

REPORT

RISK REPORT 2012–2013

An Inflection Point in Global Banking



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RANU DAYAL

GEROLD GRASSHOFF

DOUGLAS JACKSON

PHILIPPE MOREL

PPETER NEU

THOMAS PFUHLER

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EXECUTIVE SUMMARY

***F**IVE YEARS AFTER THE onset of the financial crisis, the global banking industry in the Western world is still fragile, struggling to create sustainable value. Europe's sovereign-debt crisis, the sustainability of U.S. debt levels, and global macroeconomic uncertainty are all factors. In addition, an avalanche of regulatory reforms looms ahead, led by G-20 commitments and, in many countries, complemented by domestic measures.*

The pressure on value creation will not ease in the foreseeable future. Structural market changes driven by the shifting perspectives of equity investors, debt investors, and regulators are under way. These changes mark an inflection point that will lead the global banking industry to a "new new normal." Given the prevailing uncertainty, investors may turn away from banks, prompting institutions both to reinvent themselves and to rework their current business and operating models.

Building on our last global risk report, the 2012 version covers 145 banks that account for nearly 75 percent of banking assets in Europe, the U.S., and Asia-Pacific. As we will demonstrate, banks must take action now on multiple fronts to ensure a prosperous future for themselves and their investors.

Value Creation: An Uphill Battle in the Western World

- The economic profit of the global banking industry remained negative for the fourth consecutive year (–€89 billion in 2011) despite a positive trajectory in both the U.S. and Asia-Pacific.
- Risk costs, which dropped slightly in 2011 owing mainly to lower capital charges, are still 75 percent above precrisis levels and, thus, remain a key hindrance to value creation.
- Falling income levels, refinancing costs that are again increasing, and still-rising operating costs have hampered value creation.

- Pressure on economic profit will remain high as the industry approaches an inflection point and enters the new new normal.

The Equity Investor Perspective: Higher and More Diverse Cost-of-Equity Levels

- During the crisis, the after-tax cost of equity rose from a stable precrisis level of about 9 percent for all banks to 12 percent for commercial banks and 16 percent for investment banks.
- Despite tighter regulation, volatility and overall uncertainty seem to have shifted investor expectations to future cost-of-equity levels ranging from 10 to 14 percent—investment banks at the high end and commercial banks at the low end.
- Like many enterprises in other industrial sectors, banks need to consider business-specific hurdle rates when they set target returns.

The Debt Investor Perspective: Limited Market Access and Higher Funding Costs

- In contrast to precrisis conditions, market access is limited or comes at a price.
- Unsecured funding will be selective and, on a sustained basis, will become more costly.
- In developing their business models and steering activities, banks need to give more consideration to the availability, sources, and cost of funding.

The Regulator Perspective: An Overhaul by the End of 2012

- G-20 reforms such as Basel III, resolution regimes, and central clearing for over-the-counter derivatives will form the new global regulatory foundation.
- Banks must also contend with domestic reforms that are applicable in certain jurisdictions, for example, bank levies and the Liikanen proposal in the EU, the Volcker Rule in the U.S., and the Vickers report in the U.K.
- Market pressures are speeding the implementation of reforms, requiring banks to comply with the major elements by the end of 2012.

The New New Normal: Vast Structural Changes

- Changes will reshuffle all components of economic profit at the group, business, and product level and mandate a complete review of business and operating models.
- Although some banks have reacted to changing market perspectives, major hurdles remain. For example, for each player to

individually fulfill the minimum capital ratios, the total capital base would need to be increased by 17 percent.

- A number of trends will characterize the transition to the new normal, including deleveraging, deglobalization, revenue erosion, cost reduction, consolidation, and disintermediation.
- Facing an inflection point at the end of 2012, banks must comprehensively review their business and operating models and take a centralized, bank-wide, transformational approach at all organizational levels.

THE STATE OF THE GLOBAL BANKING INDUSTRY

FIVE YEARS AFTER THE onset of the financial crisis, the global banking industry in the Western world is still fragile. Europe's sovereign-debt crisis, the sustainability of U.S. debt levels, and global macroeconomic uncertainty are all factors. The deterioration of bank stock prices—50 to 80 percent lower than precrisis levels, with European banks suffering most—reflects the prolonged difficult environment.

To gauge how the banking industry has been faring overall, The Boston Consulting Group assessed the economic profit generated by a sample of 145 banks in Europe, the U.S., and Asia-Pacific that account for 75 percent of global banking assets in these regions.¹ (See Exhibit 1.)

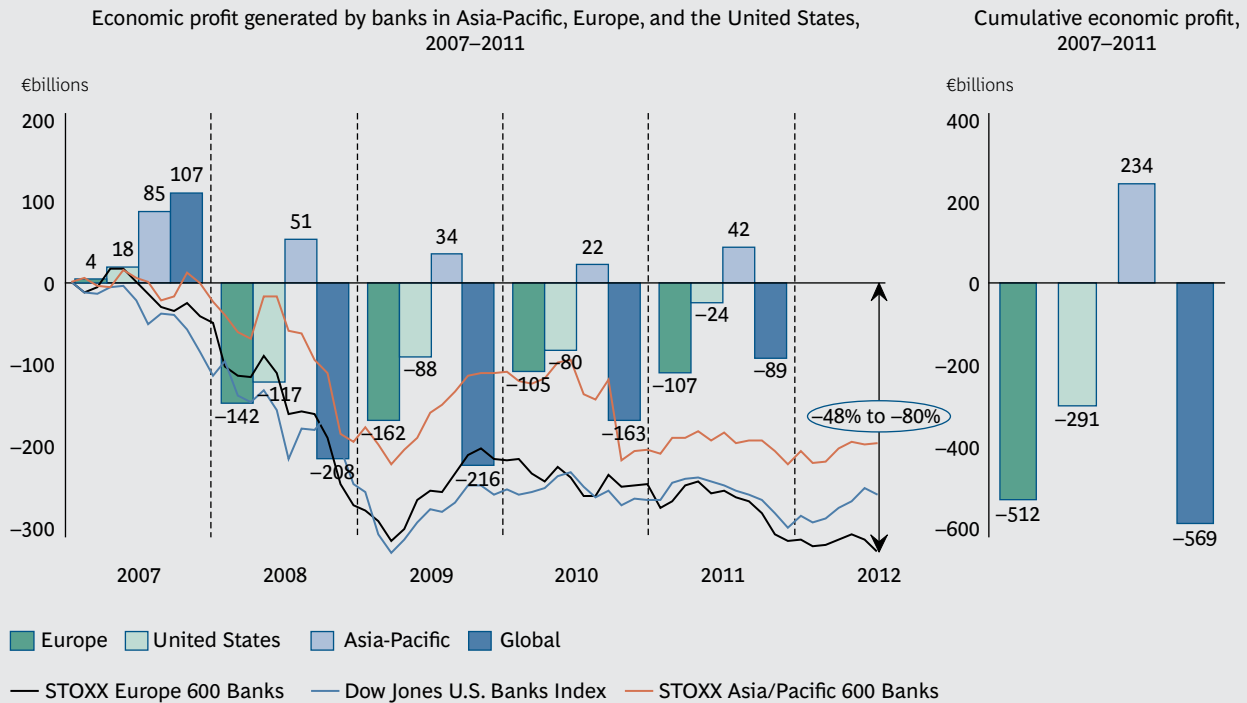
Although economic profit at the global level remained negative for the fourth consecutive year (–€89 billion in 2011), its trajectory showed continued improvement from the nadir of 2009 (–€216 billion), driven by Asia-Pacific and the U.S. The former—which, on the basis of comparatively sound economic fundamentals, regained momentum in 2011 with economic profit of €42 billion—remained the only region in positive territory every year since 2007. U.S. banks, having acted to repair balance sheets by writing off bad debts and raising capital faster than banks in any other region, also showed strong improvement (–€24 billion compared with –€80 billion in

2010). European banks, by contrast, were hit hard by Europe's escalating sovereign-debt crisis and showed slightly lower economic profit (–€107 billion) than in 2010. Huge on-balance-sheet loan books have rendered European banks more susceptible to economic downturns than their counterparts in the U.S., where roughly 70 percent of corporate borrowing is obtained directly through the bond market.

