

GLOBAL RISK 2013–2014

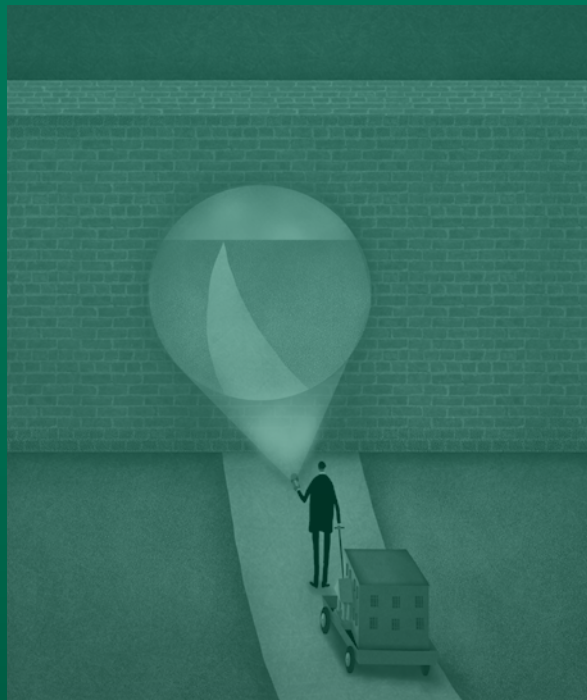
BREACHING THE NEXT BANKING BARRIER



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INTRODUCTION

Banks live globally but die locally.

—Mervyn King, former governor of the Bank of England

MERVYN KING'S GIMLET-EYED COMMENT on the banking industry, made at the height of the financial crisis, became an instant mantra of the monetary world, quoted in financial circles as readily as Shakespeare in a sophomore literature class.

King neatly captured the existential dilemma facing banks and their regulators with a phrase that resonated on both sides of the widening gulf between them: banks must now compete globally to survive, creating systemic risks that cascade down to countries and economies. If bank oversight fails globally, regulators will ring-fence their interests locally.

In the wake of a crisis unimpeded by oversight, banks face a wave of continuous, and sometimes contradictory, rules and regulatory measures as regulators react both globally and locally.

This publication, the latest in the annual Global Risk report series by The Boston Consulting Group, offers a deep look at these balkanized rules and assesses the increased costs and operational complexity that they impose on banks. Our central conclusion is that the reforms collectively represent the next level of regulatory tightening—a barrier that banks must breach to remain competitive.

To determine the health and overall performance of the industry, we assessed the economic profit generated by a diverse set of 318 retail, commercial, and investment banks, representing 90 percent of all banking assets globally. The new data, as we forecast in last year's Risk Report, reveal that the industry has reached a new inflection point—including a return to profitability for some, but not all, banks.

We found that while economic profit remained unchanged on a globally averaged basis, there was a sharp divergence in bank performance by region as well as between developed and developing economies. The industry has now diverged into a three-speed world where emerging markets are performing strongly and North American banks are leaving the crisis behind, while European banks continue to struggle, especially in southern Europe.

Worldwide, banks face a common requirement for future value creation. With their economic profit suppressed by regulatory change, banks will be compelled to optimize their risk functions and maxi-

mize the value of their “risk dollars.” This report provides a framework and a set of levers that banks can use to gain operational excellence, especially in risk functions.

To breach the regulatory barrier, banks must become proactive. Winning banks will be those that adopt a strategic approach allowing them to categorize, prioritize, and execute against old, new, and evolving regulations and an uncertain future.

To support banks in this approach, we have classified the global universe of current and anticipated reforms into three broad clusters based on regulators’ intent: financial stability, separation and resolution, and prudent operations.

We hope that this report’s findings and recommendations contribute to helping banks thrive both globally *and* locally.

BANKS' ECONOMIC-PROFIT PERFORMANCE REVEALS A DIVERGING INDUSTRY

SIX YEARS AFTER THE start of the financial crisis in 2007, much of the global banking industry has finally embarked on a path toward recovery. For most banks, however, the path is an obstacle course of government intervention, macroeconomic and financial uncertainty, and regulatory rigor.

Global regulatory reform, in particular, poses a universal challenge for the industry. Banks face an onslaught of uncoordinated new rules and regulations amid rolling updates of existing measures. Together, the reforms represent the next level of regulatory tightening—a barrier that banks must breach to remain competitive.

To determine the state of health and overall performance of the industry, The Boston Consulting Group assessed the economic profit (EP) generated by 318 diverse retail, commercial, and investment banks; the sample represented 90 percent of all banking assets globally. Economic profit—which weighs risk costs, as well as refinancing and operating costs, against income—provides a comprehensive measure of the financial conditions that banks face.¹

As we forecast in last year's global risk report, the new data reveal the arrival of an inflection point for the industry, including a return to profitability—but only for some banks. (See *Risk Report 2012–2013: An Inflec-*

tion Point in Global Banking, BCG report, December 2012.)

Averaged globally, overall profit as a percentage of total assets remained constant and negative at –€25 billion, or –3 basis points (bps). That unchanged global average, however, masked a sharp divergence in bank performance along regional lines and between developed and developing markets. The new data portray a banking industry navigating a three-speed world, in which emerging markets are performing strongly and North America is recovering, but European markets—particularly in the south—continue to struggle, registering their worst year since the start of the crisis.² (See Exhibit 1.)

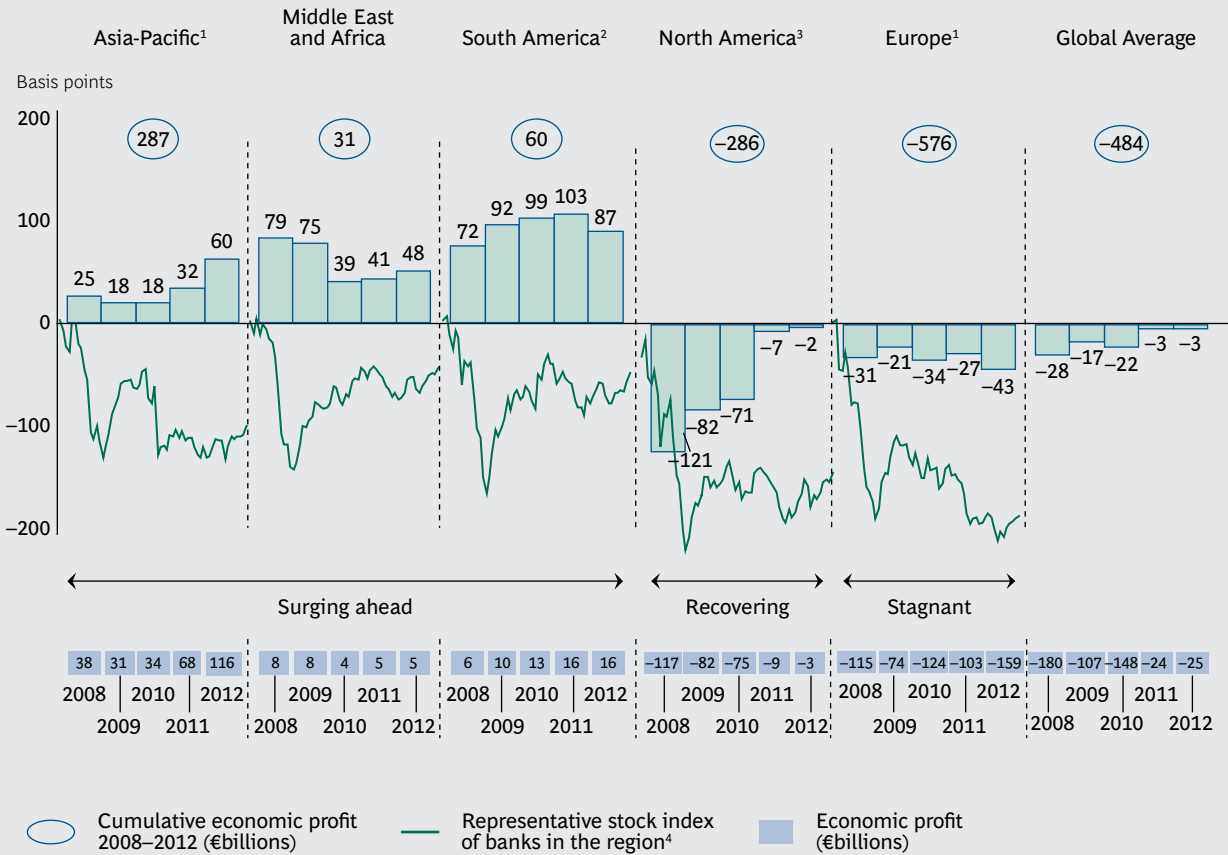
A Global View of Banks' Regional Performance

