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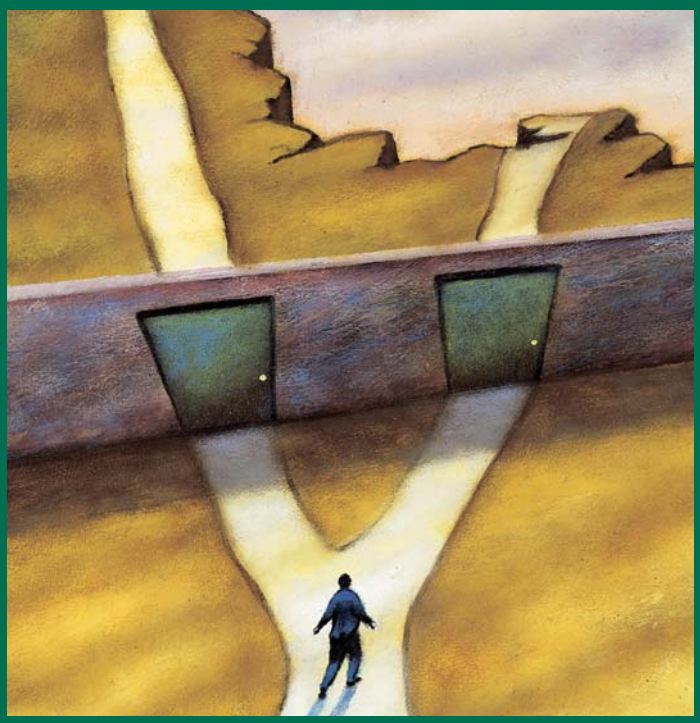
REPORT

GLOBAL CAPITAL MARKETS 2012

Tough Decisions and New Directions



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Global Capital Markets 2012

TOUGH DECISIONS AND NEW DIRECTIONS

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INTRODUCTION

THE CAPITAL MARKETS AND investment banking (CMIB) industry faces unprecedented challenges. The lingering effects of the 2008–2009 financial crisis and liquidity crunch, fears over European sovereign debt, and a high level of overall economic uncertainty are casting a long shadow over the business. Trading volumes are suffering as many investors take a cautious, wait-and-see attitude toward the market. A daunting number of new regulations and capital requirements is adding to the pressure on revenue and profit pools. Most major firms in the industry are operating at a return on equity (ROE) of 7 to 10 percent, half the historical level and half of what investors will expect in the long term.

In the regulatory arena, the impact of Basel III in Europe cannot be underestimated. Depending on the specific business, investment banks will be required to keep two to three times—and at some desks, up to ten times—the level of capital as previous guidelines mandated. The dramatic rise in capital consumption will be felt especially in fixed-income, commodities, and currencies (FICC), CMIB's most profitable segment of late. In the U.S., the Dodd-Frank Act is imposing restrictions on proprietary trading and the clearing of over-the-counter (OTC) derivatives. Moreover, new entrants to the market—such as players from rapidly developing economies (RDEs) and nonbank entities—pose further threats. Overall, it is clear that the burden of regulation is shifting some traditional banking activities toward the nonbanking world, such as into hedge funds (proprietary trading), major energy companies (underlying commodities trading), and private equity (financing).

Ultimately, there is no denying that new pressures on the industry are here, and very likely here to stay. Players that acknowledge this reality and that forge their strategies with an altered landscape in mind will be better positioned than those that do not. That said, new opportunities—be they related to product and business model innovation, to the ongoing evolution of RDEs, or to cyclical shifts in client demands—are also likely to arise. The need for financial intermediaries will not go away, and the CMIB industry has a long history of bouncing back from difficult times. A return to ROEs of 15 percent or higher is possible if players take the right steps to bolster revenues, control costs, and use their capital and liquidity resources wisely.

Below, we review the current CMIB landscape, explore key emerging business and operating models, and outline key levers for navigating through these trying times. Our aim is to candidly present the challenges facing the industry, address how the landscape will likely evolve, and offer food for thought regarding potentially winning strategies.

THE CURRENT CMIB LANDSCAPE

Today's conditions follow a period in which the three principal segments of CMIB—equities, FICC, and investment banking (IBD)—performed at varying levels. (See Exhibit 1.) Overall, FICC has grown faster than both IBD and equities and has generated the highest revenues and profits. Although FICC revenues were hit severely during the 2008 credit crunch and subsequent recession, they quickly recovered to precrisis levels. By contrast, equities and IBD revenues were not hit as hard but have not shown similar resilience, lingering below precrisis levels.

Looking ahead, we believe there will be modest or no growth in CMIB profit pools over the next few years. This is especially true for flow products, whose margins could shrink substantially the more they are traded on electronic platforms. (See the sidebar "Market Electronification: Key Drivers of Expected Growth" on page 6.) Rising electronic trading could bring reduced costs and increased volume, but competition for this volume and the lack of any true differentiation among players will likely result in flat or declining profits. Similarly, we do not expect positive profit evolution in structured products, where a likely decrease in volume owing to fewer banks offering these products could result in higher margins—an effect that should be offset by the cost of capital and regulatory compliance.

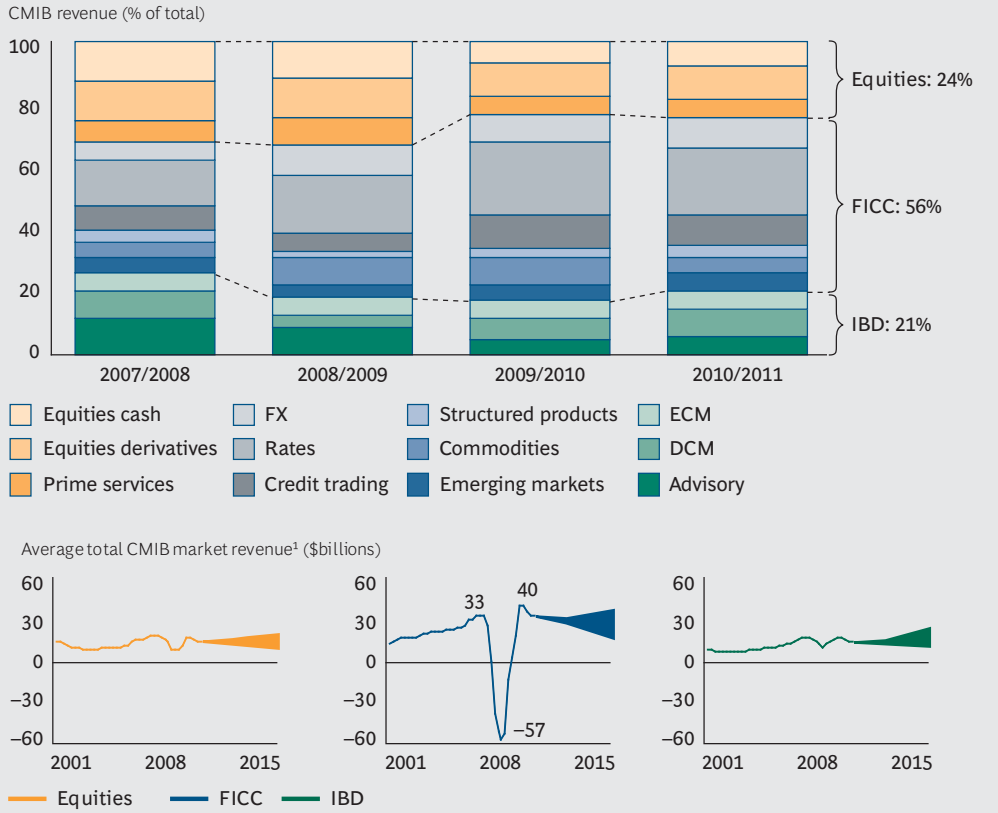
IBD should be hit least by current conditions, with annual revenue-growth expectations in the range of –5 to +15 percent through 2015. One reason is that advisory services are not affected by regulation. Since many corporations are more sturdy and battle tested than they were in the run-up to the last recession, we expect considerable M&A opportunities to materialize. Furthermore, the need to move away from originating loans (with the intent of holding them on the balance sheet) toward originating bonds (with the intent to distribute) should give rise to a significant increase in debt capital market (DCM) activities and fees.

There will be modest or no growth in CMIB profit pools over the next few years.

Equities revenues should remain fairly flat, within an annual growth range of –10 to +10 percent through 2015. Although equities, too, are not greatly affected by the regulatory climate, we do expect further margin erosion in the commoditized spaces, making them profitable only for large-scale players.