Risk Costs. Risk costs continued to be the most volatile part of the economic profit framework and remained a key drag on value creation, confirming the forecast in our last risk report. In 2011, despite a drop from the previous year, risk costs were still nearly 75 percent higher than precrisis levels worldwide. (See Exhibit 2.) Risk costs comprise loan loss provisions (LLPs), which are considered a temporary cost factor, as well as capital charges, considered a permanent cost factor.

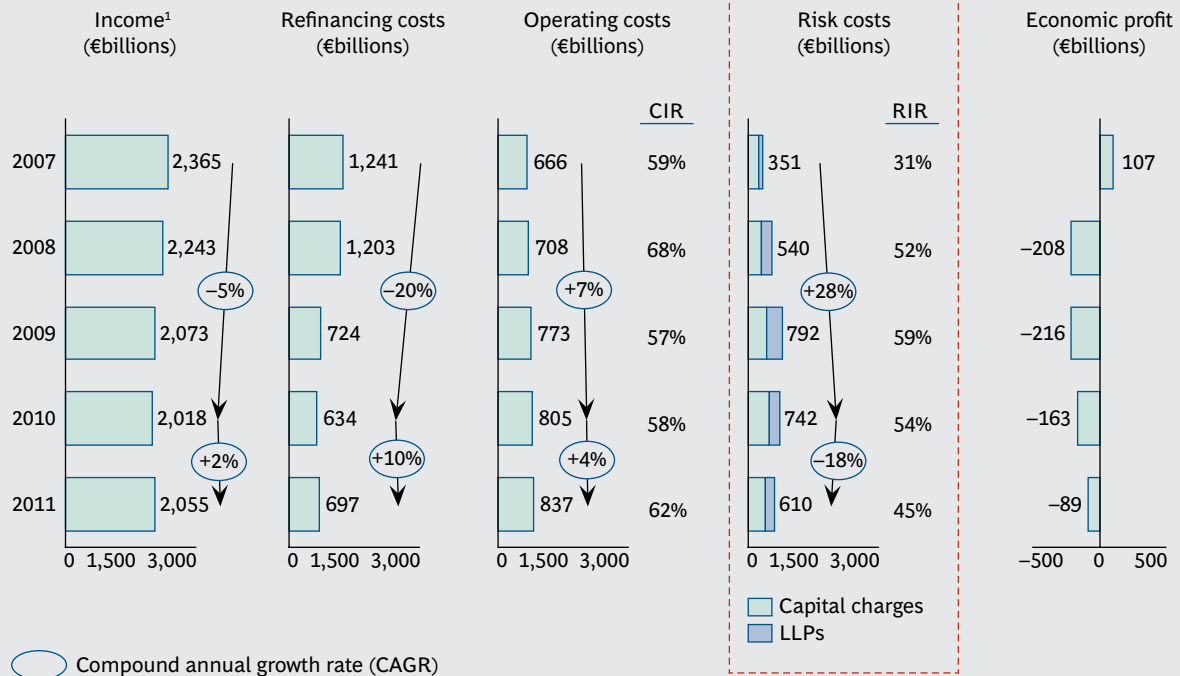
LLPs decreased globally by 20 percent to €193 billion in 2011, driven mainly by the U.S., where they roughly halved (owing to a net release of reserves). In Asia-Pacific, despite strong asset growth, LLPs decreased by 10 percent. In Europe, however, LLPs increased by 3.5 percent, owing mainly to sovereign-debt write-downs and toughening overall economic conditions in some European countries.

EXHIBIT 1 | Five Years After the Onset of the Financial Crisis, Value Creation Remains an Uphill Battle in the West



Sources: BankScope; annual reports; BCG Risk Task Force database; Bloomberg; BCG analysis.
 Note: Values may not add up to totals as a result of rounding; index performances are relative to the year-end 2006 index value.

EXHIBIT 2 | Risk and Refinancing Costs Remain a Key Drag on Value Creation



Sources: BankScope; annual reports; BCG Risk Task Force database; BCG analysis.
 Note: Values may not add up to totals as a result of rounding; CIR = cost-to-income ratio; RIR = risk-to-income ratio; LLP = loan loss provision.
¹Includes gross interest income, net trading income, net provisions, and other income.

Capital charges also fell on a global scale, driven by a reduction in the cost of equity (COE) for banks (–23 percent), which outweighed the rise of 8 percent in bank equity levels. This trend held true especially for European and U.S. banks. By contrast, banks in Asia-Pacific experienced a disproportionately strong increase in equity levels (17 percent) such that overall capital charges increased by 7 percent despite a corresponding drop in the COE for banks in that region.

Going forward, pressure on bank economic profit will remain heavy.

It is interesting to note that overall capital charges declined relative to the previous year despite the significant increase in bank capital levels—from €2,728 billion in 2010 to €2,934 billion in 2011. The key driver behind that decrease was the development of COE, which lessened slightly from its 2010 peak. The shifts in COE have brought a key question to the forefront: What is an adequate COE level for banks to set in the postcrisis environment?

In addition to risk costs, all other components of the economic profit framework—especially refinancing costs—remained skewed from their precrisis levels and exerted pressure on value creation.

Refinancing Costs. Globally, refinancing costs nearly halved from 2007 through 2010 as banks trimmed balance sheets and central banks intervened heavily. But these costs reversed course in 2011, rising by 10 percent to €697 billion (a 5 percent increase on a per asset scale). Furthermore, refinancing costs exhibited different patterns in the three regions. They increased in Europe as bleak prospects for economic growth and fiscal sustainability undermined the value of sovereign and other assets, which led to numerous downgraded ratings. They also increased in Asia-Pacific, in line with growing balance sheets and the corresponding need to tap wider sources of funding. By contrast,

refinancing costs for U.S. banks decreased owing to continuous and strong intervention by the U.S. Federal Reserve, low yields on U.S. treasuries, lower-than-peak credit-risk premiums for banks, and strong demand from investors looking for sufficient yield in moving down the capital structure.

Income. After a sustained decline that started at the beginning of the crisis, income increased by 2 percent in 2011 to €2,055 billion. The rise was driven solely by Asia-Pacific banks. On a per asset scale, however, income actually decreased by 3 percent, driven mainly by European and U.S. banks, whose weaker interest income (due to the low-interest-rate environment) and considerably lower trading income hampered year-on-year growth.

Operating Costs. Operating costs rose by 4 percent globally to €837 billion, continuing the trend of a growing operating-cost base since 2007. However, in relative per asset terms, operating costs decreased by 1 percent, signaling European and U.S. banks' cost-management efforts.

We expect that going forward, pressure on bank economic profit will remain heavy. The global banking industry is at an inflection point at which changes in the perspectives of key stakeholders—such as equity investors, debt investors, and regulators—will push the industry toward a new normal, reshuffling all components of economic profit. Given the prevailing uncertainty, investors may continue to turn away from financial institutions—whose own financial health many see as difficult to analyze or forecast, making these institutions unsure investments. This situation is prompting banks both to reinvent themselves and to rework their current business and operating models.

NOTE

1. Economic profit, which provides a comprehensive measure of a bank's financial situation, is income minus refinancing, operating costs, loan loss provisions, and capital charges. The last two represent the risk costs incurred by banks.