The emerging markets, once again, outpaced North America and Europe. Asia-Pacific, the Middle East and Africa, and South America all recorded positive EP throughout the crisis. They continued to do so in 2012, reflecting the solid macroeconomic and banking growth in the developing economies. (See Exhibit 2.) At the same time, an assessment of the components of EP shows that performance was driven by different factors in different regions:

- *Asia-Pacific*. EP in this area almost doubled, from 32 bps to 60 bps, driven by a

EXHIBIT 1 | Bank Profit Grows Strongly in Emerging Markets, Recovers in North America, and Struggles in Europe

Economic profit of global banks relative to total assets, 2008–2012



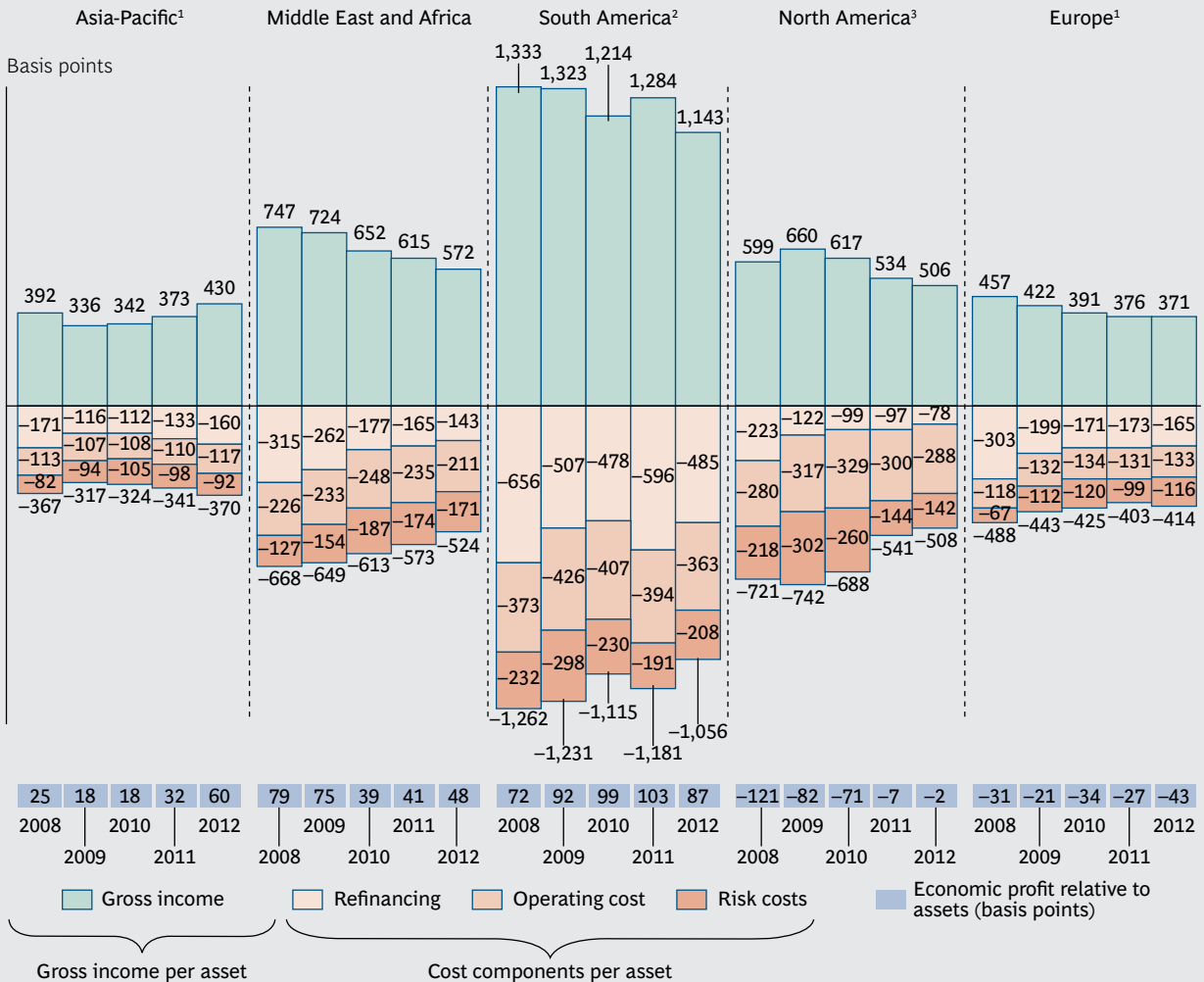
Sources: BankScope; annual reports; BCG Risk Task Force database; Bloomberg; BCG analysis.
Note: Values may not add up to totals shown because of rounding; index performances are relative to the year-end 2007 index value; the sample size was 318 banks.
¹The fact that total assets are lower in Asia-Pacific and Europe than in the U.S. is a byproduct of U.S. and local Generally Accepted Accounting Principles.
²South America includes Mexico.
³North America does not include Mexico.
⁴The following stock indices were used as a proxy per region: Stoxx Asia/Pacific 600 Bank for Asia-Pacific, BI MEast & Africa Banks for Middle East and Africa, MSCI EFM Latin America & Caribbean Index for South America, United States Banks for North America, and Euro Stoxx Banks for Europe.

strong increase in gross income and persistently low risk costs.

- Middle East and Africa.** Here, EP advanced 17 percent, rising from 41 bps to 48 bps, as lower refinancing and operating costs offset declining gross income.
- South America.** As asset margins declined in this region, EP fell 16 percent, yet it remained strongly positive, at 87 bps compared with 103 bps. Gross income increased in absolute terms, due to robust growth of total assets.
- North America.** Results showed that banks in this market are leaving the crisis behind. Total EP increased from -7 bps to -2 bps of assets and was on pace to turn positive during the current year for the first time since 2007. Bank results benefited from a further reduction in refinancing costs—from 223 bps in 2008 to 78 bps in 2012—and also in loan impairments.
- Europe.** In contrast, banks in Europe—particularly in the southern markets—continued to struggle, registering their worst year since the start of the crisis. EP fell to

EXHIBIT 2 | The Economic-Profit Performance of Banks Varies Widely by Region

Economic profit of global banks relative to total assets, 2008–2012



Sources: BankScope; annual reports; BCG Risk Task Force database; Bloomberg; BCG analysis.
Note: All values are per asset: that is, the total value divided by total assets expressed in basis points; values may not add up to the totals shown because of rounding; the sample size was 318 banks.
¹The fact that total assets are lower in Asia-Pacific and Europe is a byproduct of U.S. and local Generally Accepted Accounting Principles.
²South America includes Mexico.
³North America does not include Mexico.

–43 bps in 2012 from –27 in 2011. These results were largely due to a sharp rise in loan loss provisions (LLPs).

Disaggregating the numbers further reveals the particular weakness of the southern European markets as their performance diverged from the rest of Europe. With the exception of Greece, Italy, Portugal, and Spain, Europe recorded an EP of –24 bps per asset, about in line with 2011. The four southern European markets, on the other hand, recorded a record negative economic profit of –132 bps per asset, down from –55 bps in 2011. The 2012 downturn was driven

almost exclusively by the increase in LLPs, especially in Spain, which struggled with financial, economic, and political turbulence and uncertainty.

The pace of the North American EP recovery suggests that the U.S. crisis-management approach of radical bank recapitalization with enforced early write-downs has produced faster recovery than the step-by-step approach followed in Europe. U.S. banks took the hit in 2008–2009, incurring more than three times as many LLPs per loan as European banks, which were less capitalized. This LLP book clearing was the main driver of U.S.

bank recovery in 2012. Its benefits are likely to endure.

For European banks, the next crucial step will be to undertake a rigorous balance-sheet assessment combined with an asset quality review to identify the remaining problem loans and write down those assets. (See the sidebar “Banks Should Prepare for Balance Sheet As-

sessments as the ECB Takes a Watchdog Role.”)

Risk Excellence Will Drive Growth in Emerging Markets

In the months and years ahead, emerging-market banks will have to develop excellence in risk functions to cope with the

BANKS SHOULD PREPARE FOR BALANCE SHEET ASSESSMENTS AS THE ECB TAKES A WATCHDOG ROLE

As the European Union moves toward establishing a European banking union, the European Central Bank (ECB) will become the sole supervisor for currently up to 124 banking groups. To establish a suitable regulatory baseline before this single-supervisory mechanism takes effect—expected for Q3 2014—the ECB plans to conduct comprehensive balance-sheet assessments and include asset quality reviews in Q1 2014. Banks would be wise to anticipate and prepare for these events proactively.

