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Banking

The Troubled Future of Global Banking

Brad Hintz, Roy C. Smith

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The Troubled Future of Global Banking

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Abstract
After the financial crisis of 2008, global capital market banks have been the focus of a battery of new regulatory initiatives coming from international organizations and national regulators. Assertive supervision, limitations on permissible activities, higher capital, and improved liquidity standards were intended to reduced systemic risk to the global financial system and make it far less likely that banks will need to be assisted by governments in the future. As a result of these changes, stability has returned to the global banking industry. But the regulatory measures combined with the slow global economic recovery have led to a prolonged decline in the performance of the capital markets business. Indeed, the increased regulatory burden has rendered the banks themselves economically unviable and, therefore, considerably less safe than they were. Capital market banks, therefore, face the painful task of changing their business strategies and component configurations, a task that most have avoided addressing meaningfully. This paper discusses the evolution of bank regulation through the financial crisis and demonstrates how it has affected the market leaders that have been unable for several years to achieve returns on equity equal to the cost of that equity, and whose stock prices currently average only 77 percent of book value. It also discusses the strategic change options available to the banks.

1 Brad Hintz was until 2015 Senior Banking Industry Analyst at Sanford Bernstein. Roy C. Smith is a former General Partner of Goldman, Sachs & Co.

INTRODUCTION

After the great crash of 1929, Wall Street was pilloried for its excesses and blamed for the Great Depression that followed, despite plenty of evidence that missteps by the Federal Reserve were at least partly responsible. But the blame brought with it the most extensive financial reforms ever enacted by any country. These included the omnibus Banking Act of 1933, which reformed and fortified the Federal Reserve System, introduced federal deposit insurance, and prohibited commercial banks from participating in most capital market activities through its Glass Steagall provisions.

Glass Steagall remained in place for sixty-six years. For the first fifty of those years, it helped to keep the U.S. banking system safe and sound, and there were very few bank failures. Most banks were content to follow the rules, to pay decent dividends, and to grow only at about the same rate as the economy.

But this cautious operating policy changed in the 1970s. Walter Wriston, CEO from 1967-1984 of First National City Bank of NY (later Citicorp) introduced the idea that banks too could be "growth stocks" if they were well managed and captured opportunities to expand overseas and beyond traditional regulatory limitations in the U.S. Growth stocks were then thought to be companies that could generate annual profit growths of 15% or more indefinitely.

Growth became the mantra of Citicorp and its many banking competitors. Lending rapidly expanded into recycling "petrodollars" into large loans to less developed countries, and to commercial real estate and oil and gas production across the U.S., invigorating a boundary dispute between banks, thrifts, securities firms, and insurance companies as the largest banks attempted to expand their business footprint.

A FORGOTTEN BANKING CRISIS

Continental Illinois Bank and Trust, the seventh largest bank in the US, aggressively followed the Citicorp model. For it to grow at 15% per year, however, it would have to double earnings every five years, which meant doubling the size of the balance sheet that the bank had taken almost a hundred years to assemble. To do this, the bank would have to waive traditional credit concerns in the interest of booking the new loans. Soon, the bank's capabilities to manage and control credit risk went by the board. "Our systems broke down. It was a terrible mistake," said Roger Anderson, Continental Illinois' chairman, when describing the extraordinary growth of the bank's exposure to failing energy loans in 1984 that ultimately led to a run on its institutional funding sources and its takeover by the Federal Deposit Insurance Corp. and the Federal Reserve [Lascelles (1982)]. After its collapse, it soon became apparent that dozens of other important commercial banks had similar loan portfolio problems and had to be shored up, merged with others, or subjected to special regulatory attention in order to avoid failure [Smith (1993)].

For the next decade, U.S. commercial banks were in the penalty box, unable to grow their balance sheets and losing market share to investment banks that had devised a number of products to enable corporations to bypass the bank's wholesale lending business and finance in capital markets. The SEC's Rule 415 (shelf registration) considerably eased the issuance of corporate bonds; commercial paper (short term promissory notes) displaced bank working capital loans; medium term notes replaced bank term loans; and "securitization" enabled the sale of long-term bonds backed by packages of mortgages or other assets [Smith (1993)].

REPEAL OF GLASS-STEAGALL

By the early 1990s, the banks claimed that they had reformed and returned to the basics of "good" banking. They were financially solid once again, they said, but capital market disintermediation and competition from investment banks and foreign banks not subject to Glass-Steagall were killing their businesses, and they needed relief. They wanted Glass-Steagall to be repealed so that they could freely compete in capital markets with the others.