DRIVERS OF STRUCTURAL MARKET CHANGES

THE RECENT FINANCIAL CRISIS and its aftermath prompted key market participants to rethink their perspectives on the banking industry. We see three structural and mutually dependent outlooks shifting in the market: the perspectives of the equity investor, the debt investor, and the regulator.

In our view, the end of 2012 will signal a moment when banks will need to start making adjustments in response to these changes. It is also a point in time when virtually all major regulatory measures will be phased in. The end of 2012 therefore represents an inflection point for the financial industry.

The Equity Investor Perspective: Higher and More Diverse Cost-of-Equity Levels

COE is the expected rate of return that investors demand given the risk they take. It therefore sets the benchmark rate for the profitability a bank needs to achieve. In the precrisis period (2000–2006), after-tax COE for banks averaged around 9 percent, as banks were considered a relatively low-risk investment (with a beta factor of less than 1). However, this perception changed during the financial crisis, when it became apparent that banks could fail or require bailouts. Beta factors, as well as market risk premiums, rose significantly, pushing COE above 14 percent from the beginning of 2007 through 2011.

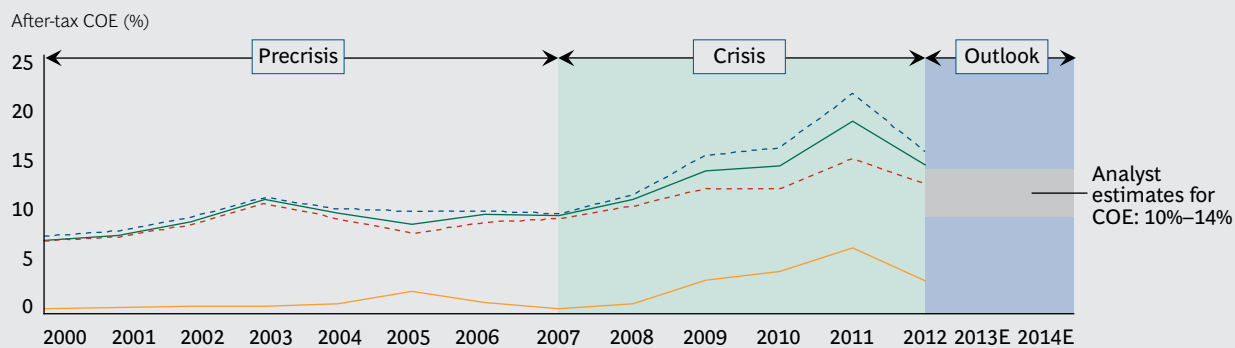
During the crisis, it also became apparent that investors increasingly expected different return levels from different types of banks. While investment banks averaged a COE of around 16 percent during the crisis, the rate for commercial banks was closer to 12 percent. Investor expectations seem to have shifted to future COE levels of 10 to 14 percent, with investment banks on the high end and commercial banks on the low end. (See Exhibit 3.) In our view, banks need to adopt a segment-specific approach to setting target returns in order to create incentives that are aligned with equity investors' interests. Companies in many other industries do this routinely.

Banks need to adopt a segment-specific approach to setting target returns.

Although one might argue that tighter regulation and increased capital should lower risk and thus reduce COE, many concerns—including the difficulty of analyzing banks, earnings volatility, the low-interest-rate environment, deleveraging, lower funding costs for corporations, changing risk outlooks on government bonds, and overall macroeconomic development—have led to a high level

EXHIBIT 3 | The Equity Investor Perspective Is Changing

Development of banks' after-tax COE, 2000–2014E



1 Precrisis (2000–2006)

- Average precrisis COE: 9.3%
- Low spread between commercial and investment banking COEs

2 Crisis (2007–2011)

- Average crisis COE: 14.4%
- Significant spread between commercial (average: 12%) and investment banking (average: 16%) COE

3 Outlook

- Investor and analyst expectations for COEs: 10%–14%, depending on business
- Banks aim for a target $ROE \geq COE$

..... COE for investment banks — COE for sample average
 COE for commercial banks — Spread between investment and commercial bank COEs

Sources: Bloomberg; analyst reports; annual reports; BCG Risk Task Force database; BCG analysis.

Note: COE = cost of equity; COE was calculated directly by Bloomberg via CAPM: $R_f + \beta \times [R_m - R_f]$; R_m = local broad index (all industries); R_f = local ten-year government bond; β = CAPM; beta is based on weekly data from the last two years; ROE = after-tax return on equity.

of uncertainty. Many banks have stated target returns ranging from 12 to 15 percent, but few have mapped out a clear path for returning to value-creating territory.

The Debt Investor Perspective: Limited Market Access and Higher Funding Costs

The perspective of debt investors is also undergoing a structural change. In the precrisis years, banks relied heavily on capital market funding. Supported by favorable ratings and implicit state guarantees, investors considered banks relatively low-risk investments. This period was also characterized by high liquidity and cost efficiency, with average credit default swap (CDS) spreads (proxies for funding costs) around a low and stable 30 basis points. (See Exhibit 4.)

But the ongoing crisis changed this perception. Banks suddenly appeared vulnerable in a variety of ways, and rating agencies responded with downgrades. Worries about sovereign bonds put additional pressure on

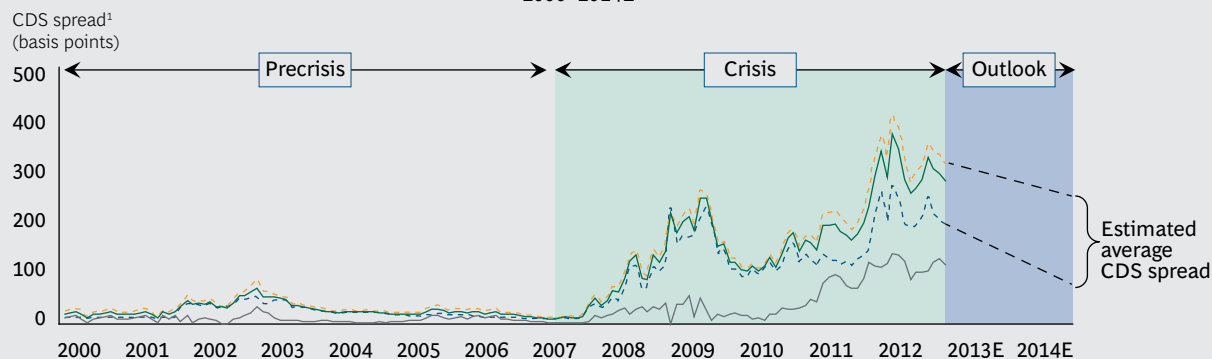
balance sheets and reduced the value of collateral. Access to funding markets became more limited and more expensive, as is illustrated by an increase in average CDS spreads to 160 basis points, roughly five times the precrisis level—and even higher on average for commercial banks, driven by high exposure to sovereign bonds, especially in Europe.

As a consequence, banks have reverted to central-bank liquidity, as well as deposits and secured funding as alternative sources. Nonetheless, a need for capital market funding will persist. But there will be lasting drawbacks:

- A perceived limited transparency concerning the risks attached to debt securities as well as to bail-in and resolution mechanisms
- Increased asset encumbrance on bank balance sheets and the subordinating of unsecured investors
- Lower demand for bank debt, as insurers and pension funds—major providers of

EXHIBIT 4 | The Debt Investor Perspective Is Changing

Development of bank CDS spreads as proxies for funding costs, 2000–2014E



1 Precrisis (2000–2006)

- Average precrisis CDS spread: 30 basis points
- Low spread between commercial and investment banking

2 Crisis (2007–2011)

- Average crisis CDS spread: 160 basis points
- Significant spread between commercial (average: 175 basis points) and investment banking (average: 125 basis points)

3 Outlook

- CDS spreads are expected to decrease slightly but remain at a relatively higher level

--- Commercial banks

--- Investment banks

— Sample average

— Spread between investment and commercial banks

Sources: Bloomberg; BCG Risk Task Force database; BCG analysis.