Following the balance sheet assessments and asset quality reviews, the ECB will perform stress tests in cooperation with the European Banking Authority. The tests are expected to give a forward-looking review of banks’ balance sheets and loss absorption capacity.

This process may significantly affect the public’s perception of banks, especially in terms of their stability, and is likely to include complex data and methodological requirements. Therefore, it is critical for banks to develop an internal view of the scope, probable methodology, and potential outcome of the exercise. By doing so, banks can anticipate the impacts and develop a contingency plan for potential capital shortfall. Executing a dry run is advisable. Additionally, continuous communication with regulators, peer banks, and the public should be well planned and carefully calibrated.

The ECB’s assessment will consist of the following three steps:

- *Risk-Based Portfolio Selection.* Selection of the relevant portfolios (asset classes and exposure regions) for individual banks on the basis of macroeconomic and bank-specific criteria and sampling of individual loan files and securities for consequent steps. Asset classes whose credit quality has strongly deteriorated in recent years—such as public finance, commercial real estate, and shipping—are expected to be considered especially relevant across all banks. National regulators will propose portfolios on the basis of their supervisory data and experience, which will be approved centrally by the ECB.
- *Execution of the Asset Quality Review.* Assessment of the accounting classification of loans and securities and derivatives, as well as the validation of the processes regarding risk classifications and collateral valuation. Assessment especially of the provisioning adequacy of nonperforming loans on the basis of collateral valuation and recovery performance, as well as the adequacy of risk-weighted assets (RWAs) and the valuation of securities and derivatives. Following the results of this assessment, the ECB will extrapolate and adjust RWAs and loan-loss provisions to entire portfolios.
- *Collation.* The final step will be made up of a consistency exercise to ensure comparability across banks.

growth of risk-weighted assets (RWAs) and increased complexity stemming, for example, from regionalization. Banks in more mature markets will need to focus mainly on cost excellence to stay competitive.

- *Asia-Pacific.* In this growing market, banks will have to rely more heavily on excellence and efficiency in risk functions if they are to control risk costs and maintain their high EP levels. There are two main reasons for this. The first is that a potential slowing of China's economy—the main driver of Asia-Pacific's growth—might trigger an increase in LLPs. The second reason is the increased complexity of risk management for banks expanding beyond their home markets. The rapid expansion of the Indonesian market is a prime example.
- *Middle East and Africa.* The banking environment in the region is especially challenged by a significant rise in RWAs, with risk costs higher than they were five years ago. When capital levels are high, a move to riskier assets is usually the right step to take. But in this case there was no corresponding increase in income, so a mispricing of risk seems to have occurred. Since capital charges are already higher in the Middle East and Africa than in any other region, a continued rise in RWAs could exacerbate those costs and decrease EP if risk steering is not optimized.
- *South America.* Asset margins and RWA productivity are decreasing in South America. This indicates that banks are evolving from an era of surging growth to a period of lower, but more sustainable, growth levels. The next challenge that the region's banks face will be adjusting business models to control risk costs and improving efficiency to permit sustained EP growth. With income growth slowing, and refinancing costs already at low levels, value creation will depend on a blend of reduced operating and risk costs.
- *North America.* We expect that banks in North America will create value largely through operating-cost reductions—as

long as the interest-rate term structure remains flat. With LLPs already at very low levels, there is little scope for further reductions, and capital charges are bound to remain high owing to new regulations. In this environment, banks will also have to keep striving for efficiency and cost excellence in order to create value. The first signs of this imperative are already apparent: on a per-asset basis, operating costs for North American banks decreased for the third year in a row.

- *Europe.* Banks in Europe face many of the same cost challenges as banks in North America, but they have not been able to decrease operating costs. To return to neutral value creation, they would have to decrease operating costs by roughly one-third—based on their average cost-income ratio of 65 percent in 2012 and assuming that other factors remain equal. The scale of that challenge makes clear the need for action, even accounting for significantly lower risk costs when an end to the euro crisis comes into view.

NOTES

1. Economic profit is calculated by measuring a bank's gross income and subtracting refinancing and operating costs as well as loan loss provisions (LLPs) and capital charges (common equity multiplied by costs of capital). LLPs and capital charges are barometers of macroeconomic and regulatory conditions, which together represent the risk costs incurred by banks.

2. For the purposes of this report, "North America" refers to the United States and Canada but not Mexico, while "South America" includes Mexico.

TOWARD A STRATEGIC APPROACH TO BREACHING THE REGULATORY BARRIER

THE STORM OF FINANCIAL regulatory reform continues unabated. (See *Risk Report 2011: Facing New Realities in Global Banking*, BCG report, 2011.) No sooner had Basel III become widely accepted as the global regulatory baseline than the next wave of regulations began to roll out. In Europe alone, more than 60 legislative initiatives to regulate banks are being prepared as of this writing, according to the BCG Regulatory Database. This balkanization of rules, with significant regional differences in current and upcoming regulations, further increases regulatory complexity—along with operational complexity and costs for banks.

To breach the barrier, banks must become proactive—not reactive—players.

The next level of regulatory tightening is a barrier that global banks must breach if they hope to remain competitive in today's three-speed world. With their economic profit suppressed by regulatory change, banks will be compelled to optimize their risk functions. To succeed in breaching this barrier, banks must first become proactive—not reactive—players. They will need a strategic approach that allows them to categorize, prioritize, and exe-

cute on three levels: to cope with existing regulations, to prepare for rule changes that are under way, and to anticipate an uncertain future regulatory environment, which continues to shift as it comes into view.

Three Clusters of Regulatory Reform

In order to assist banks in developing a strategic approach, we have classified the global universe of current and anticipated reforms and have grouped measures into three broad clusters based on regulators' intent: financial stability, separation and resolution, and prudent operations. (See Exhibit 3.)

While the first two categories of reforms will have the most significant financial and structural impact on banks, the third category will add increased operational complexity, with attendant costs for individual banks. The three types of reforms differ in terms of the strategies that a bank can follow to reduce their impact:

- *Financial Stability.* Since avoiding most financial-stability reforms will not be possible, banks should identify measures that mitigate these reforms' impact.
- *Separation and Resolution.* Banks may be able to—at least partially—avoid the impact of these reforms. Individual banks

will need to understand the implications of these measures in order to assess opportunities for doing so by remaining below certain thresholds, such as those regarding business volume in certain segments.

- **Prudent Operations.** Since neither mitigation nor avoidance will be possible for most of these rules, implementation should be well planned to realize synergies across different regulations and avoid additional costs.

We discuss strategic approaches for dealing with these regulations in more detail in the next section of this report. (See “Navigating the Three Clusters of Regulatory Reform.”)

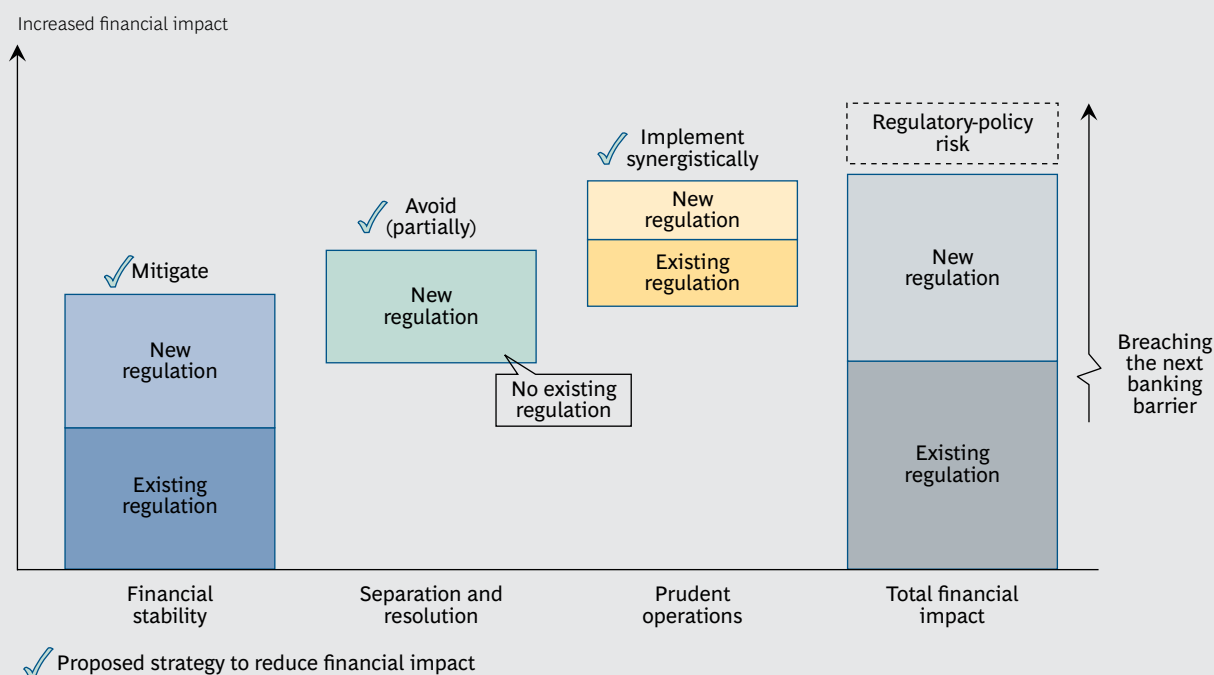
Regulatory-Policy Risk

In addition, banks will need to account for what we call *regulatory-policy risk*, a new category arising from the trend of regulators to act with increasing unpredictability. For example, regulators decided to advance the date by which U.K. banks were expected to comply with a 3 percent leverage ratio: origi-