FICC will have the largest downside risk over the next few years, with expected annual revenue growth in the range of –15 to +5 percent

Exhibit 1 | Performance Has Varied Across CMIB Segments



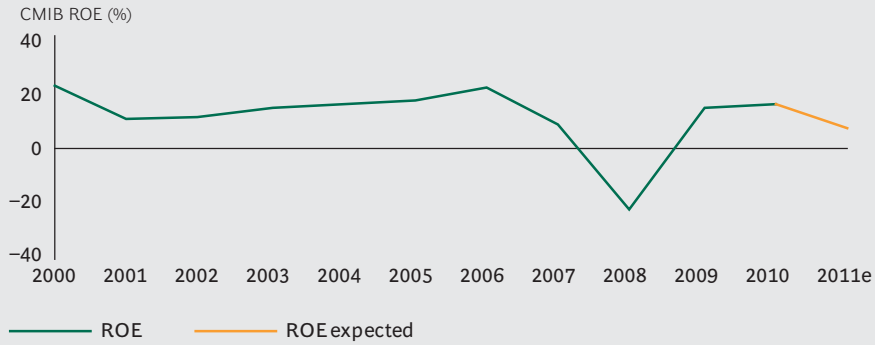
Sources: JPMorgan; Morgan Stanley; annual reports; Expand Research and BCG analysis.
Note: Gain/loss on own debt, equities, and FICC proprietary trading revenues are excluded from analysis owing to negative trading revenues in 2007/2008; 2010 proprietary trading accounts for approximately 6 percent of total revenues.
[1]Calculated as a four-month, straight moving average to remove intrayear variability in quarterly revenues; includes trading write-downs. Because of rounding, not all percentages add up to 100.

through 2015. In addition to rising costs stemming from regulatory compliance—which will hit rates and credit trading harder than foreign exchange—the advent of more electronic trading and the eventual commoditization of the market (via the push toward central clearing systems) will create further downward pressure on margins. Some margin may be recovered through higher volumes of flow products, but this effect should be relatively small.

In the same vein, ROE in the CMIB industry suffered during the credit and liquidity crisis. Despite some resilience, it has not recovered to precrisis levels. (See Exhibit 2.) Moreover, new downward pressures are likely to be felt. For example, the profitability of previously attractive business such as OTC credit and rates is under attack, mostly owing to regulatory measures. Proprietary trading has been significantly reduced in several jurisdictions, although FX has held up reasonably well. It is possible that IBD will pick up some of FICC's lost value, since corporations with cash-rich balance sheets may enter a cyclical phase of heightened activity.

Ultimately, the impact of new regulatory frameworks on capital and resource allocation, IT requirements, and, in turn, profitability will be key drivers in shaping CMIB business models. While it's obvious that regulation-driven additional costs are creating significant entry barriers in financing and capital market activities, regulation is also creating some opportunities. For instance, the Dodd-Frank Act (together with the European Market Infrastructure Regulation, or EMIR) is calling for OTC derivatives trading to be cleared via central counterparty clearing, which will require significant investments in

Exhibit 2 | ROE Has Not Recovered to Precrisis Levels



Sources: Company reports; broker reports; BCG analysis.
Note: Data include Bear Stearns, Merrill Lynch, Lehman Brothers, Morgan Stanley, and Goldman Sachs. From 2006 on, data include UBS, Deutsche Bank, Credit Suisse, and JPMorgan. From 2009 on, data include Bank of America Merrill Lynch.

MARKET ELECTRONIFICATION
Key Drivers of Expected Growth

Electronic-trading volumes, having returned to precrisis levels, should continue to rise, driven largely by pending regulations that treat electronic trading as essential for meeting tougher standards on transparency, execution, and reporting. Other factors will include the increasing need to service clients with cost-effective business models and the ongoing growth of high-frequency trading (HFT). Let's take a closer look at each of these drivers.

Regulations. Regulators across the globe are intent on forcing trading in OTC products—valued annually at more than $600 trillion—onto transparent exchanges and centrally cleared platforms. This shift will certainly lead to an increase in electronic flow across all asset classes, most significantly for rates, credit, and foreign exchange. In our view, there is ample room for migration from voice to electronic. For example, in FX, voice accounted for just under half of daily trading volume in 2010. Overall, there is potential for growth in both single- and multidealer platforms. (See the exhibit on the next page.)

However, the lack of clarity around some proposed regulations has created uncertainty. Most critical is the future of single-bank platforms relative to the expected rise in multibank-platform flow owing to multibanks' natural positioning for central clearing and qualification as swap execution facilities (SEFs). The simple answer is that both sets of channels will benefit in terms of overall volume. However, dealers will likely find it increasingly difficult to remain profitable in what will be a tricky e-commerce-platform balancing act.

Central counterparty clearing (CCP) regulations will prove both a blessing and a curse to overall profitability. On the one hand, capital requirements will be reassigned to the CCP, providing a natural deleveraging force and significantly reducing costs associated with credit risk. However, any transfer of business from single-dealer to multidealer channels will lead to lower profit margins. Also, the developing dispute among regulators over CCP location requirements could result in considerable market fragmentation (if a co-op style oversight body for CCPs cannot be agreed upon), significantly reducing the expected volume increase.

Other issues regarding the impact of regulations on single-dealer platforms include the requirements for multiple quotes and credit value adjustments (CVAs). The most likely strategy for coping

MARKET ELECTRONIFICATION
(continued)

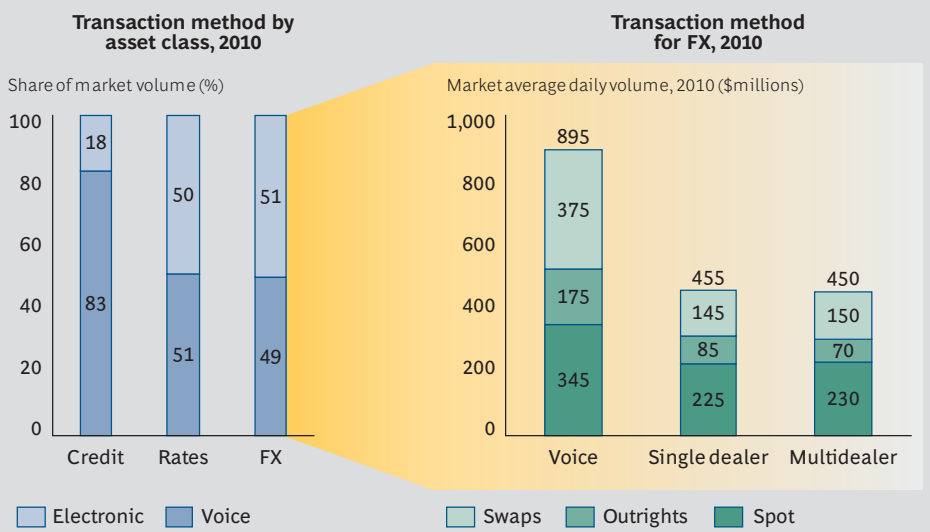
with multiple-quote requirements on single-dealer platforms is SEF aggregation. This option is no panacea, however, since displaying competitors' prices to your own loyal clients is a bitter pill for any business to swallow. Moreover, the overall impact of any CVA requirements will certainly be less onerous on single-dealer platforms, owing to the longer pricing delays and variations expected across multidealer CCPs. Still, the rudimentary CVAs favored by regulators prove progressively more punitive to the client as one moves down the credit scale. Therefore, the ongoing development of price-friendly charging models will be critical to the overall profitability of the electronic-trading business.

Cost-Effective Business Models. For most banks, electronic-platform strategies and investment choices appear to be approaching a crossroads. They must decide whether to continue down the single-dealer-platform-driven scale model or move toward a full-service model offering a selective balance of products and platforms.

For flow providers, electronic trading will continue to play a major role, since scale needs high volumes and low costs. While electronic-trading volume drives negligible scale in revenue, it drives significant scale in costs. We estimate that scale players can gain a cost-per-trade advantage of up to 29 percent over the average player. (See the exhibit on the next page.) By contrast, subscale players will be greatly disadvantaged. Investment in the electronic business will therefore be crucial, continuing to represent a relatively high percentage of both run-the-bank and change-the-bank budgets. The technical focus will be on proprietary platform development, automated risk management, stability, capacity, and speed. Less-critical functions can possibly be outsourced in order to lower costs even further.