Note: The perceived weakness of commercial banks from the European periphery in our sample—which have had funding difficulties and suffered from their exposure to sovereign bonds—is the prevailing factor in the positive spread between commercial and investment banks; CDS = credit default swap.

¹Five-year CDS spread.

long-term funding to banks—reduce their exposure to banks in reaction to regulatory changes affecting their own investment strategies

Overall, in light of these trends, capital market funding will be selective and more costly on a sustained basis. Banks thus need to give strong consideration to the availability, sources, and cost of funding in their business models and steering mechanisms—especially at a business unit and product level.

The Regulator Perspective: An Overhaul by the End of 2012

The financial crisis has led to an extensive reform agenda comprising two sets of regulations. First, the G-20 nations have agreed to a set of measures that will form a global regulatory baseline. All banks, regardless of jurisdiction, will be expected to follow these rules as a minimum standard. Second, domestic reforms in many countries will also be phased in. These guidelines will be applicable to banks active in these jurisdictions. (See Exhibit 5.)

The G-20 measures concern five principal domains.

- **Overall Stability of the Banking System.** Through the revised Basel frameworks (Basel II.5 and Basel III), regulators are tightening regulations related to capital, securitization, derivatives, market risk, and other areas. These frameworks also address the amount and quality of the highly liquid assets that banks will be required to hold, as well as long-term funding issues. In particular, global as well as domestic systemically important financial institutions (SIFIs) will be required to have recovery and resolution plans in place. Regulatory oversight is being restructured, and reporting and disclosure rules are being made stricter and more comprehensive.
- **Capital Market Reforms.** These measures, centered mainly on the clearing, margining, and trade transparency of over-the-counter (OTC) derivatives, are detailed in regulations such as the European Market

EXHIBIT 5 | A Comprehensive Overview of Regulatory Reforms

G-20 measures form a global regulatory foundation, supplemented by domestic reforms

	Regulatory theme	Description	Region	Expected phase-in date	Impact	
G-20 global reforms	Overall bank stability	Capital	Higher capital, contingent-capital, and stress-testing requirements for trading and banking books and SIFIs	Worldwide	2011–2018	
		Trading-book capital	Stricter capital requirements for trading book (for example, stressed VaR, IRC, and resecuritization)	Worldwide	2011–2012	
		Capital base	Stricter capital requirements and higher risk weights for exposures to financial institutions and derivatives	Worldwide	2013–2018	
		Leverage	Non-risk-sensitive capital requirements (in relation to total assets and defined off-balance-sheet items)	Worldwide	2017	
		SIFI surcharge	Additional core Tier 1 capital requirements on top of Basel III capital ratios for global and domestic SIFIs	Worldwide	2016–2018	
		Stress testing	Regular assessment of capital adequacy under stressed economic scenarios	Worldwide	2011–2013	
		Trading-book review	Revised approach for trading-book capital requirements (for example, expected shortfall instead of VaR)	Worldwide	TBD	
		Liquidity	Requirements for an adequate level of liquidity under stressed conditions and longer-term funding	Worldwide	2012–2017	
		LCR	Requirement to hold highly liquid assets to withstand a 30-day period of severe stress	Worldwide	2014	
		NSFR	Requirement to maintain a level of high-quality longer-term funding	Worldwide	2017	
		Liquidity-monitoring tools	Monitoring and reporting of liquidity metrics, including LCR and NSFR	Worldwide	2012	
		Intraday liquidity	Monitoring and reporting of intraday liquidity indicators	Worldwide	TBD	
		Resolution (TBTF)	Addressing TBTF through resolution regimes, including RRP and supervisory bail-in mechanisms	Worldwide	2012–2014	
		RRP	Requirement to plan for recovery in times of crisis and for resolution without endangering systemic functions	Worldwide	2012	
	Bail-in	Introduction of bail-in debts and respective supervisory power to impose losses on debt holders	Worldwide	2018		
	Reporting and oversight	Enhancement of corporate governance, reporting, and regulatory oversight	Worldwide	2012–2017		
	Internal audit function	Principles regarding internal audit function of banks	Worldwide	2012		
	Capital disclosure	Reporting and public disclosure of capital components	Worldwide	2013–2017		
	Enhanced risk reporting	Principles to strengthen banks' risk-data aggregation and reporting capabilities	Worldwide	2013–2016		
	Regulatory oversight	Intensification of regulatory oversight	Worldwide	2012		
	Capital market activities	Central clearing	Requirement to clear standardized derivatives through central counterparties	Worldwide	2012	
		Trade transparency	Requirements to publish trade details (for example, price and volumes) before and after execution	Worldwide	2012–2014	
		Pretrade transparency	Obligation to publish quotes and orders for derivative transactions before execution	Worldwide	2012–2014	
		Posttrade transparency	Requirement to report details of executed trades to trade repositories	Worldwide	2012	
Global LEI		Globally unique identifiers of parties to financial transactions	Worldwide	2013		
Dark-liquidity regulations		Transparency and reporting requirements regarding dark liquidity	Worldwide	2014		

	Regulatory theme	Description	Region	Expected phase-in date	Impact	
G-20 global reforms	Capital market activities	Margining for uncleared derivatives	Initial and variation margin requirements for noncentrally cleared derivatives	Worldwide	2012	
		Trading limitations	Limits on trading activities related to platform, positions, and algorithmic trading	Worldwide	2012–2014	
		Platform limitations	Requirement to trade standardized derivatives only on exchanges or regulated electronic-trading platforms	Worldwide	2012–2014	
		Position limits	Limits on the number of commodity-based financial instruments	Worldwide	2012–2014	
		Algorithmic trading	Organizational, operational, and disclosure requirements for firms applying algorithmic trading (including HFT)	Worldwide	2014	
	Shadow banking	Shadow-banking entities	Regulation of shadow-banking entities, for example, money market funds, ETFs, and SPVs	Worldwide	TBD	
		Money market funds	Reform of money-market-fund regulation	Worldwide	TBD	
		Other shadow-banking entities	Regulation of other shadow-banking entities such as ETFs, SPVs, and hedge funds	Worldwide	TBD	
		Shadow-banking activities	Regulation of shadow-banking activities, especially those, such as securitizations and repos, involving banks	Worldwide	TBD	
		Securitization	Risk retention and measures to enhance transparency and standardization related to securitizations	Worldwide	TBD	
		Repos and securities lending	Regulation of secured financing contracts (repos) and securities lending	Worldwide	TBD	
	Consumer protection	Business conduct	Provisions to protect consumers' interest and establishment of conduct authorities	Worldwide	2013–2014	
		Disclosure	Enhanced disclosure requirements to clients (for example, investment strategy and conflicts of interest)	Worldwide	2012–2014	
		Mortgage reforms	Minimum standards for mortgages regarding, for example, organization, underwriting, services, and resolution	Worldwide	2013	
	Further bank and nonbank regulations	Compensation principles	Provisions on remuneration schemes of banks	Worldwide	2012–2012	
		Accounting standards	Implementation of globally consistent accounting standards (for example, for financial instruments)	Worldwide	2012–2014	
		Derivatives market participants	Regulation and oversight of entities (other than banks) engaged in the derivatives market	Worldwide	2012	
		CCPs	Oversight of CCPs through which derivatives are cleared (for example, margin requirements and governance)	Worldwide	2012	
		Derivatives market intermediaries	Regulation of market participants (other than banks) engaged in dealing in or intermediating derivatives	Worldwide	TBD	
		Credit-rating agencies	Oversight, transparency, and accountability of credit-rating agencies and external credit ratings	Worldwide	2010	
	National reforms	Overall bank stability	Business separation and restriction	Separation and restriction of risky business activities, for example, through retail ring-fencing or derivatives push-out	UK/EEA, US	2012–2018
Ring-fencing			Ring-fencing of retail-banking activities or separation of trading activities	UK/EEA	2018	
Derivatives push-out			Push-out of certain derivative-trading activities into separate legal entities	US	2013	