nally slated for 2018, the date was moved up in July 2013 and scheduled to take effect almost immediately. In the recently announced details on the upcoming asset-quality review, the European Central Bank is using a Common Equity Tier 1 (CET1) ratio of 8 percent as a capital benchmark—thus implicitly requiring compliance five years ahead of the date set by the European Union’s Capital Requirements Regulation (CRR).

Banking, unlike most other regulated industries, lacks a stable legal and regulatory environment, and the playing field is uneven. The resulting uncertainty creates the need for additional capital buffers and makes planning a challenge—contradicting the intent of reforms requiring stable midterm planning. A first analysis of the next level of regulatory reforms suggests a significant increase in capital requirements—but not for everyone. Regulators largely spare commercial banking while imposing tougher restrictions on sections that they feel are riskier, such as much of capital market activity. The strictest rules apply to banks classified as systemically important financial institutions.

EXHIBIT 3 | Three Clusters of Regulation Contribute to the Rising Financial Impact on Banks



Sources: BCG Regulatory Database; BCG analysis.

NAVIGATING THE THREE CLUSTERS OF REGULATORY REFORM

TO COPE WITH THE waves of regulatory change, banks should consider adhering to some broad rules of the road, which include the following:

- Develop a comprehensive view of existing and potential reforms and then systematically review compliance, continuously assess financial impact, and analyze interdependencies.
- Stay tuned to market pressures, which are strong drivers of change and may require early compliance with specific rules and regulations.
- Understand the impact of any new rules on all business segments. Profitability reviews, especially in capital markets, may result in terminating or significantly altering individual products and lines of business. Strategic initiatives should have a process for continuous review and alignment with new and updated rules and regulations.

Transforming these broad rules into competitive advantage, however, will require additional steps. Banks will need to design strategies based on a detailed assessment of the three categories of regulation, which we will now discuss in turn: financial stability, separation and resolution, and prudent operations.

Financial Stability Regulations: A Mitigation Challenge

Banking executives generally believe that most regulatory measures are designed to curb business that regulators think is unstable and does not benefit the “real” economy—and that they do so by making conducting such business prohibitively expensive. From the outset of the crisis, therefore, strict capital requirements have been the focus of financial stability reforms.

Banks will not be able to avoid most financial stability reforms, which will have a significant financial and structural impact. Timely creation of mitigation measures, therefore, should be a high priority.

The full impact of the reforms will be to increase capital requirements by 25 to 80 percent, depending on a bank’s size, the extent of its capital market business, and how the reforms are managed. (See Exhibit 4.)

Market pressure compelled most banks to comply with Basel III’s CET1 requirements long before regulators’ deadlines. Roughly 50 percent of the top 100 banks by total assets in our sample voluntarily reported Basel III CET1 ratios. All were above the 7 percent minimum requirement, and most aimed for the 9 to 10 percent target ratio that will be required by 2019.¹ Whether a target ratio of even 10 percent is sufficient for banks is

questionable, however, since additional buffers and local regulations can increase this ratio even further. Spillover effects as a result of market pressure can affect all other banks as well.

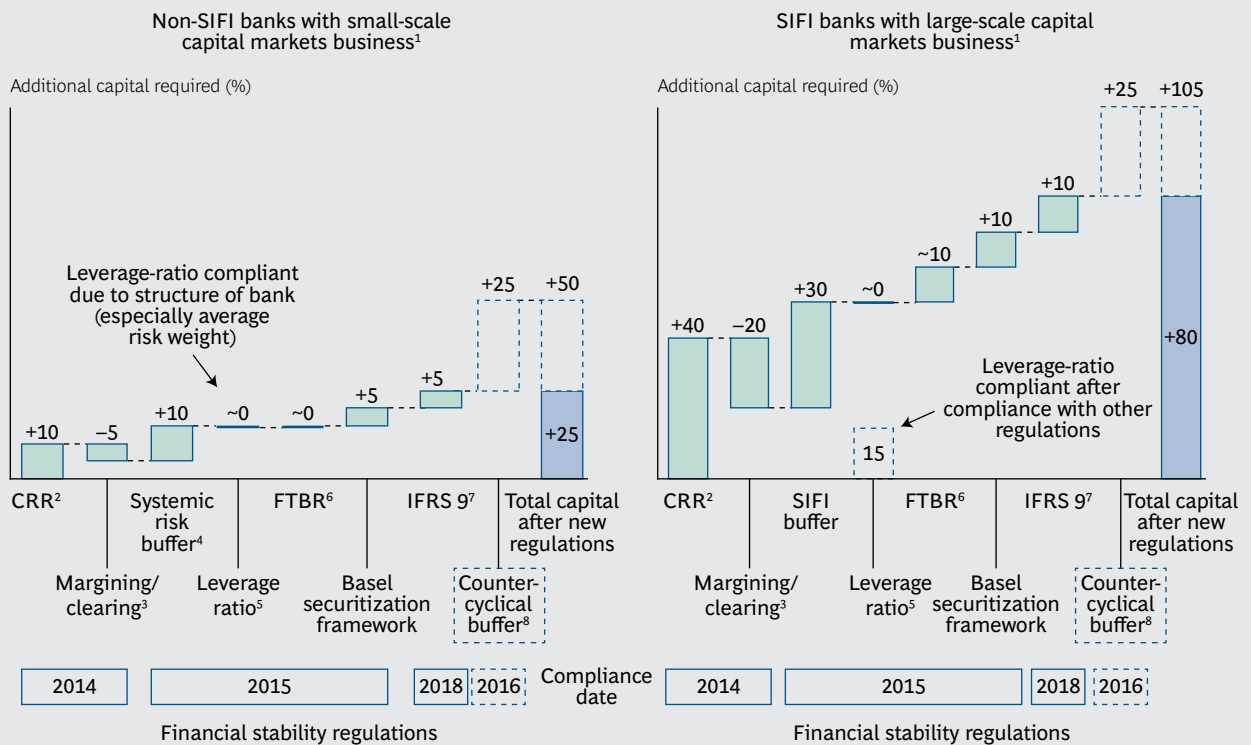
The increased capital restrictions have been aimed in particular at the capital market activities that have been identified as drivers of the financial crisis. Mandatory credit-value-adjustment charges for noncentrally cleared derivatives will increase capital requirements, but new capital requirements have been imposed even for centrally cleared trades.

Further tightening arises from mandatory capital deductions and revised capital

definitions that are not specific to capital markets. For example, unrealized gains and losses of available-for-sale securities under Basel III are no longer filtered out of banks' CET1 capital, leading to large capital swings.² The anticipation of an additional buffer for systemic risk or systemically important financial institutions further increases necessary capital by 10 to 30 percent, depending on the size, exposure, and systemic relevance of the bank.

In addition to more stringent capital ratios, accounting rules and regulations are moving toward a greater focus on fair value, which significantly increases capital and P&L volatility and makes additional capital buffers

EXHIBIT 4 | New Regulations Would Increase Capital Requirements by 25 to 80 Percent



Negative capital impact

Sources: BCG Regulatory Database; BCG analysis.

Note: Additional capital increases are relative to 10 percent Common Equity Tier1 ratio on Basel II.5 risk-weighted assets (RWA) baseline.

¹SIFI = Systemically important financial institutions.

²CRR = Capital Requirements Regulation; CRR includes credit-value-adjustment charge, financial institutions' RWA (asset value correlation), stressed effective expected positive exposure, securitization RWA/capital, CRR (exposure to central counterparty), capital deductions, and CRR prudent valuation.