Opposition to repeal gradually melted away as regulatory policy shifts occurred. In 1987, the Federal Reserve allowed limited underwriting activity by banks under provisions of the Glass Steagall (Section 20) that allowed for exceptions. By 1988, Alan Greenspan, Chairman of the Federal Reserve, was supporting the call for deregulation, stating that the "… near-complete repeal of the Glass-Steagall Act allows for a market-driven evolution of financial services and products" [Berry (1988)]. Greenspan and others believed that repeal would increase competition in financial services and that market forces would carefully monitor banks and punish any unwise or unsafe activity.

Over the next decade, banks gained support for repeal within

the Executive branch and in Congress. In 1995, U.S. Treasury Secretary Robert Rubin announced his support for the end of Glass Steagall [Roberts (2014)]. The catalyst for final removal came from the announcement in 1998 that Travelers Insurance (which had previously acquired Smith Barney, a broker, and Salomon Brothers, a major investment bank) would merge with Citicorp. The transaction was prohibited by Glass Steagall, but the parties structured their deal so that it would be undone if the law was not repealed, which, it was.

The Citicorp/Travelers merger created Citigroup, the world's largest "diversified financial services company," one that was active in banking, insurance, capital markets, and asset management, at both retail and wholesale levels, in the U.S. and overseas.

The merger triggered a number of similar cross-industry combinations in the U.S. and in Europe. One by one the leading banks decided to deemphasize the stodgy ways of commercial banking and to recreate themselves as capital markets financial "conglomerates."

THE CAPITAL MARKETS EXPANSION

As regulations relaxed, the large banking institutions expanded their nascent capital markets franchises through aggressive pricing and cross selling of new investment banking products to corporate "relationship" clients. By conditioning the continuation of long established credit relationships on the achievement of a bank's profitability target, clients were encouraged to include banks as co-managers of mergers or stock and bond issues, despite the fact that doing so was technically prohibited by existing regulations.[2]

This strategy was successful. By the end of the 1990s, commercial banks had joined the ranks of leading U.S. debt and equity underwriters and were successfully competing with investment banks around the world.

The technology market collapse of 2000-2002, which resulted in three years of record bankruptcies and a multitude of credit losses and underwriters' liability claims, did not change the goals of the largest banks. The lure of capital markets revenue and market share growth remained a strategic imperative. CEOs, corporate strategy departments, consultants, and equity analysts all believed that the growing capital markets were the future of banking and that quantitative risk management techniques combined with the "great moderation" brought about by modern central banking policies supported this business shift.

The most aggressive banks were characterized as "flow monster," able to sit astride and closely monitor market orders (flows) around the world, and to position themselves accordingly. They were also able to leverage their trading books considerably, even within the context of the Basel I minimum capital adequacy rules imposed in 1992. Thus, these firms were able to capture substantial trading profits that accounted for more than half of total revenues for some.

In the period leading up to the financial crisis of 2007-2008, banks pursued a capital markets strategy based on massive balance sheet commitments to support trading, the manufacturing of innumerable structured and synthetic securities using derivatives, and positioning investment banking coverage teams globally in order to serve clients anywhere in the world. By 2008, after several investment banks had been acquired by large banks, eight of the top ten capital market firms (ranked by origination of transactions) were diversified financial services companies.[3]

THE 2008 CRASH AND ITS CONSEQUENCES

The financial crisis of 2008 caught the banks largely unaware: liquidity disappeared as markets seized up and risk models proved inadequate. By the end of that year, AIG, Bear Stearns, Fannie Mae, Lehman Brothers, Merrill Lynch, and Washington Mutual were no longer independent firms, and Goldman Sachs and Morgan Stanley, who were, were no longer investment banks but bank holding companies (BHCs). Many of the banking conglomerates, both American and European, had to be bailed out with taxpayer funds to avoid failure. The 2008 crisis led to an economic recession and slowdown that reduced world economic output by 3.6%, and from an annual growth rate of 5.3% in 2006 to 3.3% in 2015 [IMF (2010, 2015)].

2 Provision prohibiting credit tying arrangements by national banks are part of section 106 in the Bank Holding Company Act Amendments of 1970.

3 The authors have ranked the banks by the total value of transactions originated (ranked by full-credit to "book-runners") in four categories reported by Thomson Reuters: global bonds, global stocks, global M&A, and global syndicated bank loans. In 2008, the rankings were as follows: 1) J.P. Morgan/Bear Stearns, 2) Goldman Sachs, 3) Citigroup/Salomon/Smith Barney, 4) Bank of America/Merrill Lynch, 5) Morgan Stanley, 6) UBS/SG Warburg, 7) Deutsche Bank/Morgan Grenfell/Bankers Trust, 8) Credit Suisse/Donaldson Lufkin Jenrette, 9) Barclays/Lehman Brothers, and 10) BNP/Paribas. All but Goldman Sachs and Morgan Stanley were diversified financial service companies.