EXHIBIT 5 | A Comprehensive Overview of Regulatory Reforms
Continued

	Regulatory theme	Description	Region	Expected phase-in date	Impact	
National reforms	Overall bank stability	Fund sponsorship restriction	US	2012–2014	Medium impact	
		Contingent and sectoral surcharge	CH, UK, US	2013–2018	High impact	
		Large exposures (revised)	EEA, US	2012–2013	High impact	
	Capital market activities	Registration and business conduct	Required registration and compliance with business conduct rules	EEA, CH, US, CN	2012–2014	Low impact
		Market participant registration	Required registration of entities engaging in capital market activities	US, CN	2012	Low impact
		Internal business-conduct rules	Rules for registered market participants regarding internal structure and record keeping	US	2012	Low impact
		External business-conduct rules	Rules for registered market participants in dealing with their counterparties	EEA, CH, US	2012–2014	Low impact
		Proprietary-trading ban	Prohibition against engaging in proprietary trading	US	2012–2014	Medium impact
		Short-selling regulation	Prohibition of uncovered short-selling for certain types of financial instruments	EEA	2012	Low impact
		Financial-transaction tax	Taxation of defined financial transactions	EEA, FR	2012–2013	High impact
	Consumer protection	Deposit insurance	Higher deposit-insurance standards	EEA, US, HK, SG	2011–2012	Medium impact
		Payment cards and fund transfers	Protection for payment card (for example, credit card) consumers and limits on fees chargeable for fund transfers	EEA, US	2010–2012	Medium impact
	Further bank and nonbank regulations	Bank levy	Additional bank taxation	AT, FR, DE, UK	2011	High impact
		Foreign-account reporting	Reporting requirements for foreign financial institutions on funds held by U.S. citizens (FATCA)	US	2012–2017	Medium impact
		Insurance regulation	Regulation of insurance companies, especially related to capital requirements (for example, Solvency II)	EEA, SG	2013	Low impact

High impact Medium impact Low impact

Sources: BCG Risk Task Force; BCG analysis.

Note: SIFI = systemically important financial institution; VaR = value at risk; IRC = incremental risk charge; LCR = liquidity coverage ratio; NSFR = net stable funding ratio; TBTF = too big to fail; RRP = recovery and resolution plan; LEI = legal entity identifier; HFT = high-frequency trading; ETF = exchange-traded fund; SPV = special-purpose vehicle; CCP = central counterparty; FATCA = Foreign Account Tax Compliance Act; TBD = to be determined; AT = Austria; CH = Switzerland; CN = China; DE = Germany; EEA = European Economic Area; FR = France; HK = Hong Kong; SG = Singapore; UK = United Kingdom; US = United States.

Infrastructure Regulation (EMIR) and Markets in Financial Instruments Directive (MiFID) in the EU and Dodd-Frank in the U.S. In addition, banks will be required to execute all trades on exchanges or regulated electronic-trading platforms and to set restrictions on the size of positions and on algorithmic trading.

- *Shadow Banking.* The interaction of the traditional banking sector with nonbank financial intermediaries and entities—known as shadow-banking organizations—is being reviewed. Direct regulation of shadow-banking organizations such as money market funds and hedge funds is being considered. This area of

reform is not as advanced as others, however.

- *Consumer Protection.* Stricter product-transparency requirements are being placed on banks, focusing especially on offerings such as consumer mortgages. Adherence to these measures will be overseen by newly formed authorities such as the Financial Conduct Authority in the U.K. and the Consumer Financial Protection Bureau in the U.S.
- *Further Bank and Nonbank Regulations.* New provisions will monitor compensation schemes, accounting standards, central counterparties, nonbank derivative intermediaries, and credit-rating agencies.

Domestic reforms along similar lines are also under way. Although these initiatives concern mainly banks domiciled in specific countries, their reach can, in some cases, cross borders.

- *Overall Stability of the Banking System.* One example is the Lincoln Amendment to the Dodd-Frank Act in the U.S. The amendment aims to force banks with access to federal assistance to spin off their lucrative swap desks—the so-called derivatives push-out. Another is the ring-fencing of retail-banking operations from riskier investment-banking activities in the U.K., in the wake of the Vickers report. More recently, a similar proposal to separate trading entities—if certain thresholds are exceeded—has been made in Europe by the Liikanen commission.
- *Capital Market Reforms.* Both the registration requirement for entities engaging in derivatives trading and the prohibition of proprietary trading (related to the Volcker Rule) are imposed by the Dodd-Frank Act in the U.S. In the EU, a ban on naked short-selling is in place, and additional taxation on financial transactions is about to be implemented.
- *Consumer Protection.* Many countries have tightened insurance requirements on bank deposits. In the U.S. and the EU, provisions regarding debit cards, credit cards, and electronic funds transfers—such as

the Credit Card Accountability Responsibility and Disclosure Act (known as the Credit CARD Act), the Durbin Amendment to the Dodd-Frank Act, and the Single Euro Payments Area, or SEPA—have been adopted.

- *Further Domestic Bank and Nonbank Regulations.* New measures include bank levies (as introduced by Austria, France, Germany, and the U.K.), a requirement for foreign financial institutions to report on accounts held by U.S. citizens (Foreign Account Tax Compliance Act, or FATCA), and enhanced regulation of insurance firms in the EU (Solvency II) and Singapore.

The global regulatory-reform agenda is now entering the final stage of implementation.

The global regulatory-reform agenda is now entering the final stage of implementation. Although some regulations—such as the market risk rules of Basel II.5—have already been introduced, virtually all remaining major reforms will be phased in to a certain degree by the end of 2012 or in early 2013. Basel III's capital and liquidity requirements are a case in point.

Furthermore, recovery and resolution plans to cope with market shocks have already been mandated for large banks in key jurisdictions such as the U.S. and the U.K., with all other SIFIs required to follow in early 2013. Central clearing, trade transparency, and the margining of OTC derivatives will be required in all major jurisdictions by the end of 2012.

Most domestic regulatory reforms are also linked to the end of 2012. (See the sidebar, “Smart Regulation: A Shift in Mindset Is Required.”) For instance, the Volcker Rule in the U.S. already requires banks to engage in good-faith efforts toward achieving full regulatory compliance.

SMART REGULATION

A Shift in Mindset Is Required

In order to be effective, financial regulations should be relatively few in number, easy to understand, difficult to manipulate, and capable of bringing about desired behaviors. Yet a plethora of banking-sector rules is generating excess complexity. Instead of having regulators set a multitude of limits that may or may not ward off another systemic banking crisis, in our view what is truly needed is a shift in mindset toward fewer, more fundamental rules that enable a free-market economy to work.

The regulatory environment in the precrisis years offered a broad range of perverse incentives that encouraged banks to leverage to the hilt. Being “too big to fail” permitted institutions to seize refinancing advantages of up to 90 basis points, driven by an implicit government guarantee. More recently, by tapping central-bank programs, banks could access funding at very low costs.

For instance, the long-term refinancing operation of the European Central Bank (ECB) provided banks with unlimited three-year funding at 1 percent. All told, over the past three years, banks have received a direct subsidy of more than €75 billion in estimated profits as a result of U.S. Federal Reserve and ECB actions. In addition, regulatory arbitrage possibilities helped decrease capital requirements and inflate leverage. Trading-book capital requirements—after the revision to the market risk framework in Basel II.5—are still approximately 30 percent lower than banking-book requirements for the same level of risk.