³Dates based on European Market Infrastructure Regulation (clearing 2014, margining 2015) and Dodd-Frank Act (clearing 2013, margining 2015).

⁴Phase-in from January 2015 through January 2019; SIFI buffer includes systemic risk buffer.

⁵Based on CRR, new Bank for International Settlements suggestion much stricter; potential shortfall could be balanced with Tier 1 capital.

⁶FTBR = Fundamental trading-book review.

⁷IFRS = International Financial Reporting Standards.

⁸Potential measure; would be phased in from January 2016 through January 2019.

necessary. The effect is to raise capital requirements by 5 to 10 percent on the basis of International Financial Reporting Standards regulation IFRS 9 and the CRR prudent-valuation reforms.

The European Central Bank's assessments may result in further capital requirements.

The balance sheet assessments and an asset quality review planned by the European Central Bank will be an additional step in this direction and may result in further capital requirements. Additionally, the fundamental trading-book review released by the Basel Committee on Banking Supervision in May 2012 imposes significantly stricter rules that will increase capital requirements and operational complexity. Together with the Basel securitization framework, capital increases of 5 to 20 percent can be expected. Finally, the potential phase-in of a countercyclical buffer could further increase capital requirements by up to 25 percent, if triggered by the regulators.

Banks will, however, receive a benefit from clearing and margining reforms, such as the European Market Infrastructure Regulation (EMIR) and the Dodd-Frank Act. Those measures will reduce capital requirements by 5 to 20 percent, along with decreased risk weights for centrally cleared derivatives. But that will be accompanied by cost increases in capital market businesses, since more collateral will need to be managed and funded. The collateral shortfall will continue to be an industry-wide hot topic, especially given global efforts to define initial margin rules for noncentrally cleared derivatives.

Since internal models have proved vulnerable to flaws and have shown a large range of resulting risk weights, regulators' first step toward a more consistent risk calculation across banks will be to limit the benefits that accrue from internal risk modeling. This will raise the RWA and capital requirements for many banks.

The increased use of standardized risk models, along with leverage requirements, is meant to reduce potential variances in the calculation of capital ratios through triangulation. The leverage ratio as a backstop is combined with two different RWA numbers—one based on a standardized model and the other on an internal model. Such mechanisms and constraints, together with increasing standards for model validation, make it more complicated for banks to optimize RWA and are likely to significantly reduce the importance of internal models. Also, a holistic approach to bank steering will be necessary to ensure compliance with all relevant requirements, as we discuss in the next section of this report. (See "Implications: Three Key Topics on the CRO's Agenda.")

In June 2013, the Bank for International Settlements (BIS) made changes to the leverage ratio regarding the definition of exposure, aiming to align the ratio for banks worldwide—regardless of accounting standards. Final leverage-ratio rules are expected to be officially implemented in 2018. However, the next level of tightening is already under way as the market forces banks to comply with a minimum leverage ratio of 3 percent; in the future, an even higher ratio, of 4 to 6 percent, seems realistic.

A leverage ratio of 3 percent usually does not pose an additional constraint once all capital requirements from other reforms are fulfilled, especially for banks with significant loan business. But if higher minimum requirements are enacted, banks will need to actively manage their leverage ratio exposure. Altogether, they will need to prepare for capital increases of 25 to 80 percent, excluding a countercyclical buffer. If regulatory-policy risk is taken into account as well, this might not be enough.

In a January 2013 update to the liquidity coverage ratio (LCR), the BIS announced a revised plan in which the minimum ratio of 60 percent increases to the target ratio of 100 percent by equal annual amounts from January 2015 to January 2019. According to CRR, the target ratio could become binding by January 2018, but overall requirements have been eased because of market pushback on

qualifying assets and deprioritization of the net stable funding ratio.

Despite the regulators' delay in implementing the LCR, market forces are putting pressure on banks to fully comply earlier, with public disclosure in 2015. That may result in additional costs in the current low-interest-rate environment, with the number of bonds qualifying as highly liquid assets at all-time highs. Moreover, end-of-period "window dressing" will no longer be possible, because banks will need to report averages across the previous 90 days. Again, the main driver of LCR is the capital market business, with calculation requirements regarding future collateral outflows in a hypothetical 30-day stress scenario, but credit lines and deposits are also affected.

Separation and Resolution: The Threat of Subsidiarization

Separation and resolution mechanisms aim to ensure that market forces allow profitable banks to prosper while permitting unprofitable banks to fail without disrupting the funding markets. Though regulators are generally working in the right direction, domestic agendas have distorted efforts to arrive at a simple, coherent global approach. A trend toward "subsidiarization" threatens coherence and suggests that trust among national regulators is lacking.

Currently, several proposals for separation mechanisms with significantly differing scope and severity are under discussion. While they all aim to separate less risky from riskier businesses, they differ in many other aspects:

- In the U.K., the Vickers reform—currently the most restrictive approach globally—aims to ring-fence banks' local retail and small and midsize businesses from other, riskier activities.
- In Europe, the Liikanen report, the Schäuble proposal, and the French law on the separation and regulation of banking activities impose the separation of proprietary trading and prime brokerage and address other capital market activities, such as market making. A forthcoming draft of the Liikanen proposal will

overtake the Vickers reform to become the most comprehensive and restrictive to date.

- In the U.S., the Volcker Rule aims to ban proprietary trading activities and is accompanied by Dodd-Frank's swaps push-out rule, forcing swap dealers and major swap participants to place speculative derivatives into a ring-fenced subsidiary.

Though the repercussions of these reforms on any given bank are highly dependent upon the bank's business model, the Vickers reform and the Liikanen proposal are the most severe. To be effective, separation needs to happen along clearly defined lines, preferably with a globally consistent mechanism.

To be effective, separation needs to happen along clearly defined lines.

In its recent guidance papers on recovery and resolution planning, the Financial Stability Board proposed that one of two resolution strategies be applied in the event of a failure: either a single-point-of-entry strategy that imposes losses on the shareholders and investors of a bank's parent company, or a strategy of multiple points of entry where each local subsidiary of a bank absorbs losses.

In theory, the single-resolution mechanism, envisioned as a pillar of the European banking union, will serve as a good example of a working resolution mechanism if implemented. The European Union's parliament and council each made individual proposals for "bail-inable" funds. While differing slightly in the treatment of unsecured deposits, they both confirm the widely expected approach of saving most deposits—those up to €100,000—while sacrificing other claims.

Mervyn King's vest-pocket observation that banks live globally but die locally reflects the belief of many regulators who want to shield their home turf. They demand that banks

with significant business and exposure in a specific country establish a subsidiary that complies with regulations on its own. This will essentially make the multiple point of entry the default strategy for resolution mechanisms.

In the U.S., the Tarullo proposal to tighten oversight of foreign banking organizations is a good illustration of this subsidiarization. It would subject subsidiaries of foreign banks with over \$50 billion of combined U.S. assets (branch and subsidiary) to the same capital, liquidity, stress-testing, and supervision regimes as U.S. banks, essentially requiring them to set up fully compliant local legal entities, which will be locally resolvable. Other countries are debating similar proposals.

The implications of subsidiarization, if unchecked, could be significant, especially since there is no single point of entry entitling one authority to steer the resolution process. For example:

- The cost of local operations would increase because of trapped capital and liquidity.
- International regulatory harmonization and coordination would be impaired, and the disruption could spill over into other domains.
- The resolution of global banks will become more complicated because of the involvement of many national resolution agencies and differing resolution laws—or, in the end, might not even happen at all, setting regulation back to where it is now.

Banks should closely follow the progress of separation and resolution reforms. These measures could significantly affect EP—roughly estimated at 50 percent or more of the impact of financial stability reforms—owing to equally higher funding and capital costs resulting from the Liikanen proposal and the European Union’s Crisis Management Directive bail-in requirements. But banks may be able to at least partially avoid the impact of these reforms by remodeling their business activities and remaining below certain thresholds.

Prudent Operations: New Implementation Complexity

Prudent-operations reforms try to improve business conduct and procedural standards and set a baseline for other regulations. But they can have severe consequences for banks and their management, both financially and in terms of personal liability. There is a manifold landscape of reforms, but they all focus primarily on customer protection and business conduct.

To improve business conduct, criminal sanctions would be imposed for certain risk-management breaches (the Schäuble proposal). Also, new standards are being developed for insider dealing and market manipulation (the Market Abuse Directive II and Market Abuse Regulation). Some of these measures create a real risk of jail sentences for executive board members or acting individuals inattentive to potential instances of bank misconduct. Heightened compliance requirements and criminal liability for risk-management executives are seen as crucial to restoring trust in the markets and showing the public that the government is taking rigorous steps to fight misbehavior in the financial industry.

