for exceptions</td>
<td>Zero exception tolerance, first-time right capture</td>
</tr>
<tr>
<td>Siloed, cross-asset</td>
<td>At-scale, integrated utility</td>
</tr>
<tr>
<td>Siloed, highly manual exception management</td>
<td>Cross-bank automated utility</td>
</tr>
<tr>
<td>High-touch, costly service teams for basic activities</td>
<td>App-based, electronic self-servicing</td>
</tr>
<tr>
<td>&gt;T+3 RWA calculations</td>
<td>Near-real time RWA calculations</td>
</tr>
<tr>
<td>&gt;10K manual adjustments</td>
<td>Real-time P&amp;L</td>
</tr>
<tr>
<td>Dozens of reporting tools; manual recs</td>
<td>Single, integrated F2B reporting</td>
</tr>
<tr>
<td>Manual reporting, collateral calculations</td>
<td>Single, integrated reporting and calculation engine x-asset</td>
</tr>
<tr>
<td>Sample-based monitoring and controls</td>
<td>Alert-based controls with intelligent routing</td>
</tr>
</tbody>
</table>

*Source: McKinsey analysis*
Capital Markets and Investment Banking 2016: Time for Tough Choices and Bold Actions

- Create a clear process and organizational structure to identify, capture and track impact; focus relentlessly on financial outcomes, as opposed to best practice.
- Invest in a deep bench of talent with the right capabilities, including technical skills.
- Invest early in the business model to address the next challenge, not just the historic one.

Taken together these actions are a road-map to sustainable cost reduction, and most CMIB businesses, including those with strong ROEs, are likely to benefit. The key, as the examples of other industries that have successfully restructured their cost basis indicate, is to move beyond the tactical to a fundamental overhaul of cost structure.

**Participating in industry utilities, including distributed ledgers**

While it is widely recognized that operational partnerships and alliances can drive economies of scale, until recently CMIB banks have been reluctant to join utilities, due to concerns about sharing intellectual property. This mindset is changing as industry executives realize they cannot afford to continue replicating systems and processes.

The post-trade space, where settlement and reporting processes generate significant IT and labor costs, is an area of particular focus today. KYC and client onboarding are also ripe for the efficiencies that utilities can deliver.

McKinsey calculates that utilities could provide a potential cost reduction of more than 70 percent, measured in cost-per-trade. Frictional costs, integration and utility margins would reduce this to 30 to 40 percent, but banks would also benefit by avoiding the regulatory and other upgrades they would need to undertake on their own.

Distributed ledgers, or blockchains, have garnered considerable attention and interest because of their potential value in post-trade areas and are likely to have an impact in execution, settlement, clearing and regulatory oversight. In the coming years, blockchain technology could deliver a broad range of benefits—including faster clearing and settlement, ledger consolidation, consolidated audit trail, reduction in systemic risk and operational improvements—to firms across the capital markets industry, from clearing houses and exchanges to prime brokers and banks.

Some of the most promising use cases for blockchain are in areas such as OTC derivatives and repo (particularly if combined with central clearing). In each case, McKinsey expects long-term benefits in the billions of dollars, although these benefits may take five years to materialize. In OTC derivatives, blockchain could create $4 billion to $7 billion in value through lower counterparty risk and operational costs. Streamlined operations, instant settlement and better visibility could reduce counterparty risk capital costs from $4 billion to $2 billion; better collateral management could save $500 million to $1 billion; and streamlined client onboarding, trade processing and settlement in the back and middle office could deliver $1 billion to $2 billion in savings.

Challenges remain in the use of blockchain technology in the industry. Distributed ledgers based on blockchain currently process relatively low volumes,
recourse mechanisms are lacking, and many assets simply do not exist in the necessary digital format.

McKinsey expects these challenges will be overcome, but the development of applications that can function at scale will still require patience and investment, and the costs of integrating and decommissioning existing infrastructure are unknown.

The biggest caveat is that the benefits of blockchain will only be realized through cooperation among market participants, regulators and technologists, and this may take time (Exhibit 16). However, the industry is already deriving significant value from the use of blockchain technology in areas like digital cash, KYC/AML and identity.

Leveraging advanced analytics, machine learning and robotics

Banks hold large volumes of data, but sometimes this data is like an oil deposit that is too far underground to be reached with current drilling methods. Today, however, tools are emerging to enable banks to access this rich resource. As advanced analytics and machine learning evolve, banks will have the opportunity to create significant value from data and serve their customers better.