Both relationship experts and smaller banks are likely to invest much less in their electronic-business strategy, potentially even decreasing their budgets. Since they cannot compete with large-scale players on

Current Market Volumes Indicate Potential for Growth in Both Single- and Multidealer Platforms



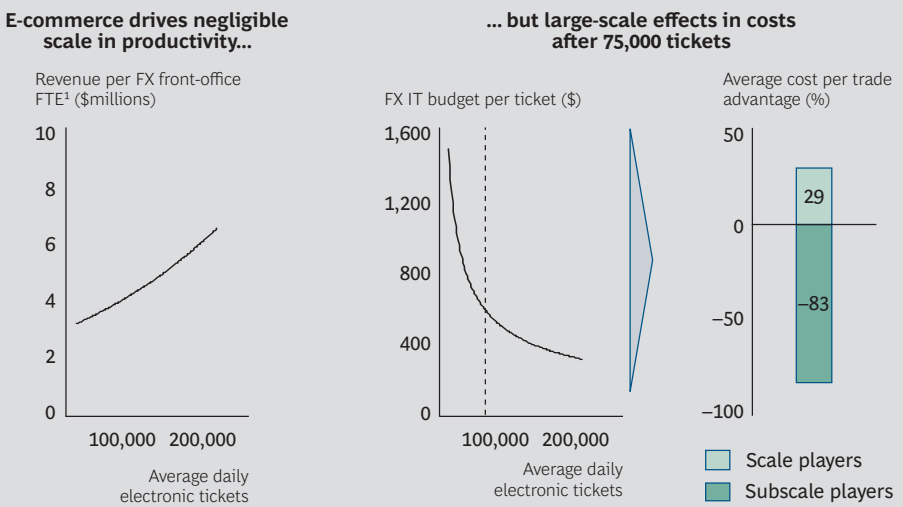
Sources: Expand Research; Celent Research; client interviews; Expand Research and BCG analysis.
Note: Data based on European markets; because of rounding, not all percentages add up to 100.

MARKET ELECTRONIFICATION
(continued)

complex in-house solutions, they will focus on connectivity and automated risk management, probably servicing clients with white-labeling solutions and selective multidealer channels.

HFT. Over the past decade, HFT has been one of the most significant drivers of CMIB volume. HFT currently accounts for more than half of U.S. equity-trade volume, up from 35 percent in 2005. This rise in volume, coupled with the market-making function of HFT, has deepened CMIB activity, tightened spreads, and increased liquidity. In our view, by 2015, HFT will account for about 70 percent of U.S. and European equity volumes and around 28 percent of Asian volume, providing a further illustration of the strong growth in overall e-commerce trading volume.

FX Scale Players Can Gain a Significant Cost Advantage Through Electronic Trading



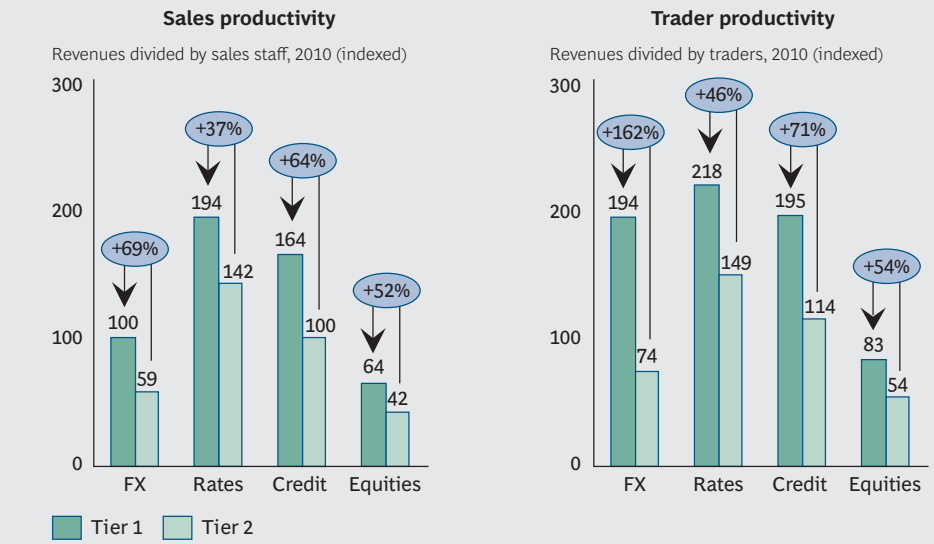
Sources: Expand Research; Expand Research and BCG analysis.
[1]IT budget divided by number of IT FTEs.

clearing interfaces that only a handful of banks will be able to afford. Tier 1 banks have started to offer white-label products to Tier 2 and Tier 3 banks, and the first deals have already gone through.

Moreover, as we move through a period of modest to flat growth in CMIB revenues, there will be increasing focus on the profitability of individual asset classes and the productivity of sales and trading staffs—where Tier 1 banks have clearly outperformed Tier 2 banks. (See Exhibit 3.) Revenues per front-office salesperson or trader will be scrutinized much more closely. Low-yielding desks such as cash equities will either become a hunting ground for players with significant scale or be further migrated onto electronic platforms, lowering head count requirements.

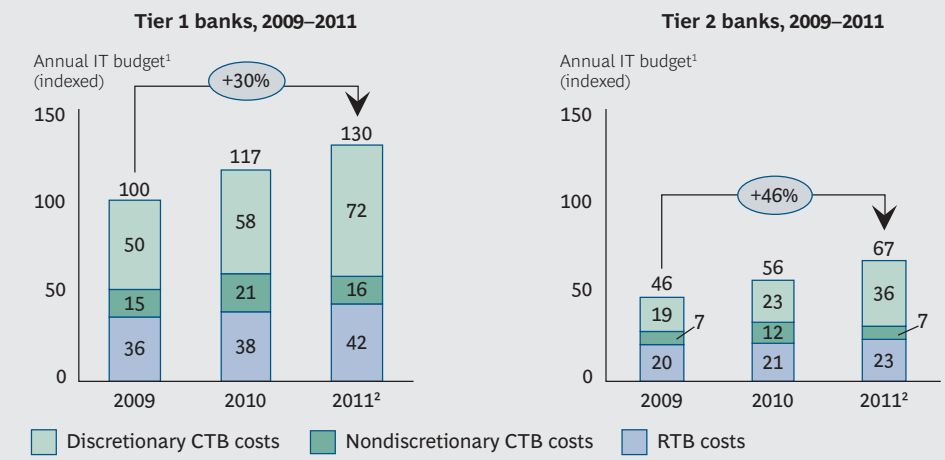
On top of negative revenue developments, costs have been rising quickly. For example, IT costs have increased by 30 percent for Tier 1 banks and by 45 percent for Tier 2 banks over the last three years, largely driven by regulation. (See Exhibit 4.) Similarly, banks

Exhibit 3 | Tier 1 Banks Have Outpaced Tier 2 Banks in Sales and Trader Productivity



Source: Expand Research.
Note: Banks categorized on the basis of revenue per asset class; 100 = 2010 FX sales productivity of Tier 1 banks.

Exhibit 4 | IT Costs Have Risen in Both Tier 1 and Tier 2 Banks



Sources: Expand Research; BCG analysis.
Note: 100 = 2009 IT costs of Tier 1 banks; CTB = change the bank, RTB = run the bank; because of rounding, not all percentages add up to 100.
[1]Excludes infrastructure costs.
[2]2011 figures are estimated as of Q2 2011.

have invested heavily in collateral management and credit-value adjustment desks in order to reduce their risk-weighted assets (RWA) charges and cost of risk. As the cost of running a CMIB business rises and the opportunities for generating additional revenue decline, it will become critically important to focus on fewer business lines and become more efficient.

Finally, there is no denying that the CMIB world is becoming more and more complex. All the more reason why investment banks will be compelled to find simple solutions (involving products with minimal complexity) to increasingly sophisticated problems. This will require some innovative thinking on the part of bankers, but it is thinking that today's clients will appreciate and be willing to pay for.

KEY EMERGING BUSINESS AND OPERATING MODELS

We believe that all investment banks—whether large or small, global or local, universal or niche—can regain their lost profitability despite the tall challenges they are facing. But not every player will be able to succeed, and there will be tough decisions to make—and new directions to take—in terms of clients, markets, asset classes, and product portfolios.

The first choice confronting investment banks concerns the client segments they target and the volume they aspire to. Fundamentally, CMIB volumes fall into three distinct categories, each lending itself to potentially successful strategies.