Prudent-operations reforms could have severe consequences for banks.

Another set of new regulations provides clear guidelines for clearing, trading, and infrastructure enhancements. These include requirements to clear standardized derivatives trades through central counterparties, as provided by Dodd-Frank’s Title VII and EMIR; restrict certain transactions, such as short-selling; and add more stringent trading requirements—through the Markets in Financial Investments Regulation, for example. In addition, regulators are tightening documentation and reporting requirements, again through Dodd-Frank’s Title VII and EMIR, to create transparency for markets and regulators.

The infrastructure reforms, aimed at encouraging standardization and compliance, could

force banks to make very expensive changes. The new Basel Committee on Banking Supervision risk-data-aggregation proposal (BCBS 239), for example, demands a significant remodeling of IT infrastructure, easily amounting to an investment of €50 million to €100 million for an average bank. In addition, proposed requirements for central clearing would add substantial investments for some banks due to increased collateral and infrastructure requirements.

Most of the regulations, when considered individually, do not generate a large impact. But taken together, they significantly increase operational complexity. And since neither avoiding nor mitigating most of these rules will be possible, banks will need to focus on

efficient implementation to forestall redundancy when several regulations affect the same processes, IT, and data systems. Furthermore, the liability issues that pose a new level of threat to managers must not be underestimated.

NOTES

1. It can be assumed that at least some of the banks not reporting their CET1 ratio are not yet able to meet the 7 percent hurdle.
2. Assuming that our sample banks hold 15 percent of their assets as fair value securities with an average duration of four years, a 100 bps interest-rate increase would deteriorate their Tier 1 capital by roughly €440 billion—or more than 10 percent of current levels.

IMPLICATIONS

THREE KEY TOPICS ON THE CRO'S AGENDA

TODAY, BANKS FACE A new new normal with an ever-increasing regulatory burden. Although the chief risk officer (CRO) is heavily involved in tackling this challenging environment, other executives—especially the CFO and COO—are increasingly affected as well. In order to deal with this new climate, the CRO must consider three core questions:

- How can the risk function be optimized to spend risk dollars wisely?
- How can new regulations be used to create competitive advantage?
- How can the risk function improve bankwide steering?

Spending Risk Dollars Wisely Poses a Rising Challenge

As we have seen, regulators have responded to a crisis in a complex industry with a complex rule book. For the most part, banks have reacted by expanding the scope of the risk function. BCG benchmarking indicates that before the crisis, banks dedicated roughly 2.4 percent of their full-time equivalents to the risk function. The share rose to 3.4 percent during the crisis and is roughly 4.8 percent postcrisis, with smaller banks seeing even greater expansion. (See Exhibit 5.)

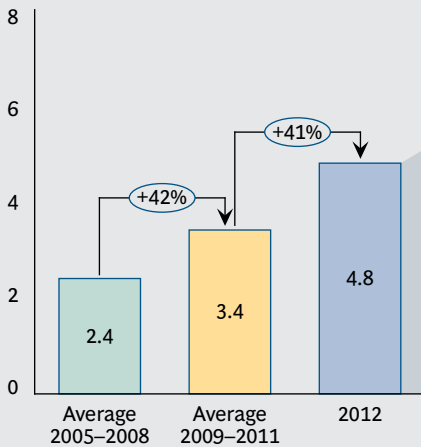
Since 2009, a large majority of banks with systemic relevance have announced cost-cutting programs. Therefore, further expansion of the risk function is not a viable option—despite its growing importance and complexity. Instead, banks must optimize their expenditure of risk dollars through organizational and process-related measures. To do so, they need a clearly structured framework to help allocate resources in a way that generates the most value. Optimizing the risk function can be achieved using a tested four-step approach. (See Exhibit 6.)

1. *Refocus governance of the risk function.* Broadly speaking, the new regulatory complexity—driven in part by increased interdependence among regulations—often results in different functions working on the same or overlapping regulatory issues. Therefore, there is greater need for smooth interaction and clearly defined accountabilities between risk and adjacent functions, especially finance, legal, and compliance. New regulatory developments must be communicated to all relevant staff, and financial implications need to be made transparent to individual business units.
2. *Install a smart operating setup that can break the traditional content-driven silo structure of the risk function.* While a setup based on the three dimensions of credit,

EXHIBIT 5 | As Risk FTEs and Costs Grow, So Does the Size of the Risk Function

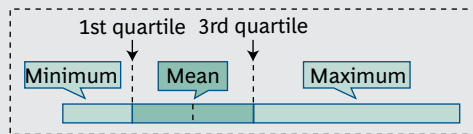
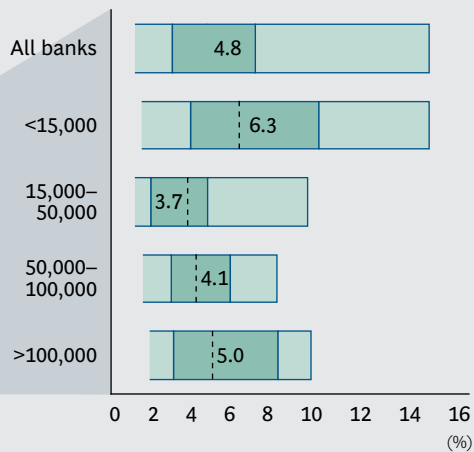
Substantial increase in the number of risk-function employees since the crisis

Risk FTEs per 100 employees



Risk FTEs as a percentage of total FTEs

Bank size, in total FTEs



Sources: BCG case experience at 25 universal banks from Australia, Canada, Europe, the U.K., and the U.S.; Expand benchmarking of 20 major European and U.S. banks; and 2013 BCG risk organizational benchmarking.

Note: FTE = full-time equivalent.

market, and operational risk allows banks to concentrate topic expertise, it can also lead to inefficiencies by duplicating similar activities and creating multiple interfaces. It is therefore preferable to shift the focus to an activity-oriented integrated functional structure. (See Exhibit 7.)

Aligning activities such as analytics, reporting, and modeling can yield several benefits, such as decreasing the number of interfaces and increasing economies of

scale. And the risk function can be made more flexible by creating activities with few or no interfaces within the risk function and between risk and the rest of the organization. This flexibility allows the CRO to move certain activities from high-cost to low-cost locations. Clearly identifying—and reducing—interfaces among activities in any given risk process can give rise to new offshoring options.

3. *Improve process effectiveness and efficiency.* By reallocating scarce resources to the

EXHIBIT 6 | Optimize the Risk Function With a Proven Four-Step Approach



- Create transparency about tasks, outputs, and key roles, and ensure clear accountabilities

- Rotate to activity-based integrated functional structure and optimize location and sourcing

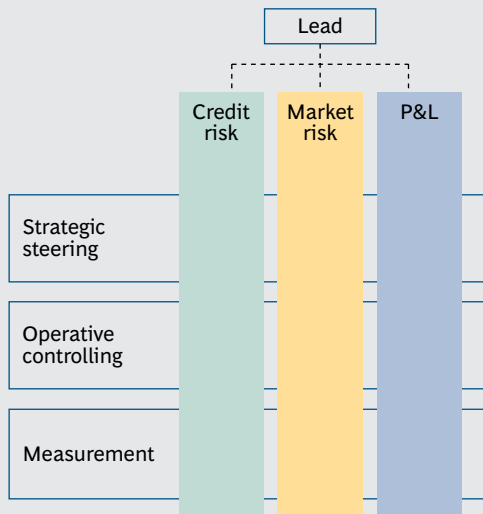
- Prioritize activities and realize lean transformation process

- Increase spans of control and reduce unnecessary management layers

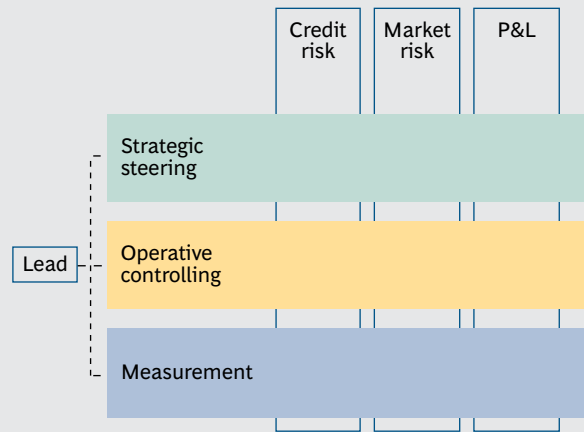
Source: BCG analysis.

EXHIBIT 7 | Cost Pressures on the Risk Function Have Led to a Stronger Focus on Activities

Shift from the traditional silo setup ...