In the front office, data mining, machine learning and artificial intelligence can be used to improve decision making and the quality and efficiency of insight generation. Algorithms already send buying signals, match buyers and sellers, manage liquidity and analyze documents and transcripts.
In middle and back offices, advanced analytics can drive predictive trade capture and improve reconciliation and root-cause analysis. Machine learning and robotics are being tested in middle-office, product control and operations functions, in some cases improving efficiency by up to 30 percent.

Advanced analytics and machine learning can be used to flag financial and operational risks. For example, banks are investing heavily in trade surveillance, analyzing emails and texts and linking them to trades (linking phone calls to trades is the next step). The technology for these processes is cost-efficient. The big challenges now are finding people with deep understanding of the businesses and the required data and modelling capabilities and keeping abreast of evolving regulatory requirements in different jurisdictions.

For banks, the value potential in advanced analytics, machine learning and robotics is clear. For many, the question now is where to apply these concepts to get the biggest bang for the buck. Banks have run proof-of-concept projects in specific asset classes and steps of the value chain, but now they need a clear understanding of where the value is and how to sequence and prioritize their efforts. Internal development is not always the best path, and outsourcing or utilities should be considered. Where competitive advantage is paramount, investment in internal teams or start-ups could be justified. Innovation labs are increasingly the norm among larger players, and those that succeed are able to scale their efforts and capture tangible benefits.

**Upgrading management skills and winning the war for talent**

The CMIB industry has entered a transformational period with regard to talent. The “best and the brightest” are less likely to choose a career in banking today, a number of experienced senior executives are finding the industry less appealing and leaving, and there is a deficit of talent in the data, technology, risk and regulatory areas.

Banks face several recruiting challenges, including:

- An insufficient supply of skilled employees (e.g., data scientists, technology, trading, risk and compliance professionals).
- The lack of an institutional approach to professional development and talent retention.
- The need for more robust human resources capabilities (e.g., systems and data management) and clearer roles and responsibilities relative to business leaders.

Ironically, as banks have become less attractive places to work, they are competing for digital talent with FinTech start-ups and innovative technology firms. McKinsey estimates there will be a shortage of 190,000 data scientists in the U.S. by 2018, so competition will be intense.

In 2014, 34 percent of MBA graduates went into financial services, compared with 41 percent in 2011. Meanwhile 16 percent went into technology in 2014, compared with 10 percent in 2011.

Banks must act fast to meet increased competition for the best talent. They need to change their value proposition for talent beyond financial rewards to the opportunity to have a positive impact on the economy and society. In addition, they should use data and analytics to drive more effective decision making, identifying
issues before they arise (e.g., the front office people most at risk of leaving). Setting up innovation labs and other new ventures can attract a new breed of talent, especially in the digital arena.

CMIB players also need to step up their game on diversity. The industry is still male-dominated, and banks are missing out on a significant portion of the talent pool.

Addressing conduct risk, risk culture and incentives

Conduct risk and risk culture are a priority for banks and regulators, given recent litigation and fines. However, conduct risk is not well understood, and banks continue to grapple with implementing global oversight and monitoring.

Conduct risk broadly encompasses behaviors, attitudes, motivations, strategies, business models, organizations, operations, controls or actions that lead to or allow poor outcomes for customers, markets or the broader public.

The UK has taken the lead, through its Firm Systematic Framework, in codifying standards for conduct risk, and in 2016, the framework will be expanded to include individuals as well as firms.

Banks are also addressing conduct risk, with those in the U.S. and Europe probably most advanced in defining a second line framework.

From these efforts, six insights have emerged:

1. Definition of conduct risk is a moving target: from rogue trading to mis-selling and tax evasion, the concept covers many areas.

2. There is a lack of transparency and metrics: risk assessment tends to be backward-looking and relatively generalized.

3. Conduct risk is a rolling train: conduct risk is a new concept, but some practices are already in place (e.g., in relation to travel and trade monitoring).

4. Interfaces are complex: firms find that relationships with compliance, legal and strategy are complicated.

5. Culture matters: culture is key but remains neglected.

6. There are too few resources: conduct typically receives less than a third of risk and compliance resources.

One challenge for banks is to build a conduct risk framework that can be applied across the firm, and while some have set out key parameters (definition of conduct risk, taxonomy, policy), few have achieved full implementation.