In order to create incentives that encourage desired behaviors, market discipline must be restored, ensuring that gains as well as losses are privatized. Key measures in this approach are cascading balance sheets, resolution regimes, and possibly a smart separation of the banking system.

Contingent convertibles and bail-in debt are tools to achieve cascading balance sheets and ensure every investor’s participation in a bank’s gains and losses. Resolution regimes ensure that a bank can be allowed to fail as any other company can. The importance and effectiveness of a proper approach to resolution has been proved by the “flash” resolution of a major U.S. bank by regulators in 2008. Despite the bank’s size—more than €200 billion in assets—its resolution went swiftly and without contagion.

Ultimately, it is worth discussing whether a separate banking system is a requirement for the two aforementioned instruments—cascading balance sheets and resolution regimes—to work. In addition to proposals related to the Volcker Rule in the U.S. and the Vickers report in the U.K., the Liikanen report calls for a separation of trading activities from deposit-taking activities in the EU if assets measured at fair value (held-for-trading and available-for-sale assets) exceed a certain threshold (15 to 25 percent of total assets, or €100 billion). The report also suggests that banks should hold additional capital against high-risk businesses and should possess debt that could be bailed-in in the event that a recapitalization is needed. Overall, the Liikanen proposal could transform the picture of the European banking landscape. Sixteen to 21 banks that account for 50 to 63 percent of the assets in Europe could be affected by the proposal and thus required to separate their trading activities. (See the exhibit, “The Liikanen Separation Is Likely to Affect 16 to 21 European Banks.”)

The Liikanen committee sees several benefits in strictly separating trading activities from commercial banking. Among them are improved risk sensitivity for trading-related funding costs and enhanced simplicity and transparency—without limiting banks’ ability to provide a wide

range of services. Taking risks with deposits, as well as interconnectedness between banks, could be sharply reduced. The experience of a major insurance company serves as a relevant case that a smart separation can bring clear benefits. Due to the legally and financially separated setup of its life, health, and property and casualty business lines, the collapse of the life business line—the consequence of an aggressive investment strategy and a stock market downturn in 2003—passed without contagion to the other business lines.

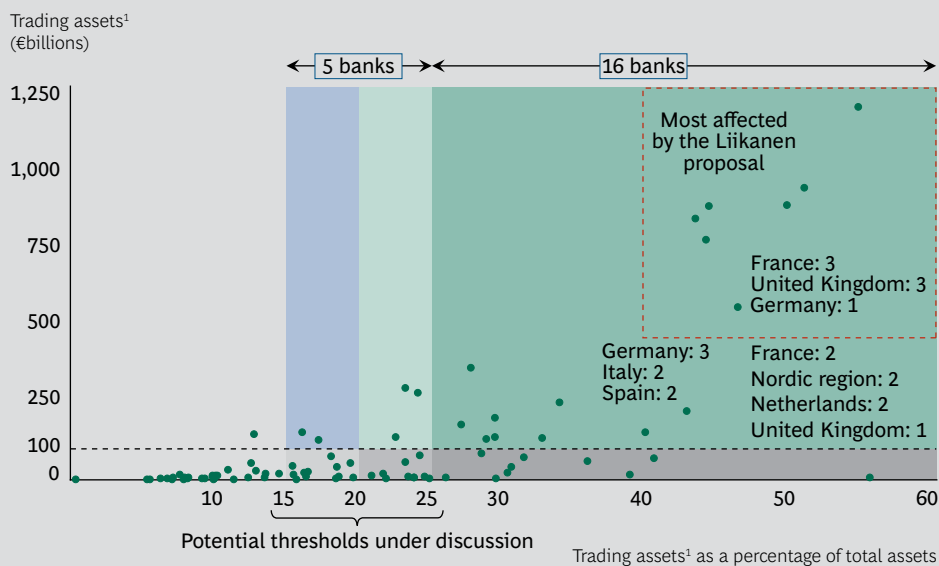
We believe, however, that all banks being forced to separate their trading entities will experience a significant cost increase. Independent trading entities require independent capitalization and funding strategies. On a group level, higher refinancing costs will occur due to less diversification. Moreover, a separation challenges cost and business structures, particularly in areas such as technology and knowledge transfer. Even though deposit entities will profit from lower

refinancing costs, the overall separation costs for banks could reach €2 billion per year. As a consequence, a two-tier banking system in Europe could magnify a competitive disadvantage with U.S. peers.

All of the above measures have been seen as key tools in the new regulatory framework. But a sweeping question remains: Four years after Lehman Brothers' collapse, how many of these key rules have been implemented effectively? Moreover, the numerous other measures that regulators are now designing are tightening banks' belts to such an extent that considerable business is shifting to the largely unregulated shadow-banking sector. Whether this shift will increase overall financial stability remains to be seen.

The effect of a still-incomplete mind shift can be seen in Europe at the moment. An overleveraged financial sector is significantly aggravating the European sovereign-debt crisis. Troubled banks' need for government support weakens the creditworthiness of

The Liikanen Separation Is Likely to Affect 16 to 21 European Banks



Sources: BankScope; BCG analysis.

Note: Sample size = 82 banks; Switzerland is not included.

¹Trading securities, securities available for sale, and derivatives.

SMART REGULATION Continued

sovereign debt, which in turn weakens the creditworthiness of the banks through their sovereign holdings. Breaking this link will likely facilitate a solution to the crisis. So instead of a debate about, for example, whether a 9 percent capital ratio (including a sovereign buffer) is the right ratio, a viable and concrete proposal on this highly discussed topic in Europe could be the following:

First, all new capital that banks raise by a specific date—say, June 30, 2013—would be subsidized at 20 percent. Thus, for each euro of bank capital raised, banks would receive 20 cents on top with no strings attached or payback requirement. Second, to refinance this scheme, a fee of, for example, 20 basis points of nondeposit liabilities and 2 basis points on notional outstanding derivatives could be levied. The subsidy would cost roughly €45 billion

per 10 percent increase in the capital of banks in the euro zone, whereas the corresponding levy should raise about €40 billion to €50 billion per year. Thus, for each 10 percent increase in capital, the levy would need to be charged for one year in order for the scheme to be self-financing.

This proposal provides an incentive to banks to raise capital quickly: the subsidy is a private benefit—while the levy is a cost to the entire banking system. The incentive is reinforced by the levy-induced increase in the cost of debt. The scheme also removes the stigma currently associated with raising capital. Moreover, it could actually lead to reproach for not raising capital. Additionally, the scheme is self-financed by the financial sector and thus fulfills the desire for fairness. Balance sheet deleveraging and credit crunches might be avoided as well.

Ultimately, despite the fact that many new regulations have yet to be put into law and that postponement discussions on some (such as Basel III in Europe and the U.S.) are ongoing, banks need to review where they stand now. Investors demand that banks achieve compliance status ahead of deadlines, so being behind the curve will damage any bank's market standing. Some leading banks are already fully in line with the new regulatory

framework, highlighting their level of diligence to investors and raising the bar for their competitors. In addition, domestic regulators and other relevant parties are pushing to proceed with implementation of certain regulations ahead of formal legislation. It is therefore critical that banks take the initiative.