... to an activity-aligned setup...



...using a four-step approach to ensure high operational stability during implementation:

Transparency
(Get granular)

Diagnosis
(Challenge what gets done)

Reallocation
(Cluster similar tasks)

Transformation
(Combine and optimize)

Source: BCG project experience.

highest-impact activities and reducing the number of total activities—through automation, for example—the CRO can shift resources from manual reconciliations to value-adding tasks.

For example, since credit risk management absorbs a great deal of the CRO’s resources, improving process effectiveness through risk analytics can deliver benefits quickly. Traditionally, the focus has been on backward-looking micro models for single credits that necessitated many time-consuming manual credit reviews. But using portfolio-based, forward-looking macro models can lead to competitive advantage by improving prioritization and ensuring that specialists spend their valuable time wisely—while commodity activities are performed automatically. (See the sidebar “Advanced Risk Analytics Provide Tangible Returns”.)

Industrialization based on lean principles is crucial for improving process efficiency. (See *Lean That Lasts: Transforming Financial Institutions*, BCG Focus, Septem-

ber 2012, and *Lean That Lasts, Part 2: Embarking on the Journey*, BCG Focus, September 2013.) Standardizing and automating processes and systems across the value chain lead to a simpler and more efficient operating model. In addition, implementing an integrated workflow tool, with end-to-end support for the credit process and real-time editing of data, allows for a focus on value-adding analyses.

4. *Streamline the management structure.* To support the previous steps, the risk organization should be delayered according to the “8 × 8 principle,” with a groupwide reduction to a maximum of eight layers and an increase of spans of control to eight employees within each layer. The resulting gains in efficiency through reduction of excess management capacity and interfaces can reach 30 percent and free up FTEs for real risk-management activities. What’s more, delayering can improve communication and escalation mechanisms and increase transparency.

ADVANCED RISK ANALYTICS PROVIDE TANGIBLE RETURNS

The recent rise of high-performance risk analytics has introduced more agile and advanced bank-steering capabilities and proactive risk management. These new, sophisticated analytics allow for more accurate forecasting, a better understanding of multidimensional ratios, and improved mitigation of earnings volatility effects—assuming appropriate data are available, complete, and of sufficient quality. The advanced technologies enable banks to manage large amounts of data and run complex algorithms in near-real time, reducing time and costs.

High-performance analytics also offer a reliable platform for easier scenario analyses, with options for simulating interdependencies and making volatility more transparent. For example, during an interactive planning and budgeting process, “what if” scenarios can be explored rapidly, with statistical analysis across functional silos.

The potential benefits are multifaceted and can be felt throughout the organization. On strategic, tactical, and operational levels alike, advanced analytics can be applied much faster today than they could in the

past—changing the nature of decision making from reactive to proactive.

Advanced analytics’ contribution to cost savings can be seen in the implementation of an automated early-warning scorecard for defaulting customers. (See the exhibit “A Risk Score for Customer Default Shows How Advanced Risk Analytics Can Be Helpful.”) Empirical back-testing proves that a well-calibrated early-warning scorecard running in batch mode on monthly account data can typically identify, roughly 18 months in advance, at least 75 percent of customer defaults that would occur without intervention. Up to 90 percent of risky customers can be reliably identified six months prior to default.

These results show the immense benefits and advantages of an automated early-warning system compared with a typical Basel II rating implementation—involving highly manual annual credit reviews, infrequent refreshing of customer data, and tardy warning of impending defaults when it is too late to react.

Customers with worrisome risk trends can be routed into intensive processes early,

Turning New Regulations to Competitive Advantage

Banks often react to regulatory updates with a bottom-up, single-rule perspective, postponing implementation for as long as possible without analyzing the new rules’ potential impact, portfolio implications, and interdependencies with other regulations. But by doing so, banks forgo opportunities to mitigate those regulations—or even to avoid them altogether—and to benefit from potential implementation synergies.

In fact, significant benefits can be achieved by embracing a proactive approach that prioritizes projects and is aligned with overall strategy, thereby potentially turning the implementation of new regulations into a source of com-

petitive advantage. (See Exhibit 8.) The key to this proactive approach is creating or adopting a comprehensive list of new regulations and associated requirements that includes a regulatory calendar and an assessment of individual rules. Given more than 1,200 key regulatory requirements around the world, according to the BCG Regulatory Database, this is the first step toward forming an accurate view of the main drivers of complexity.

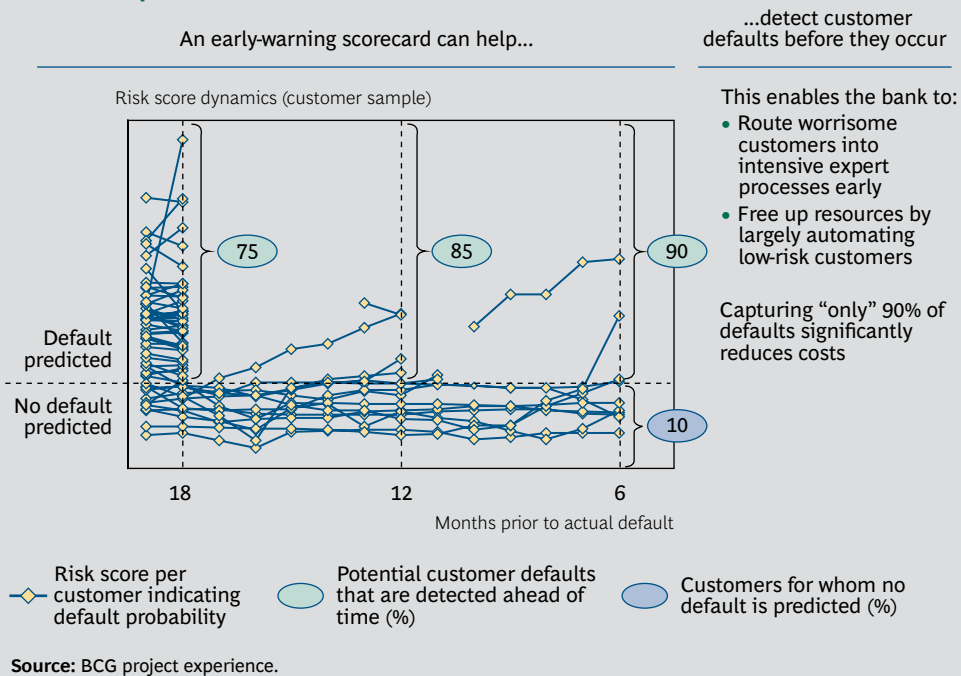
Banks should assess the impact of potential new reforms while they are still under discussion and set priority measures to cope and comply with them. By acting early, banks can define preferred outcomes, lobby proactively, and decide which like-minded peers might be potential allies. Also, informed bets on the out-

ADVANCED RISK ANALYTICS PROVIDE TANGIBLE RETURNS (continued)

leading to successful turnarounds and active mitigation of potential losses. Meanwhile, customers who are safer bets will remain well monitored using largely automated, low-resource intensive processes.

The savings that result will provide a tangible return on the already significant regulatory investments made on the data, IT infrastructure, and scoring models. It takes little incremental investment to realize this return, only intelligent analytics.

A Risk Score for Customer Default Shows How Advanced Risk Analytics Can Be Helpful



come of specific regulations should be made well in advance. Naturally, postponed or dismissed regulations would have lower priority, while regulations with constantly altering specifications would need extra attention.