Technology and benchmarking tools can help significantly, but the key challenge for management is to identify where to start and the most beneficial interventions.

“Most banks have more than 100 people covering our portfolio managers, traders and analysts. I am pretty sure we could manage, if the banks would have only half as many people.”

Real money investor
Six potential immediate actions for banks to consider include:

1. Introduce mandatory conduct orientation for lateral hires and training for upper tenure employees as a prerequisite for promotion.
2. Establish working groups to monitor high-level conduct topics.
3. Launch divisionally led conduct committees to strengthen first line of defense and informal dialogue.
4. In trading, set in stone escalation procedures for complex trades.
5. Optimize front-office management approval for more consistency.
6. Increase the impact of risk culture initiatives and emphasize a new approach to conduct risk.

There is no one-size-fits-all prescription for restoring the health of the global CMIB industry. While some CMIB banks have succeeded in adapting to the post-crisis environment, many are struggling, with the top 10 global banks facing the biggest challenges. They carry the most significant legacy burdens and face the most disruption from new rules and competitors.

As executives juggle the cost, earnings and capital components of ROE, tough choices must be made. Costs should be a particular area of focus, and technology should play a leading role in managing, analyzing and implementing efficiencies.

Efforts to date are steps in the right direction, but more must be done as banks identify where they sit in the competitive landscape and which business model is most likely to lead to attractive profitability.

While the eight key initiatives that bank leaders need to undertake in order to transition to a successful operating model are all relevant for each of the four emerging business models, the prioritization, resource allocation and intensity of managerial focus across the eight initiatives varies. McKinsey has identified three priority initiatives for each of the four business models where banking leaders must achieve best-in-class performance to attain sustainable profitability (Exhibit 17):

- **Global full-service players at scale** across products and services should focus on: 1) optimizing their balance sheet, leveraging integrated tools to drive incremental ROE while managing the complexity of multiple simultaneous constraints across a full suite of global products; 2) implementing a new cost framework; and 3) transforming conduct, culture and incentives to prudently manage a highly complex global business.

- **Focused global players with scale** in select product bundles should focus on: 1) restructuring portfolios to efficiently identify and exit subscale business lines and product areas; 2) developing a clear client value proposition linked to the focused strategy and relentlessly managing scarce resource allocation to profitable clients; and 3) implementing a new cost framework to drive efficiencies and ensure ration-
alization of stranded costs typically associated with business and product line exits.

- **National or regional commercial banks** with strong corporate franchises and CMIB product factories should focus on: 1) optimizing their balance sheet across a wide range of complex, simultaneous constraints (similar to full-service global players); 2) upgrading management skills and winning the war for talent, particularly against larger full-scale banks with broader talent value propositions (e.g., opportunities for lateral moves); and 3) participating in industry utilities to drive costs down for subscale commoditized activities.

- **Non-bank players** should focus on: 1) developing a clear value proposition to convince potential clients of their unique value proposition relative to established players; 2) intensely leveraging advanced analytics, machine learning and robotics to drive incremental operational improvements and maintain a significantly reduced cost base relative to banking peers; and 3) winning the war on talent, particularly against other attractive industries (e.g., start-ups) competing for a consistent pool of top analytical and technological talent.

Across all players, a clear-eyed vision is required and a steady nerve in making the bold moves required for success: building a sustainable business model that serves the interests of clients, shareholders, regulators and the wider public.
Capital Markets and Investment Banking

Global Data

The following exhibits provide a graphic overview of the current trends in capital markets and investment banking and of the challenges facing CMIB institutions around the world. The data are derived from analysis of the financial and regulatory reporting of 212 banks, including the 13 largest CMIB institutions.

The global CMIB industry has stabilized with around $280 billion in annual revenues.

Americas and EMEA share of global revenue pools declined 85% to 67% since 2005.