IMPLICATIONS OF THE “NEW NEW NORMAL”

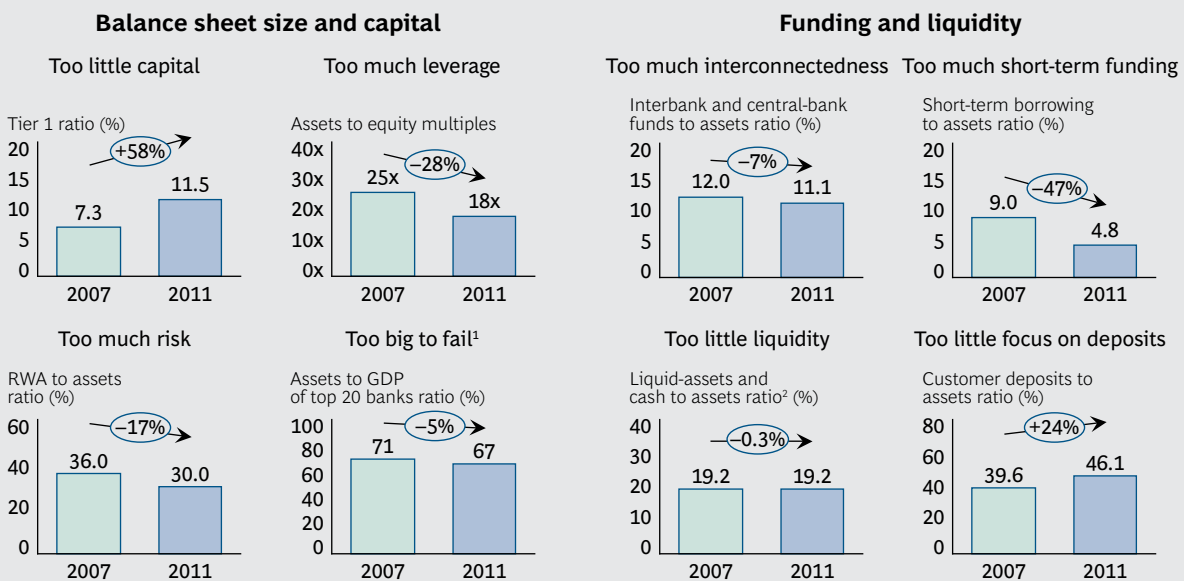
THE IMPLICATIONS OF THE new normal are extensive. Bank income, refinancing costs, operating costs, and risk costs will all be affected at the group, business unit, and product level, thereby impacting economic profit.

There has been progress mainly in terms of balance sheet size and capital, but banks have also started to tackle shortcomings related to funding and liquidity. (See Exhibit 6.) However, the need for further major initiatives remains.

Indeed, since the onset of the financial crisis, banks have reacted to changing market per-

Risk Costs. Risk costs are primarily affected through tighter capital requirements, invest-

EXHIBIT 6 | Banks Have Reacted to Changing Market Perspectives



Sources: BankScope; BCG Risk Task Force database; BCG analysis.

Note: RWA = risk-weighted assets.

¹Top 20 global banks in terms of total assets in 2011 (simple average).

²Highly liquid assets are those that can be converted into cash quickly with minimal price impact, as well as cash (that is, cash itself and non-interest-earning balances with central banks).

ment banks bearing the brunt of the new rules. In our view, however, many banks are underestimating the impact on their loan books in corporate and retail banking.

Globally, banks will be confronted by a capital shortfall of around €474 billion (about 17 percent of their current capital base) to meet minimum capital ratios—not counting additional buffers investors require. (See Exhibit 7.) Also, national supervisors will apply stricter rules to large exposure regimes, as well as to mandatory recovery and resolution regimes, making it necessary to review legal-entity structures. Capital efficiency will be affected, and capital demands could therefore change in an unfavorable way.

At the product level, the disparity in capital charges between high-risk and low-risk products is widening, and virtually all risk-return profiles will be reordered. Spread effects will be particularly burdensome for already capital-intensive products (such as corporate loans) and for products that have already been hit by numerous risk-weighted asset (RWA) increases (such as derivatives that are not centrally cleared). We usually see the greatest effects on banks' businesses with BB- and B-rated customers. In addition to effects

on capital charges, accounting standards are evolving toward expected-loss-based provisioning and will affect bank loan-loss provisions as well.

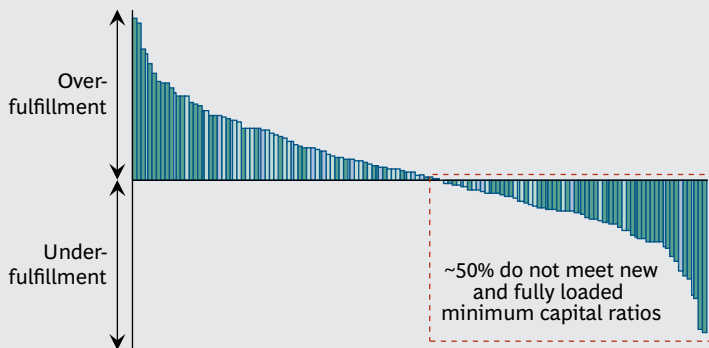
Refinancing Costs. Refinancing costs are affected primarily by the new margining and liquidity rules. Margining rules for cleared and uncleared derivatives are estimated to demand up to €5,500 billion in additional collateral (roughly doubling the collateral base currently held in the markets). To meet the liquidity coverage ratio (LCR), another €1,800 billion in unencumbered highly liquid assets (around 20 percent of banks' 2011 cash and liquid assets) will be needed. Rehypothecation and the margining efficiency of central counterparties (CCPs) can help in the management of this demand, but only to a certain extent, as netting efficiency might even be reduced by rolling over portfolios to CCPs. Ultimately, banks need to fund this additional stock of collateral and liquid assets, and that funding will be reflected in refinancing costs.

The amount of long-term funding needed to fulfill the net stable funding ratio (NSFR) is estimated at approximately €2,800 billion (around 10 percent of banks' 2011 adjusted

EXHIBIT 7 | Meeting Capital Requirements Will Require Major Additional Efforts

Some 50% of banks do not meet the new minimum capital ratio ...

Fulfillment of Basel III minimum capital ratios¹
(as a percentage of individual minimum requirements based on year-end 2011)



■ Europe ■ United States ■ Asia-Pacific

Sources: Annual reports; BCG Risk Task Force database; Bloomberg; BCG analysis.

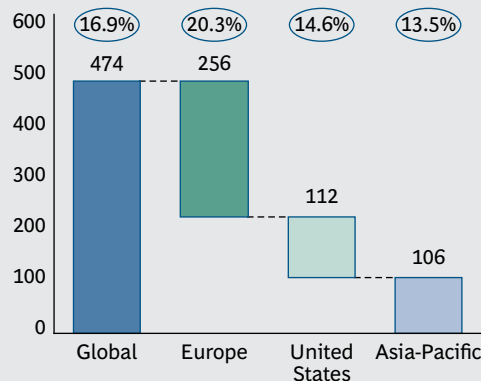
Note: Our results differ from the Bank for International Settlements estimates owing to the sample composition, as well as to the fact that the BIS relies on internal data whereas our analysis is based on external disclosures that are publicly available.

¹Includes SIFI (systemically important financial institution) surcharge.

²Pro forma capital needed to fulfill the minimum core Tier 1 ratio (including SIFI) does not include stricter Swiss requirements, known as "Swiss finish."

... which leads to a regulatory capital need of €474 billion, or about 17% of the current capital base

Pro forma capital needed as of year-end 2011 to achieve core Tier 1 ratio² (€billions)



○ Additional capital requirements as a percentage of current common equity

liabilities). NSFR significantly reduces a bank's capacity to mismatch maturities. Refinancing costs will be affected, depending on the source of funding used to close this shortfall. A stable deposit base is surely a favorable source of funding if it comes at the right cost. But tapping unsecured funding markets will be unavoidable for banks. Due to the changing perspective of debt investors, unsecured funding will come at high cost, which in turn will raise overall refinancing costs.

Stable deposits will become an even more strategic source of funding.