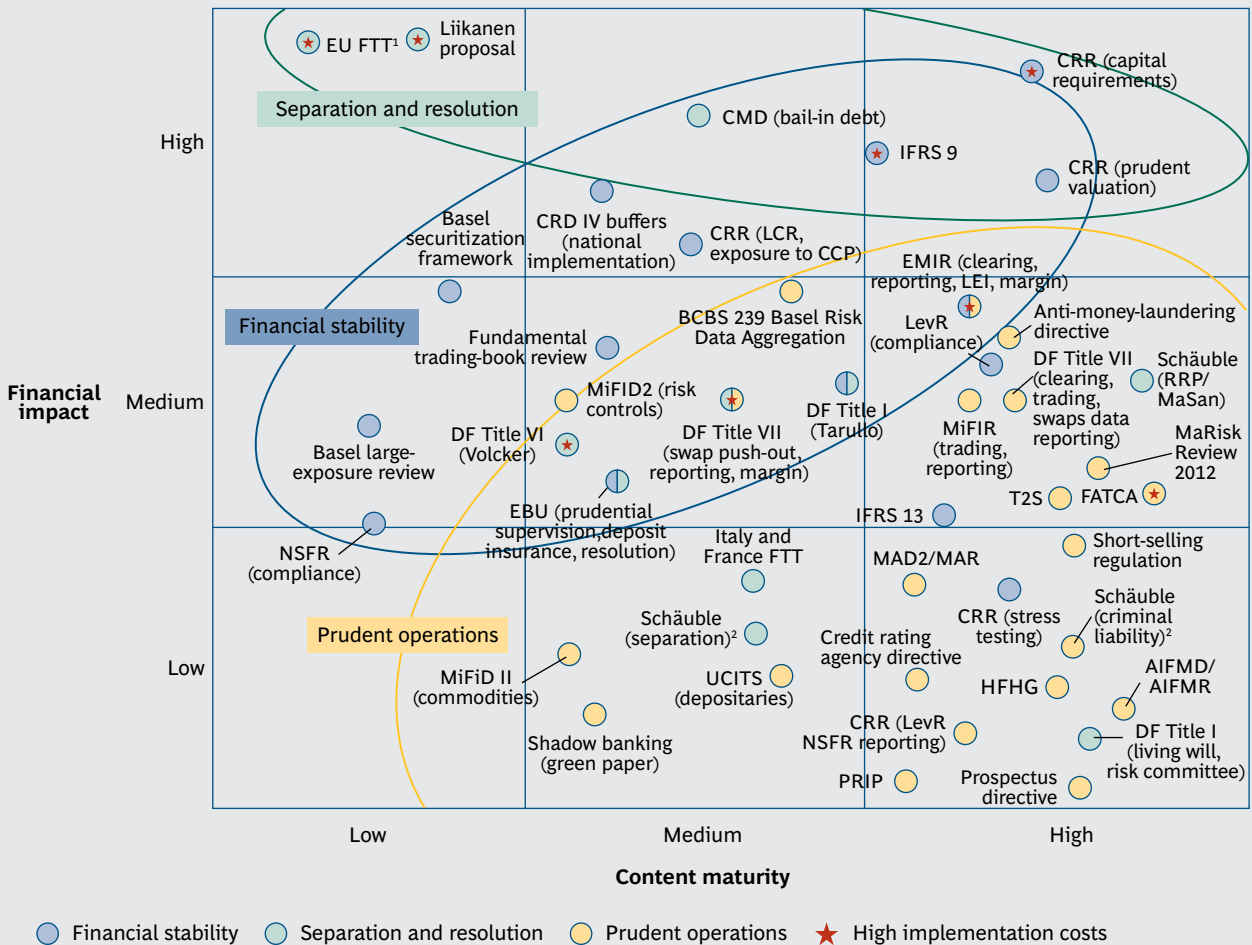
A laborious but more powerful approach is to use levers that at least partially avoid new regulations. Through adjustments to its operating model, legal structure, and tactical portfolio strategy, a bank can sometimes work around time- and resource-consuming new rules. And lobbying for time extensions or requesting no-action relief can mitigate regulatory costs.

Once a regulatory footprint has been set and the regulatory strategy is clear, banks should

refine their impact analysis and apply it to the client and product level. Only on this basis can sound strategic portfolio decisions be made. Banks can decide on a sensible reallocation of business volume to areas less affected by the regulation and on potential divestment opportunities and necessities. They may also be able to spot evolving business opportunities triggered by the new regulations.

Implementing the regulation can achieve maximum synergies if it is coordinated across functions, processes, and systems in a deep and matrixed fashion. Achieving synergies derived from regulations with similar content—such as Dodd-Frank and EMIR—is just the beginning.

EXHIBIT 8 | An Example of How Prioritizing Regulatory Implementation by Financial Impact and Content Maturity Can Create Competitive Advantage



Sources: BCG Regulatory Database; BCG analysis.

Note: Indicative analysis—not all regulations shown; EU FTT = European Union Financial Transaction Tax; CMD = Crisis Management Directive; IFRS = International Financial Reporting Standards; CRR = Capital Requirements Regulation; CRD = Capital Requirements Directive; LCR = liquidity coverage ratio; CCP = central counterparty; BCBS = Basel Committee on Banking Supervision; EMIR = European Market Infrastructure Regulation; LEI = Legal Entity Identifier; LevR = leverage ratio; DF = Dodd-Frank Act; MiFID = Markets in Financial Instruments Directive; RRR/MaSan = recovery and resolution planning/minimum requirements for recovery plans; MiFIR = Markets in Financial Investments Regulation; EBU = European Banking Union; MaRisk = minimum requirements for risk management; T2S = TARGET2-Securities; FATCA = Foreign Account Tax Compliance Act; NSFR = net stable funding ratio; MAD2/MAR = Market Abuse Directive II/Market Abuse Regulation; UCITS = Undertakings for Collective Investment in Transferable Securities; HFHG = Hochfrequenzhandelsgesetz (Germany's high-frequency-trading act); AIFMD/AIFMR = Alternative Investment Fund Manager Directive/Alternative Investment Fund Regulation; PRIIP = packaged retail investment products.

¹Separation and resolution changes due to adjustments of booking model and legal entity setup.

²The Schäuble proposal is technically adopted but subject to change by future European Union legislation (Liikanen).

Quite different regulations often affect the same processes or IT and data systems. An in-depth analysis of the necessary technical changes—down to business-processes and IT-system levels—can identify unexpected ways of exploiting inputs such as content maturity and expected compliance dates, for example. In recent years, regulatory projects have increasingly—and unnecessarily—crowded out implementation of business goals. Smart implementation can allow both

to proceed, bringing clear competitive advantages.

How the Risk Function Can Improve Bankwide Steering

Because the evolving regulatory landscape is so complex, banks must move from relatively passive risk measurement to active risk management. A holistic approach to risk management will look forward instead of backward

and incorporate integrated P&L and balance sheet forecasts, capital and liquidity steering, and coherent management of earnings volatility. Alongside new developments on risk-data aggregation and reporting, the focus will expand to include scenario analyses and potential measures to be taken.

In our view, more forward-looking steering is the first key lever to pull. Most banks concentrate on forecasting models that use historical data enriched with certain assumptions concerning areas such as GDP growth and interest-rate movements. Such models lack a detailed, truly forward-looking analysis of the macroenvironmental developments that shape the financial industry and affect the value drivers of their specific businesses.

During the financial crisis, approaches using mainly historical data caused some banks to face huge exposure to risk. The aim is to leverage macroeconomic forecasting and develop an opinion about future scenarios to maximize strategic positioning and minimize risk exposure. Nonetheless, improved forecasting must be combined with an integrated steering approach for the bank's scarce resources—especially capital and liquidity—which need to be managed in a coordinated way in order to ensure compliance with all constraints. Moreover, banks must be sure that they are crystal clear about exactly what each regulation means and what their own precise constraints will be across different regions and reforms.

To tackle this challenge, banks need to form an integrated view of multidimensional ratios and take into account their interconnectedness when analyzing past and present values and forecasting future values. Banks also need to rationalize the regulatory view of key risk classes with the economic view. The two

perspectives can differ significantly, and they need to be balanced in order to recognize existing and future opportunities, as well as threats, in a timely manner.

Finally, given changes to capital definitions and accounting, unexpected earnings volatility can subject a bank's capital basis to substantial stress. That volatility can arise in one of three ways:

- Unanticipated developments in operating results over the course of the year.
- Fluctuations in daily results due to changes in market parameters and volatile income from trading activities.
- Volatility due to the effects of International Financial Reporting Standards.

CROs and CFOs should focus on creating transparency through fair-value adjustments and continuous monitoring to avoid volatility. Transparency is a requirement for banks in making informed decisions about possible mitigation mechanisms, such as hedging or early asset disposal. This macro view should be complemented by continuous projections and monitoring to analyze potential deviations from plans.

GLOBAL BANKS—universally—face substantial and indefinite challenges in piercing the rising barrier of regulatory restrictions. Among them will be banks that adapt and prevail. The winners will be the institutions that take a long-term view of their circumstances and adopt a proactive, strategic approach to categorizing, prioritizing, and executing against the regulations of today and the uncertain regulatory environment of tomorrow.

FOR FURTHER READING

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.

Global Payments 2013: Getting Business Models and Execution Right

A report by The Boston Consulting Group, September 2013

Global Asset Management 2013: Capitalizing on the Recovery

A report by The Boston Consulting Group, July 2013

Global Wealth 2013: Maintaining Momentum in a Complex World

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An article by The Boston Consulting Group, January 2013

Risk Report 2012–2013: An Inflection Point in Global Banking

A report by The Boston Consulting Group, December 2012

NOTE TO THE READER

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