In our view, roughly 70 percent of all trading volume will predominantly be executed electronically by *flow providers* that can achieve near-precrisis profitability by achieving scale. Twenty percent of volume will be driven by *relationship experts* and will comprise trades that still need manual execution—for example, because of ticket size, slightly less-liquid product, or a relatively unsophisticated client (such as a midsize or family-owned corporation). Typically, this volume should provide higher margins than traditional flow volume. The remaining 10 percent of volume will be driven by *principal traders* that are willing and able to take significant and longer-term risks and will be made up of transactions that are largely illiquid because of the bespoke nature of the product (such as complex, cross-asset derivatives) or the inventory required to trade it (such as high-yield corporate bonds). These three approaches will give rise to business models that enable banks to focus primarily on specific parts of the value chain that give them a competitive edge. At the same time, banks can and should outsource some noncore activities.

Despite tall challenges, investment banks can regain their lost profitability.

Furthermore, we are likely to see two additional approaches gain prominence in the market: *category killers* and *utility providers.* We expect category killers to aggressively pursue parts of the value chain that are dominated by flow providers, relationship experts, and principal traders. Utility providers, by contrast, are likely to offer their services in parts of the value chain that are no longer economical or are considered less critical for many banks.

It is important to note that none of these five approaches is new or innovative per se. Different institutions have embraced one or more of them in the past. What is new, how-

ever, is that companies will no longer be able to divide their energy to the extent that many did in the past—in essence doing a bit of this and a bit of that. Allowing for a small amount of overlap among approaches, players will be forced to decide which one will receive the bulk of their energy and resources. The innovation may come in the execution. Moreover, we do not necessarily expect any one of these approaches to consistently outperform the others in terms of profitability. Given sharp execution, all five approaches can be profitable. Let's take a closer look at each one. (See Exhibit 5.)

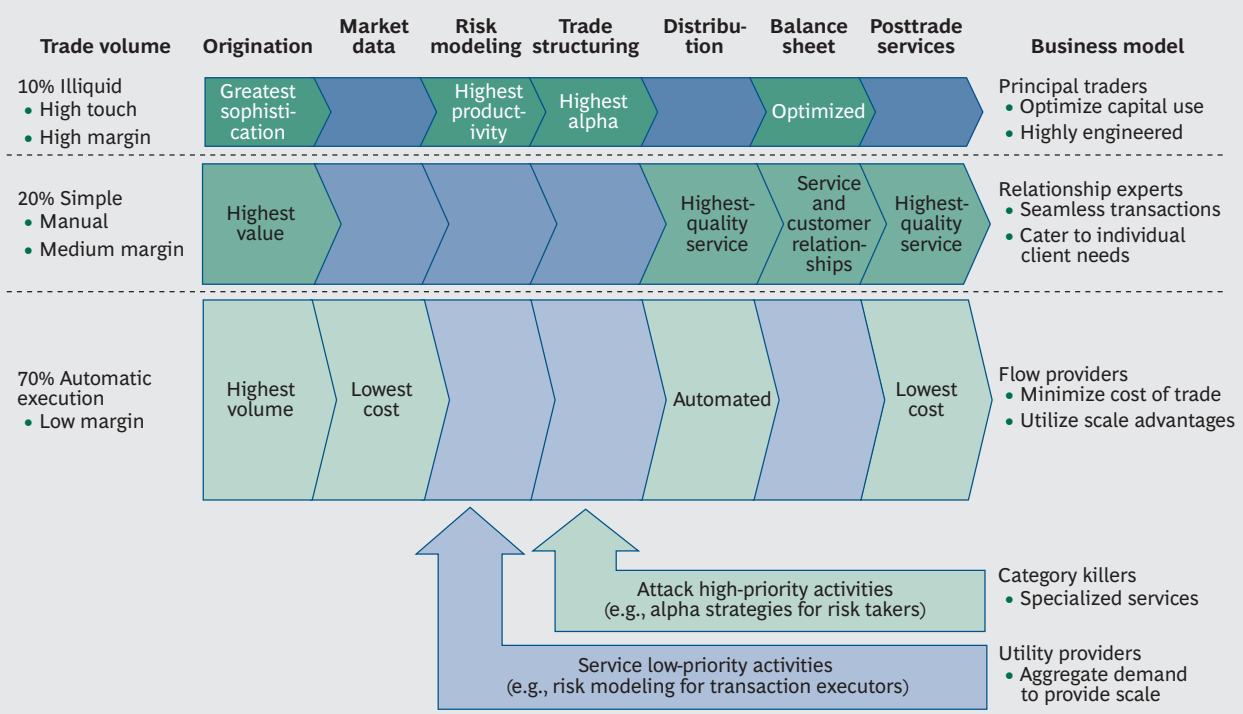
Flow Providers

For the first 70 percent of volume, where profitability will largely come from scale, banks will focus on origination of volume, automatic trade execution, and lowering cost per trade in market data procurement and posttrade servicing. They will compete for volume through aggressive pricing and a more client-centric offering across as many scalable asset classes and markets as possible. Smaller banks will have to focus on one or two asset classes or markets where they can realistically compete—or exit the scale strategy altogether. Scale curves show that in equities cash, for example, only the largest multimarket players with volumes greater than 1 million tickets per day can achieve significantly lower cost per trade through scale. (See Exhibit 6.) It is critical for flow providers to pursue end-to-end, straight-through processing in order to create an environment where human intervention across the enterprise is kept to the absolute minimum. Flow providers also need to deepen relationships once they have captured clients—potentially through such activities as voice trading, financing, structuring, and dealing in plain-vanilla equity derivatives—thus moving slightly into the territory of other types of players.

Relationship Experts

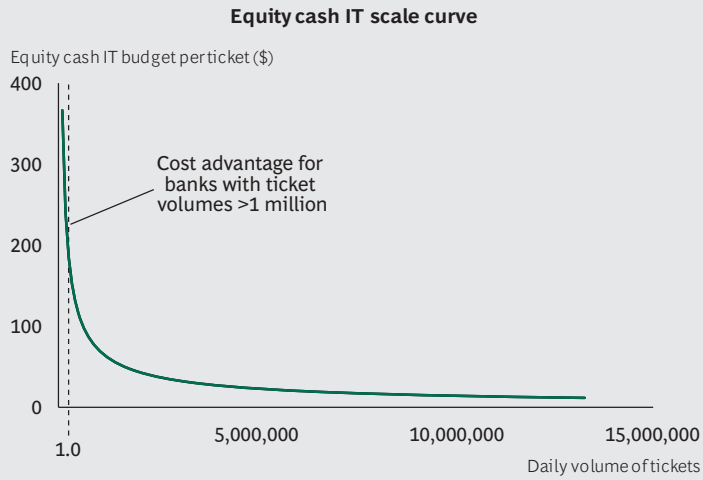
The middle 20 percent of volume will require more client touch points. Tier 3 and Tier 4 banks may have an advantage here—despite their subscale flow businesses and low appe-

EXHIBIT 5 | Five Strategic Approaches Are Emerging in CMIB



Source: BCG analysis.

Exhibit 6 | There Are Significant Scale Effects in Flow Products



Sources: Expand Research; BCG analysis.
Note: Based on a sample of six global banks.

tite for complex risk—since they can sometimes differentiate themselves from larger banks through their greater ability to concentrate purely on delivery to the client. Overall, relationship experts need to have a very broad product range, potentially (though to a relatively small extent) covering areas such as IBD as part of their total offerings. However, as their size does not allow them to be competitive in all products, they may need to turn to white labeling—the success of which will depend on the ability of larger banks to demonstrate that they are not using information gained from the white labeling of trades to attract customers away from the smaller banks with which they collaborate. If relationship experts can make this model work, catering to the less sophisticated, small to medium-size client base can potentially lead to very high ROE. Some large flow providers may compete for a portion of this medium-margin business, but they will need to be careful to service clients without increasing their average cost per trade.

Principal Traders

The remaining 10 percent of volume, providing the highest margins, will be captured by players able to take longer-term risks that may have to be carried on the balance sheet. The key differentiators will be creative trade ideas, accurate pricing of risk (to minimize the cost of capital), and underwriting of risk (particularly long-term or illiquid risk). Since banks do not need scale in either the front or back office to be successful at this strategy, we expect selected desks at large global banks to compete directly with niche providers—infrastructure banks, for example, and potential new entrants such as hedge funds and spun-off proprietary trading desks.

Scale-driven universal banks may no longer be able to offer balance sheet and liquidity to trade-and-hold positions, and principal traders will see these capabilities as their key to competitive advantage. For example, we expect principal traders to be the main banking providers for structuring, selling, and trading complex derivatives across multiple asset classes. But as the number of banks able to maintain a presence in this arena has dwindled owing to the heavier regulatory burden, we also expect the bulk of such activities to be captured by nonbanks.