Moreover, market changes—including rules that concern large exposure regimes and recovery and resolution regimes—as well as increased intervention by national regulators will put limitations on cross-jurisdiction liquidity movements, reducing liquidity efficiency. Bank funding strategies also need to be reconsidered in light of higher foreign-exchange (FX) spread levels and the expected rise in the cost of derivatives for FX hedging.

At the product level, offerings with a high regulatory cash-out profile, such as committed-credit exposures and revolving-credit facilities, are affected by the LCR requirements and must bear the negative carry of holding highly liquid assets. Similarly, illiquid products with long maturities such as aircraft, shipping, and commercial real-estate loans drive the NSFR requirement and must bear the longer-term funding costs. FX mismatches could cause further problems at the product level. The largest cost impact, however, will arise from the term-funding requirements for products with short maturities. By contrast, as previously mentioned, stable deposits will become an even more strategic source of funding and thus a highly sought-after product.

Operating Costs. The new new normal is also expected to prompt changes to bank operating-cost structure. Although these costs will certainly move in parallel with overall balance-sheet developments, more funda-

mental changes are imminent. Personnel costs, which have historically been linked to deregulation levels, will be restructured, as banks have to rework their incentive systems. IT costs should rise in line with the investment needed to handle new regulatory demands for methods, data, reporting, and interfaces. Also, driven by resolution-planning efforts and more strongly exercised local oversight, organizational and procedural structures—such as the establishment of local CROs and local credit documentation—have to be adapted, thus increasing banks' production costs.

Income. Three principal streams will affect bank income. First, regulatory reform will bring about restrictions and prohibitions of certain activities. The Volcker Rule, for example, prohibits banks from engaging in proprietary trading. Other rules will restrict banks' ability to set fee levels freely. As a consequence, income from these areas will shrink.

Second, many initiatives are aimed at increasing transparency, mainly in the capital markets business. The key reforms are mandatory central clearing and the reporting of trade details. This transparency is expected to restrict pricing opportunities for banks, thus potentially decreasing their income pools.

Third, consumer deleveraging, alternative solutions for corporations, the “punishment” of certain products under the new regulatory framework, and the low-interest-rate environment will all contribute to lower demand for banking products, thus eroding banks' ability to generate income. In addition, income will be affected by decisions to leave or enter certain businesses.

Taking all factors contributing to the new new normal into account, several key trends seem likely to continue, albeit at different intensity levels, depending on the region and the business segment.

- *Deleveraging and Deglobalization.* The pressure on banks to deleverage has increased as capital and funding constraints have intensified and new regulations have been imposed. Banks will continue to shrink their balance sheets

and reduce RWA. Deleveraging, especially in Europe, has thus far focused on selling off noncore assets and reducing cross-border lending. Now, banks will begin to review core businesses. They will look at assets and liabilities at the national level and withdraw from countries where the gap between local assets and local liabilities appears unmanageable and where local regulations are too punitive.

Consolidation in the banking industry will certainly regain momentum.

- *Revenue Erosion.* Bank revenue bases will be eroded by the limitations that new regulations place on their earnings capabilities. Moreover, as banks pare down their balance sheets and try to avoid capital-intensive businesses, they will pursue more retail- and commercial-focused activities. Such moves might be risky themselves, since competition will increase in these areas and potentially jeopardize remaining revenue pools.
- *Cost Reduction.* As pressure on refinancing and risk costs increases, operating costs will have to give, moving at least in parallel with deleveraging efforts. Launching programs aimed at reducing costs by 5 to 15 percent will be only a start. As businesses in other industries have done, banks will need to work toward operational excellence—industrializing processes and forging leaner structures—especially in areas where income levels do not hit targets.
- *Consolidation.* Consolidation in the banking industry will certainly regain momentum. First and foremost, we expect a new wave of market-clearing activity, with stronger players absorbing parts of weaker or even failing banks. Second,

consolidation is a logical reaction to the pressure on refinancing costs, operating costs, and capital costs—as well as to overcapacity in the industry.

- *Disintermediation.* As banks shift toward a more liability-driven business model with shorter-term lending and more flexible steering portfolios, they will be unable to provide the amount of long-term funding needed in the global economy. Combined with the needs of investors such as insurers and pension funds for longer-term investments with an adequate yield level and the fact that many corporations benefit from better credit ratings than banks, this shift paves the way for an increased level of disintermediation. Banks will be more likely to follow a capital-market-oriented originate-to-distribute model, adopting a fundamentally different approach both to selling and to products.

CLEARLY, banks need to prepare for the new new normal. With an inflection point for the industry coming at the end of 2012—a time when the changing perspectives of equity investors, debt investors, and regulators will hit the market in full—banks need to be fully transparent about where they stand. Investors, regulators, and analysts will look not only at compliance fulfillment but also at reviewed and reworked business models, gauging which will be the most successful in the new new normal.

Time is short for banks that have not yet started to prepare. An industry in transformation requires that each player transform as well. Banks must ensure that all aspects of the new new normal are properly addressed and that the many pitfalls we have observed are avoided. A particular danger is taking a “silo”—as opposed to a holistic—approach to the transformation. Ultimately, those banks that can adapt quickly will set the pace for their peers and take the lead in value creation.

FOR FURTHER READING

This paper continues a series of publications written by The Boston Consulting Group in response to the financial crisis.

Risk Report 2011: Facing New Realities in Global Banking

A report by The Boston Consulting Group, December 2011

Liquidity Risk Management: Managing Liquidity Risk in a New Funding Environment

BCG White Paper, October 2010

Risk and Reward: What Banks Should Do About Evolving Financial Regulations

BCG White Paper, March 2010

Operational Risk Management: Too Important to Fail

BCG White Paper, February 2009

Additionally, BCG has published other reports that may be of interest to senior financial executives. Recent examples include the following:

Global Asset Management 2012: Capturing Growth in Adverse Times

A report by The Boston Consulting Group, September 2012

The “New New Normal” in Retail Banking: How Banks Can Get Back on Course

A report by The Boston Consulting Group, August 2012

Global Wealth Report 2012: The Battle to Regain Strength

A report by The Boston Consulting Group, May 2012

Global Capital Markets Report 2012: Tough Decisions and New Directions

A report by The Boston Consulting Group, April 2012

Operational Excellence in Retail Banking: Raising Performance in Turbulent Times

A report by The Boston Consulting Group, February 2012

NOTE TO THE READER

About the Authors

Ranu Dayal is a senior partner and managing director in the New York office of The Boston Consulting Group.

Gerold Grasshoff is a senior partner and managing director in the firm's Berlin office.

Douglas Jackson is a partner and managing director in BCG's Bangkok office.

Philippe Morel is a senior partner and managing director in the firm's Paris office.

Peter Neu is a partner and managing director in BCG's Frankfurt office.

Thomas Pfuhler is a project leader in the firm's Munich office.

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For Further Contact

If you would like to discuss our findings in greater detail, please contact one of the authors.

Ranu Dayal

Senior Partner and Managing Director
BCG New York
+1 212 446 2800
dayal.ranu@bcg.com

Gerold Grasshoff

Senior Partner and Managing Director
BCG Berlin
+49 30 28 87 10
grasshoff.gerold@bcg.com

Douglas Jackson

Partner and Managing Director
BCG Bangkok
+66 2 667 3000
jackson.douglas@bcg.com

Philippe Morel

Senior Partner and Managing Director
BCG Paris
+33 1 40 17 10 10
morel.philippe@bcg.com

Peter Neu

Partner and Managing Director
BCG Frankfurt
+49 69 91 50 20
neu.peter@bcg.com

Thomas Pfuhler

Project Leader
BCG Munich
+49 89 231 740
pfuhler.thomas@bcg.com

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The Boston Consulting Group, Inc.

One Beacon Street

Boston, MA 02108

USA

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