1 Pre-writedown
2 Fixed Income, Currencies and Commodities
Source: McKinsey CMIB revenue pools
Decline in FICC revenues offset by increases in IBD and equities revenues since 2010

CMIB revenues have declined for the top 10 banks since 2012; reverse is true for non-top 10
Top 10 CMIB banks’ 2015 ROE improved by ~1pp versus 2014

CMIB profitability analysis for top 10 global investment banks

<table>
<thead>
<tr>
<th>ROE&lt;sub&gt;RWA&lt;/sub&gt;&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Revenues</th>
<th>Revenues/RWA</th>
<th>T1 capital ratio&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Cost-income ratio&lt;sup&gt;4&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>US$ billion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>149</td>
<td>144</td>
<td>11.8</td>
</tr>
<tr>
<td>+1pp</td>
<td>-3%</td>
<td>+0.3pp</td>
<td>+0.6pp</td>
<td>-3pp</td>
</tr>
</tbody>
</table>

1 Top 10 includes: Bank of America/Merrill Lynch, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, JP Morgan, Morgan Stanley, UBS

2 Return on Tier 1 capital (ROE<sub>RWA</sub>), assuming tax rate of 30%; includes both core and non-core divisions (i.e. bad banks)

3 Group level ratio

4 Includes operating expenses, litigation and restructuring expenses, one-offs, as well as costs in bad banks

Source: McKinsey CMIB revenue pools, company filings, broker reports, coalition data, McKinsey analysis

Impact of litigation, restructuring and non-core operations on ROE for top 10 CMIB banks

CMIB post-tax ROE<sup>1</sup> of top 10 global investment banks, 2015

<table>
<thead>
<tr>
<th>ROE&lt;sub&gt;RWA&lt;/sub&gt;&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Revenue/RWA</th>
<th>Cost-income ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core business excluding litigation and restructuring expense</td>
<td>10.1</td>
<td>5.4</td>
</tr>
<tr>
<td>1.9</td>
<td>0</td>
<td>6.2</td>
</tr>
<tr>
<td>0.2</td>
<td>0</td>
<td>0.8</td>
</tr>
<tr>
<td>1.4</td>
<td>-0.4</td>
<td>2.6</td>
</tr>
<tr>
<td>&quot;All-in&quot; business as currently operational</td>
<td>6.6</td>
<td>5.0</td>
</tr>
</tbody>
</table>

1 Return on Tier 1 capital (ROE<sub>RWA</sub>), assuming tax rate of 30%

2 Total litigation expense for the top 10 banks of US$ 8.9 billion in 2015

3 Includes costs of US$ 3.3 billion and RWAs of US$ 193 billion

Source: Coalition data, McKinsey analysis
Leverage is the binding constraint, especially in Europe.

Banks have had particular difficulty cutting FICC costs to compensate for declining revenues.

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**CMIB post-tax ROE** of top 10 global investment banks, 2015

<table>
<thead>
<tr>
<th>Percent</th>
<th>&quot;All-in&quot; (Core + non-core)</th>
<th>Core division 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. banks</td>
<td>8.1</td>
<td>8.2</td>
</tr>
<tr>
<td>European banks</td>
<td>3.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Total top 10</td>
<td>6.6</td>
<td>8.2</td>
</tr>
</tbody>
</table>

1 ROE is calculated post-tax and is based on Coalition’s normalized revenues, costs and equity; RWA is calculated under Basel III; Leverage exposure (LE) is calculated under BCBS, 270; ROE calculations assume a leverage capital ratio of 3 to 5%, Tier 1 capital ratio as per group reported number for 2015, tax-rate of 30%

2 Core division costs include litigation expenses but exclude restructuring and non-core expenses

Source: Coalition data, McKinsey analysis

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**CMIB costs for top 10 global investment banks**

<table>
<thead>
<tr>
<th>US$ billion</th>
<th>Revenues</th>
<th>Allocated and overhead expenses</th>
<th>Front office direct expenses</th>
<th>Front office compensation costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IBD</td>
<td>31</td>
<td>26</td>
<td>4</td>
<td>-4</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>25</td>
<td>4</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td>29</td>
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<td>5</td>
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<td>33</td>
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<td>25</td>
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<tr>
<td></td>
<td>34</td>
<td>25</td>
<td>5</td>
<td>-4</td>
</tr>
<tr>
<td>Equities</td>
<td>36</td>
<td>36</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>34</td>
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<td>FICC</td>
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<td>79</td>
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<tr>
<td></td>
<td>72</td>
<td>66</td>
<td>66</td>
<td>-6</td>
</tr>
</tbody>
</table>

1 Data includes top 10 players - Bank of America/Merrill Lynch, Barclays, BNP Paribas, CitiCorp, Credit Suisse, Deutsche Bank, Goldman Sachs, J.P. Morgan, Morgan Stanley, UBS

Source: Coalition data, McKinsey analysis
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