Category Killers

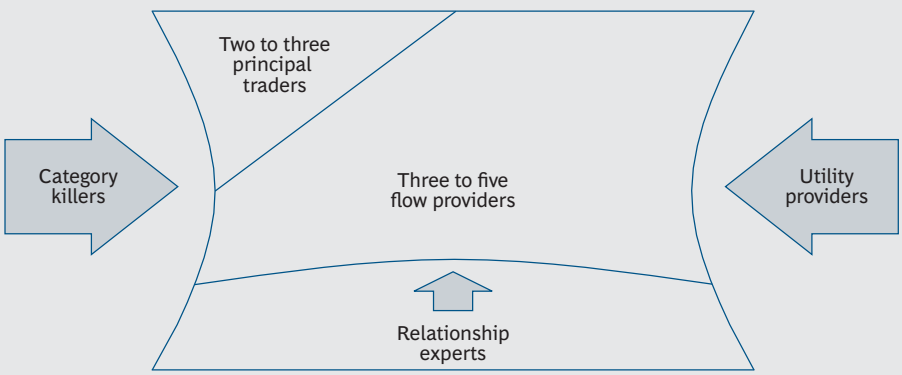
A substantial concern for existing regulated banks is the likelihood that new entrants—unregulated nonbanks—will attack parts of the value chain that are at the heart of the flow provider, relationship expert, and principal trader business models. Such an entrant could be a market data provider that offers

trading, execution, and clearing all in one click, a hedge fund competing head-on with principal traders on high-alpha-return strategies, or a major energy company trading in the commodities that it needs. It could also be an M&A boutique, a niche that we expect to survive in the new normal. Such entities have an obvious advantage: the fact that they are unencumbered by evolving regulatory measures and are typically able to do business less expensively than banks. They also tend not to have legacy IT systems that can raise costs.

Utility Providers

Since many banks will likely focus on specific parts of the value chain, there will be an opportunity for other new, nonbank entrants to sweep up the "neglected" links and offer them as third-party services. These new entrants could, for instance, provide cheap services for subscale players in areas such as risk modeling or back-office processing. We may also witness the appearance of industrial platforms for clearing services, a development that could significantly reduce the cost and risk of this business, just as electronic exchanges have revolutionized trading activities. Another opportunity may be providing balance sheet to smaller Tier 3 and Tier 4 banks through white labeling. Such services could be offered by new nonbank players, or even by large banks that wish to expand on their scale advantage. Overall, we expect service and utility providers to partner to some degree with the three main categories of existing players—or, potentially, to squeeze their businesses. We also expect the intensifying competition to help drive industry consolidation. (See Exhibit 7.)

Exhibit 7 | Current Competitors May Be Squeezed and Consolidation Increase



Source: BCG analysis.

TAKING ACTION ON REVENUES, COSTS, AND RESOURCES

We believe that investment banks can recover their lost ROE, but not through deep cost cuts alone. BCG analysis shows that even if banks were to cut $100 million in costs for every $100 billion in assets, they would still require sharply improved revenues in order to raise ROE into the midteens. Banks must therefore take forceful action on both the revenue *and* cost sides—as well as manage their resources wisely—if they hope to return to an ROE level of 15 percent or higher. Let's take a closer look at each of these three areas.

Bolstering Revenues

Despite challenging market conditions, investment banks still have a number of ways to raise revenues, such as embracing a highly client-centric strategy, strengthening core capabilities in key areas of opportunity, and capturing the potential of RDEs.

Embracing Client Centricity. In order to adjust to regulation, intensifying competition, and generally lower revenues, many areas of the financial services industry have tried to become more client focused rather than purely product or function focused. Indeed, in the CMIB arena, limitations on proprietary trading combined with shrinking fees and margins on flow products are increasingly making client centricity the name of the game. The key is for investment banks to realize that focusing in earnest on the long-term interests of the client—not on the short-term interests of the bank—will ultimately serve both parties best.

> Banks must place greater focus on their clients' long-term interests.

Obviously, corporate clients and institutional investors have varying needs and expectations of their investment banks. We believe that corporate clients are best served by a product-neutral approach in which investment banks have incentives not to push certain products over others but to find the best solution for the client within the right time frame and at the appropriate service level. Investment banks also need to develop a function that accurately measures the amount of capital and liquidity allocated to each client. In a world of scarcer resources, the highest-value clients should clearly be first in line. Banks that take the time to measure and monitor resource allocation often find that a significant number of clients—sometimes up to 50 percent—are not bringing value to the bank and should therefore be either dropped or targeted for a concerted, relationship-improving effort.

As for institutional investors, we have observed that they are rarely offered the level of collaboration with their investment banks that they really need. Banks should therefore develop dedicated experts who truly understand the investment needs of different types of institutions in today's rigorous regulatory environment, and who also grasp exactly how institutions make their investment decisions. Some banks have made great progress in achieving closer collaboration with institutional clients, but others are still catching up.

The entire world is still restructuring in the wake of the 2008–2009 financial crisis.

Broadly speaking, becoming truly client centric involves designing a crystal-clear value proposition, developing an end-to-end, client-centric operating model, and effectively tracking the implementation of the client-focused strategy.

The value proposition defines which clients the bank wants to serve and matches them to a product and service offering. For example, a bank focusing on being a flow provider could cater predominantly to pension funds, mutual funds, asset managers, and flow-driven hedge funds. Its value proposition would consist of simple products executed (mostly) automatically with minimal manual intervention. By contrast, if the bank's strategy were to serve mid-size corporations or family offices, its value proposition might be centered around client service, delivering liquidity and access to CMIB, and potentially sourcing the e-commerce and risk-taking aspects from larger players.

The operating model should consist of a distribution strategy, a client service model, and easy, multichannel pathways for clients. Finally, implementation of the model should be tracked by analyzing client profitability and loyalty—through such means as client endorsement and client engagement scores.

Achieving a high level of client centricity is perhaps most important for relationship experts. These banks often rely heavily on higher-margin business from relatively small clients, and their selling point is deep client knowledge and an ability to deliver first-rate service on a consistent basis.

Strengthening Core Capabilities. In a sense, the entire world is still restructuring in the wake of the 2008–2009 financial crisis and its aftereffects. This means that traditional investment-banking services will continue to be in demand over the next decade and that CMIB players must strengthen their core capabilities to seize the opportunities that await.

Corporations, for example, will increasingly look to investment banks to help them access the funding they need—through both capital markets and direct contact with institutional investors—in a world in which commercial lending resources will be scarcer than in the past. They will also continue to require hedging solutions involving a high share of cleared derivatives. Institutional investors themselves, saddled with heavy long-term liabilities amid highly uncertain equity and bond markets, will need investment banks in order to gain access to private placements, for example, as well as to assets in such areas as infrastructure and real estate. At the same time, their need for more-transparent solutions will increase. Furthermore, governments that have to restructure their debt will require CMIB capabilities. Helping to shape industry restructuring through such services as derivatives clearing can provide further potential revenue streams to investment banks.

Ultimately, opportunities to raise revenues significantly will be plentiful if CMIB players prepare themselves to seize them.

Capturing the Potential of RDEs. Another factor affecting the CMIB landscape is the increasing volume of so-called south-south investment flows—trade among RDEs. Today, the amount of foreign direct investment flowing into developing and developed economies is roughly equal, with economic growth in the former far outpacing that in the latter. The high growth expected in RDEs presents a clear opportunity for investment banks, some of which may adopt "Go east"

and "Go south" as rallying cries. Indeed, higher CMIB volume is already helping some small, emerging-market banks—as well as global banks with trading desks in RDEs—gain share by connecting these trade volumes directly, south to south. (See the sidebar "The Growth of South-South Trade.")

Controlling Costs

In order to climb back toward ROE levels in the midteens, investment banks must continue to rein in costs. This is chiefly a matter of aligning costs strategically, reworking compensation and benefits, and potentially delayering the organization.

Aligning Costs Strategically. As CMIB revenues declined in the second and third quarters of 2011, most large players took the immediate step of resizing head count, reducing the capacity they had added when the market outlook was brighter. Today, given the expectation of modest or flat growth in revenues and profits, banks must maintain their cost vigilance through both short-term initiatives focused on rightsizing and longer-term efforts to migrate to a more client-focused, efficient, sustainable model. (See Exhibit 8.)

> To climb back to ROE levels in the midteens, banks must continue to rein in costs.

There are two key short-term requirements: demand management and organizational effectiveness. For both, the challenge lies in capturing the opportunity by changing day-to-day behaviors at trading desks and within operations.

Demand management savings can be found primarily on two fronts. First, by using a combination of better sourcing, proactive steering, execution routing, and compression, banks can save 10 to 15 percent of addressable costs on brokerage, clearing, and exchange fees. Second, they can save a similar percentage of addressable costs by more-selective use of market data providers—such as some wire services, live exchange-data feeds, and content-based data services. Organizational effectiveness is largely a matter of introducing more-rigorous front-office performance management as well as optimizing layers—a topic we will address in greater detail below.

Despite the improvement to cash flows that short-term initiatives such as these should generate, industry shifts will mandate further cost savings. Additional longer-term changes to the operating model and client and product portfolios will be required. We have identified four initiatives that banks can take to upgrade their operating models:

- **Simplify processes.** A BCG survey of more than 200 companies across multiple industries found that banks, in particular, see excess complexity as a leading source of value destruction. We have long advocated end-to-end, lean management techniques that encompass the front, middle, and back offices. Such methods include process simplification, automation, and standardization; load leveling for activity peaks and bottlenecks; and quality assurance. In our experience, efficiency gains of up to 25 percent are possible in single, complex processes (such as equity finance) with zero IT investment.

- **Functionalize noncore activities.** Conventional wisdom suggests that shared services create scale as well as problems, such as losing control over activities, costs, and overall transparency. Clarity on allocations and service levels—provided by effectiveness and efficiency measures as well as by service level agreements—are critical to ensuring successful sharing of functions and activities. Currently, there is scope for further sharing across asset classes and regions. This potential is driven both by the greater number of complex, cross-asset investment strategies in the front office and by the back office's need to optimize collateral and capital per counterparty.

- **Rationalize global platforms.** Rationalizing the number of platforms, instances,

THE GROWTH OF SOUTH-SOUTH TRADE

There will be new opportunities for investment banks in RDEs all over the world. Asia-Pacific (APAC), for example, accounted for about 28 percent of global CMIB revenues (approximately $73 billion) in 2010. Overall, we forecast robust growth over the next few years in both large and small APAC markets. This growth will be driven by the need to finance expanding APAC economies and especially the growth of urban areas. In China, for example, up to 200 new cities will likely take shape by 2020.

Infrastructure funding gaps in emerging markets are likely to be enormous in the coming years. We therefore expect the CMIB revenue mix in the APAC region to shift increasingly toward IBD activities: from 22 percent in 2010 to an estimated 31 percent by 2014. Equity capital markets (ECM) are already the largest contributor, with $7.4 billion in revenues in 2010, and we are observing increased activity from smaller ECM/DCM sponsors, as well as more mid-cap IPOs (particularly in China, where the regulator has a five-year plan to list one IPO per day). The Chinese ECM market is already as big as Japan's and is likely to outgrow it.

There are other opportunities in the region, as well. We expect local bond markets (particularly Hong Kong's) to rise, partly fueled by more APAC countries choosing the Chinese offshore currency (CNH) over the U.S. dollar as their reserve currency—a shift that will also result in a more robust CNH swap and FX market. Another opportunity is in the commodities that will be needed to support the region's growth.

In addition, as more emerging-market players expand their footprints, they will increasingly be perceived by banks and corporations from developed markets as tough competitors to be reckoned with on the global stage. In India, for example, domestic private- and public-sector banks are competing with international banks to deliver the services required by their core clients.

All of these opportunities are playing out on a shifting CMIB stage in APAC, where many European banks are retrenching and many Asian players are looking to break out. The former, concerned about limited capital and liquidity, are returning to their hubs in Hong Kong and Singapore and are exiting capital- and funding-intensive business lines to shift toward corporate-finance businesses. The latter, by contrast, are seeking to expand both regionally and globally and are absorbing talent left behind by other players. We are also witnessing the rise of players from the Association of Southeast Asian Nations, such as Malaysian banks. These institutions, mainly corporate-finance oriented in the past, are now seeing reasonable CMIB flows—prompting them to expand into business lines they have traditionally avoided, such as FICC. Asian banks are also expanding their regional footprints as they follow their clients across borders. For example, we have seen a number of Japanese and South Korean banks expand rapidly across APAC.

Finally, some CMIB institutions from both developed and emerging markets are growing rapidly by orienting themselves to overarching trends in APAC and in some Latin American RDEs. These trends include the emergence of large corporations with increased cross-border financing needs, the expansion of pension schemes, and the broadening of public finance. The planned IPO of BTG Pactual in Brazil provides an illustration of an RDE investment bank taking steps toward developing a global presence.

and customizations from front to back has a direct impact on complexity and cost—particularly for large banks, many of which have not done enough in this area. According to a BCG capital-markets IT benchmark, there is a correlation between size and the complexity of IT architecture, with larger banks opting for the most complex architectures. (See the sidebar "Refining IT Operating Models in CMIB.")

- **Optimize sourcing and location strategy.** The location of specific activities has a direct impact on real estate and labor costs, but these decisions must take into account issues such as client proximity, time zones, and delivery needs, as well as regulatory requirements and the value of local knowledge. Our experience suggests that careful sourcing of labor to mid- and low-cost locations, along with the consolidation and deployment of global operating models, can be a significant cost lever—leading to savings of 30 percent or more of the addressable cost base.

Long-term improvements to the product and client portfolio will involve aligning product coverage and front-office resources with client profitability. For example, an e-commerce strategy should play a key role in lowering the cost per trade of certain flow products. Also, banks can potentially exit low-priority markets.

Ultimately, in order to accomplish any meaningful cost realignment, it is critical to enhance tracking and accountability and to embed these measures in the bank's culture. We have often observed that unless the initial changes are monitored and maintained, benefits are not fully captured and costs revert to previous levels over time.

Although strategic cost alignment is a key issue for all players, it is perhaps most critical for flow providers because they are scale driven and constantly seeking new ways to lower trading costs.

Reworking Compensation and Benefits. As revenues and profits decrease, banks will need to find new incentives to retain their top talent. Compensation ratios (total employee compensation as a percentage of revenues) in the CMIB industry have historically been

Exhibit 8 | Both Long- and Short-Term Cost-Reduction Initiatives Are Needed

Lever	Potential opportunities	Potential savings[1]	Timeline
Demand management	Brokerage, clearing, and exchange fees	10%–15%	Short
	Market data	10%–15%	Short
Organizational effectiveness	Optimization of layers	20%–30%	Short
	Front-office performance management	10%–15%	Short
Operating model	Process improvement	5%–10%	Long
	Functionalize noncore activities	15%–25%	Long
	Global platforms	5%–15%	Long
	Location and sourcing	<30%	Long
Portfolio	Client coverage	n/a	Long
	Exit from low-priority markets	n/a	Long

Source: BCG analysis.
Note: Range of potential savings based on BCG experience with major global organizations.
[1]At the management level.

REFINING IT OPERATING MODELS IN CMIB

CIOs face significant challenges in refining their operating models to better engage with internal clients, meet regulatory requirements, and deliver continued cost efficiencies. At the same time, they must maintain a motivated, innovative workforce and integrate new technologies into their existing IT architecture and infrastructure.

Overall, we expect a further push toward shared IT services in CMIB. Successful initiatives in these areas should result in cost reduction as well as efficiency gains in product delivery, cross-product leverage, and cross-geography opportunities.

CIOs will also be challenged to deliver value and competitive advantage. The IT function must maintain the full support of the business units, retain product-specific domain expertise, track real cost savings, monitor performance, minimize the complexities of chargeback models, and avoid fragmented delivery models that can result from shifts to low-cost locations (which are being driven by labor arbitrage and M&A). Today banks are looking to rationalize their hub-and-spoke models and create centers of excellence both for functional and domain expertise (such as e-commerce and risk) and for technical expertise (such as call center support, quality assurance, and testing). The challenges of concentration risk, remote management, local IT infrastructure, and so-called line of sight to internal clients are paramount decision drivers.

Such rationalization requires a strategy for metro, near-, and far-shore sourcing and for captive versus outsourcing decisions. Vendors can offer better economies of scale for "factory" services, which will continue to dominate low-cost locations where labor arbitrage exists. Where banks wish to retain intellectual property in-house, the talent pool and proximity to the client require near-shore locations. Regardless of the nature of the team and where it is located, ensuring that people feel part of the bank is critical. Terms such as *offshore, low-cost location,* and *outsourced* can lead to feelings of being undervalued and of not belonging. To maximize returns from existing locations and consolidate vendors with better terms and service quality, a more deliberate and structured decision tree is needed in order to make in-house versus outsource choices.

In the current cost climate and with the rise of shared services, the chargeback models supported by IT management will become even more important. Currently there are two prevalent models with opposing attributes in terms of simplicity and granularity: fixed-price rate cards versus monthly billing based on consumption. The choice of model depends on many factors, including the business's demand for cost transparency, finance's wish to manipulate balance sheets through IT projects, and the need to cut costs. The most advanced chargeback models treat IT as a business, therefore requiring proper assessment of client satisfaction, quality of delivery, and value for money—while at the same time providing transparency of choice to businesses.

Another concern is the increasing investment in infrastructure (networks, servers/grid, storage). With capacity planning on trade volumes and data retention with the business remaining weak, banks continue to operate at low average levels of utilization—so as to cope with extreme trading peaks when they occur. Indeed, the sheer cost of data center investments has forced banks to revisit their strategies. Colocation and modular builds are more frequent than large-scale new builds. However, as reduction of latency is key to staying competitive, and as processing power in an exchange's data center is critical, banks' infrastructure budgets continue to rise. Cost savings have to come by other means, such as standardizing vendors, consolidating data centers, implementing IT-service-model disciplines, and driving innovative technologies such as

REFINING IT OPERATING MODELS IN CMIB
(continued)

grid, which can significantly reduce run-the-bank costs and improve production stability.

Finally, banks need to continue to react to new technologies such as iPad/Android applications for internal clients and IT. Banks planning to take this opportunity to "virtualize the estate" will require an overlay of security to satisfy regulators and internal compliance, which in turn will drive costs upward.

Overall, the IT operating model will continue to evolve, driven by business requirements, technology innovation, regulatory oversight, and human capital implications. Given the complexity and variety of the financial instruments and products offered by banks, the global nature of their businesses, and the regulatory burden, a one-size-fits-all operating model is simply unattainable. Companies in which IT is seen as an integral part of both the business model and client service—not as just a cost of doing business—will be more successful in implementing an IT operating model that is an optimal fit, rather than one in which cost is the overruling driver.

around 40 to 50 percent. But lower ROEs may put an end to this standard.

Furthermore, stringent new regulations on bonuses—on top of banks' traditional vesting policies that pay bonuses out over time—are forcing banks to choose whether they want to pay their top talent higher base salaries (that are not linked to performance) or pay them less overall. A significant chunk of bonuses—in EU banks, up to 90 percent for top earners and a minimum of 40 to 60 percent for everyone else—must now be deferred over a period of up to ten years. Therefore, generally speaking, cash bonuses paid out in any given year may be dramatically lower than in many past years.

Since this situation could drive leading performers to nonregulated entities, banks will need to shift to more holistic compensation strategies. These should encompass both qualitative and quantitative assessments, a clear career progression, tightly controlled titles and job profiles, and opportunities to develop through training, switching business units, or further education.

Overall, there is a clear need for greater transparency in bonus allocation, and for performance to be determined on a risk-adjusted basis for the bank. We have recently observed a trend toward the linking of bonuses to qualitative performance evaluations that include criteria such as ethical standards. Moreover, intrabank collaboration and the ability to cross-sell among different desks are becoming larger factors in performance evaluations.

Another approach being embraced, especially by leading banks, is tighter management of titles—and thus of base salaries. Top banks remain the most disciplined and selective, strictly limiting the number of senior roles and titles in the highest compensation brackets. Tier 2 banks have also begun to clean up their title norms, but around 40 to 50 percent of their staff still hold the title of director or managing director, compared with roughly 20 to 30 percent at Tier 1 players.

Compensation and benefits issues are perhaps most critical to principal traders, since their top talent will be aggressively pursued by nonbank entities that do not face regulatory-compliance issues on the amount or structure of bonuses.

Overall, banks' ability to offer holistic and innovative compensation packages is being perceived as a key differentiator in attracting talent.

Delayering. Removing excess layers of management affords many benefits to CMIB

players, such as bringing top managers closer to where revenues are actually generated, fostering faster decision making and clearer governance, and motivating employees who—in a flatter organization—can gain a better perspective on how their individual contributions affect the bank's total performance.

Banks must reduce leverage without risking their strategic positions and client bases.

Indeed, removing excess layers and increasing spans of control can save 20 to 30 percent of the managerial cost base. A further 10 to 15 percent of staffing costs can be saved by weeding out nonperformers in the front office. The overall delayering initiative should include consolidating nonrevenue-generating and shadow functions into centralized support functions (and, often, relocating them to lower-cost locations).

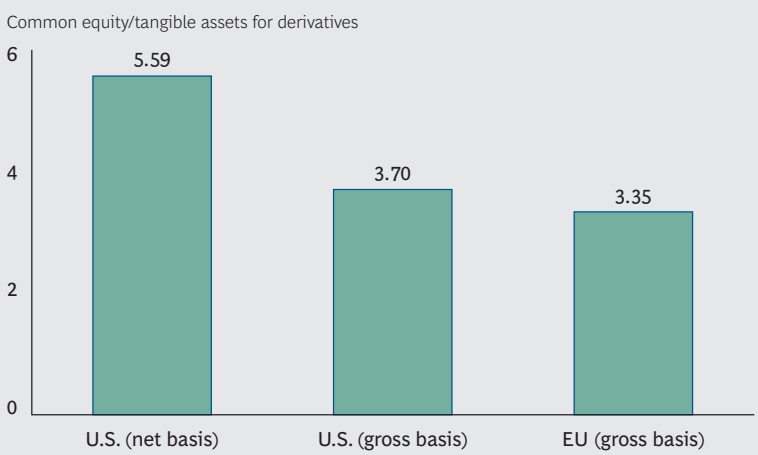
When delayering is carried out in conjunction with a broader operating-model review—including steps such as eliminating duplicate processes and low-value activities, right-sizing teams, and outsourcing manual processes—cost savings can become very substantial. BCG recently helped a major global bank reduce the number of management layers from the high teens to the high single digits.

Managing Resources

Regulatory pressures are forcing CMIB players to be vigilant about capital reserves and liquidity. Even if this were not the case, efforts to deleverage and to maintain sufficient liquidity are good practice and should be embraced as part of an overall program to lift performance and raise ROE.

Deleveraging. The need to reduce financial leverage would appear to be a concern mainly for European banks with large balance sheets that have traditionally adopted a "buy and hold" approach to assets—as opposed to U.S. banks that have embraced the "originate and distribute" model. And on the surface, this is certainly true. Nonetheless, when the treatment of derivatives accounting by U.S. Generally Accepted Accounting Principles and International Financial Reporting Standards is considered, U.S. and European banks do not look so different. (See Exhibit 9.) In our view, banks worldwide should consider how they can reduce leverage without risking their strategic positions and client bases. There are, of course, two ways to do this: improving funding—related to both capital and liquidity—and decreasing assets.

EXHIBIT 9 | EU and U.S. Banks Are Similarly Leveraged When Derivatives Accounting Rules Are Harmonized



Sources: Credit Suisse; BvD Orbis; BCG analysis.
Note: Based on banks with assets of more than €500 billion; data as of June 2011 or latest available.

Ever since governments, rating agencies, and investors started requiring banks to reduce their short-term and wholesale funding needs as well as increase their capital bases, capital has become scarcer and more expensive—especially given the risks associated with the European sovereign-debt crisis. Furthermore, even though banks (particularly in continental Europe) long ago adopted a model by which loans get funded by deposits, it is clear that deposits alone cannot make up the shortfall in funding. Therefore, reducing cash-hungry assets will be necessary—a complex exercise that requires strategic planning and laser-like implementation.

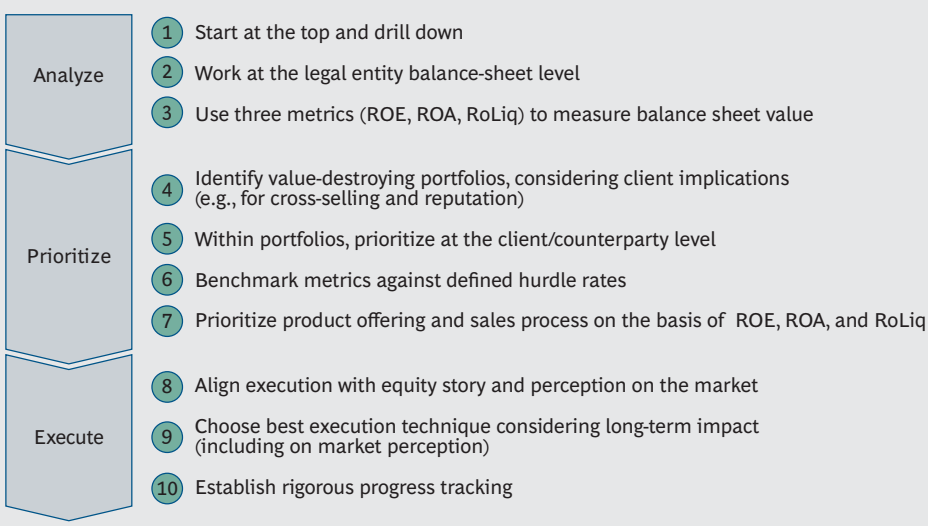
Asset reduction should be approached by looking at liquidity consumption and profitability by client, across asset classes, and over time. For the medium and long term, banks need to develop management information tools to make these metrics visible alongside those dealing with capital and RWA consumption. We have developed a set of "golden rules" for determining the true value of balance sheet items. (See Exhibit 10.)

Short-term initiatives should be addressed urgently, checking overall client consistency and discontinuing origination of activities that are not sufficiently profitable or that consume excessive liquidity or capital. Cuts can include core businesses, entire countries or regions, and, if necessary, clients. In the longer term, strategic deleveraging should be addressed through a portfolio review. ROE, return on liquidity, and scenario analyses of margin and volume evolution should be considered. Also, the business model should be evaluated and a new direction set if needed (for example, from an originate-and-hold to an originate-and-distribute model).

Reducing cash-hungry assets requires planning and laser-like implementation.

Ultimately, deleveraging should not just resize a bank's balance sheet but also contribute to a business model shift in which assets will be originated taking client priorities into account and distributed in order to reduce balance sheet use. Even though a disintermediated market would result in more-volatile financing for corporations, the scarcity of funding should allow a move toward the U.S.-style originate-and-distribute model. Such a shift would need to be supported by a significant broadening of the CMIB and institutional investors base in continental Europe, where CMIB is narrower and access to debt products less developed. We have already ob-

Exhibit 10 | There Are Ten Golden Rules to Valuing Balance Sheet Items



Source: BCG analysis.

served high-yield businesses growing with mid-to-large-size corporations. The challenge for banks will be to structure the loans they originate in a way that aligns with institutional investors' needs. For instance, loans distributed to life insurance companies should be structured to take the liability profile of the insurer into account. Real assets that will end up in mutual funds should allow for the level of transparency, price setting, and (if possible) liquidity that an asset manager requires.

Maintaining Sufficient Liquidity. The financial crisis that has been unfolding since 2007 has reminded markets that banks do not fail because they lack capital. Lehman Brothers had capital ratios well above a sufficient threshold on the day before it fell. Indeed, banks fail because they lack liquidity—an element that regulators had insufficiently addressed before the crisis. Basel II, for instance, did not mandate any liquidity ratio in Pillar 1. In Basel III, regulators have introduced both short-term and long-term liquidity ratios.

Both adequate deleveraging and rigorous liquidity management are crucial.

Yet banks are still struggling with how to make these ratios operational. Although bank treasurers are able to calculate targets for their short- and long-term ratios, few—according to a BCG survey of the top 15 European banks in 2011—know how to make judgments or decisions at the business, client, or operations level that accurately factor in liquidity constraints.

Although the worst of the liquidity crisis is largely over and solvency is now the greater concern, liquidity should still be managed like capital. Business lines should submit an annual liquidity budget that considers both inventory and collateral, and there should be incentives in place for them to respect it. For example, they could be charged for the cost of the liquidity they request and penalized if they overconsume. Cost accounting systems should monitor liquidity at the client level—just as many banks monitor capital consumption. We have observed that return on liquidity (defined as net banking income minus operating cost minus capital and liquidity cost divided by net liquidity consumed) is becoming a key metric for banks, similar to risk-adjusted return on capital.

In addition, a new funding approach should be adopted that considers targeting cash-rich institutions. And collateral must be managed through a group-level monitoring of clients and counterparties.

Both adequate deleveraging and rigorous liquidity management are crucial for all CMIB business models in the new normal. (For more on this subject, see *Facing New Realities in Global Banking: Risk Report 2011,* BCG report, December 2011.)

LOOKING AHEAD

A STRUGGLING BUT RESILIENT INDUSTRY

WHERE IS THE CMIB business heading? What kinds of choices will have to be made by the various types of players? Which business models will be best positioned to thrive and gain share in the new environment? We have a few closing observations to offer.

First, it would be misleading to suggest that an atmosphere of business as usual will prevail in the altered CMIB landscape and that any type of institution can thrive in the new normal with just a few minor adjustments. Although it's true that regulatory pendulums swing back and forth, it is very unlikely that we will see a return to the norms of the pre-crisis, pre-Basel III, pre-Dodd-Frank days. This reality needs to be accepted and new ways of doing business developed.

> Regulation is not always just a burden—it can be an advantage of a certain type.

Given the imminent highly restrictive regulatory climate and the growing emergence of nonbank, largely unregulated niche players, a key difference between the old and new worlds—which we alluded to earlier—is that most institutions will now have to choose clearer identities. For example, in the past, many investment banks shifted their primary focus from one desk to another over time, depending on prevailing market winds and the best opportunities of the moment. A premium was placed on flexibility. In the future, institutions will need to choose—to a far greater extent than previously was necessary—exactly what type of player they wish to be. They will then have to align their capabilities accordingly and largely stick with their decisions.

Second, it would be equally misleading to suggest that some business models, at least on the surface, are not better positioned than others. Models that do not require high capital consumption will have an advantage, since regulatory restraints take effect as soon as capital has to be put to work. At the same time, high-margin roles such as principal traders do not represent an automatic path to success. Their opportunity space will be relatively narrow, and they will have to work hard to establish trust with clients. Overall, it is important to acknowledge that regulation is not always just a burden—it can be an advantage of a certain type. Regulatory bodies effectively vouch for the viability and trustworthiness of financial institutions—backing that hedge funds, for example, do not have.

Finally, although the jury is still out on whether any unforeseen developments will in some way "rescue" the industry from the se-

vere challenges that it now faces, it is clear that new opportunities can still be uncovered by those that focus intently on finding them. Such opportunities could possibly come in such areas as high-duration risk—long-term risks being packaged as a series of shorter-term risks—which could be used, for example, to replace standard infrastructure finance. There may also be new possibilities in regulatory arbitrage, in emerging economies and the commodities needed to build them, in FX solutions to the volatility caused by the sovereign debt crisis, and in other areas.

Broadly speaking, we will see a CMIB world with a different flavor—not just in developed markets but in RDEs as well. The purely intermediary role of investment banks in helping to structure financing will remain, but (because of regulatory constraints) more players will distribute assets immediately to investors that are tired of fixed-income and equity market volatility and hungry for long-term assets to match long-term liabilities.

Ultimately, investment banks have a history of resilience. They have faced financial crises before and found new ways to grow, to serve clients, to manage risk, and to move forward with confidence. There may be a shadow over the industry at present, but for those players that find the most efficient and effective ways to deal with adversity—and that execute their chosen strategies sharply—the future can still be bright.

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The Boston Consulting Group has published other reports and articles that may be of interest to senior financial executives. Recent examples include those listed here:

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Digital Insurance: Charting a Course to Best-in-Class Capabilities
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A New Virtuous Cycle for Banks: Linking Social Media, Big Data, and Signal Advantage
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Facing New Realities in Global Banking: Risk Report 2011
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NOTE TO THE READER

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Acknowledgments

For their valuable contributions in the conception and development of this report, our special thanks go to our BCG colleagues Simon Bartletta, Carsten Baumgärtner, Candice Burdette, Jean-Michel Caye, John Garabedian, Vinoy Kumar, Gwenhaël Le Boulay, Duncan Martin, Kaveesh Nath, Peter Neu, Aymen Saleh, Shubh Saumya, Aaron Sim, Mandeep Soor, and Tjun Howe Tang.

We would also like to thank the following members of Expand Research: Michael Aldridge, Rupert Bull, John Doonan, Raza Hussain, Jeremy Sims, and Franck Vialaron.

Finally, grateful thanks go to Philip Crawford for his editorial direction, as well as to other members of the editorial and production team, including Katherine Andrews, Gary Callahan, Angela DiBattista, and Gina Goldstein.

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