A consequence of this recession and slowdown was a 25% reduction in capital market new issue volume, from a peak of U.S.$10.2 trillion in 2006 to an average of U.S.$7.7 trillion over the next ten years, and a 16% reduction in completed merger and acquisition transactions, from U.S.$2.1 trillion in 2006 to a ten-year average of U.S.$1.7 trillion.[4] New issues and merger transactions represent a substantial portion of investment banking revenues for the major firms.

The 2008 crisis was also followed by the most extensive regulatory reform and tightening since 1933. This was achieved by a substantial modification of the Basel minimum bank capital adequacy accord (to "Basel III"), the passage of the Dodd Frank Wall Street Reform Act (2010), the creation of the Financial Stability Board of the G-20 group of countries and the European Banking Commission, and a series of new regulatory powers being ceded to the European Central Bank.

COMPLEXITIES AND CONSEQUENCES OF LARGE BANK RE-REGULATION

As a result, thirty designated "global systemically important banks" (G-SIBs), including all of the global capital market banks, have been the focus of a battery of new regulatory initiatives coming from international organizations and national regulators. Assertive supervision, limitations on permissible activities, higher capital, and improved liquidity standards were intended to reduced systemic risk to the global financial system and make it far less likely that banks will need to be assisted by governments in the future.

As a result of these changes, stability has returned to the global banking industry: the banks' credit default spreads, which soared during the crisis, have returned to near pre-crisis levels, and the "betas" (stock price volatility) of the largest banks have declined from peak levels. But the regulatory measures combined with the slow global economic recovery have led to a prolonged decline in the performance of the capital markets business.

The new regulatory rules form a labyrinth of constraints on the capital markets banks. They materially restrict the amount, type, and the riskiness of assets that a bank may hold for a given amount of capital, and thus narrow potential business strategies that a bank may pursue. Nevertheless, within the many regulatory constraints there is presumed to be a "safe harbor" – an area that is allowed under the regulatory standards in which a bank can operate freely and base its future activities upon.[5]

Logically, a bank should be able to choose a business strategy that optimizes its balance sheet and maximizes its return on equity (RoE) under existing regulations. Such an optimal mix, or the RoE "sweet spot," will typically exist along the edges of the regulatory constraints that form the safe harbor.

But that sweet spot has proven to be elusive for G-SIB banks. The safe harbor is too small to support an RoE that can provide long-term economic viability for them.

In addition to well-defined capital constraints, risk weightings and "prudential" cushions, banks face a set of annual "stress-tests" that form the true binding constraint on their business activities. These derive from annual stress-tests required by the U.S. Federal Reserve, the U.K., and European authorities.

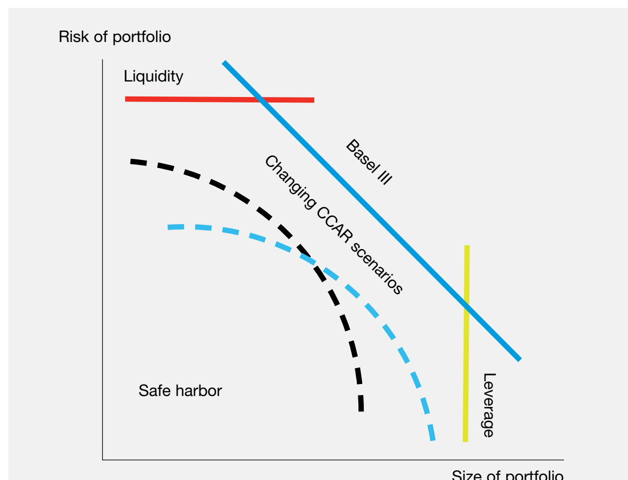
The U.S. test, the Comprehensive Capital Analysis and Review, or CCAR, is different from past quantitative measures because the regulators now adjust stress assumptions and measure outcomes based on qualitative policy and risk scenarios that are not communicated to banks in advance. The tests, therefore, are more than just a test of bank capital, and can be difficult to predict. The regulators also use the tests to ensure that there is no gaming of capital rules by banks (as happened extensively before 2008) and that potential financial bubbles can be addressed.[6]

The consequences of failing to pass an annual stress-test can be severe. In the U.S., dividend payouts and stock buyback plans, and a variety of other issues in which regulatory consent may be sought, can be denied.

The uncertain frontiers of the stress-tests in effect reduce the size of the safe-harbor further, and that obstructs banks' ability to fully maximize opportunities under the official regulatory constraints to reach an optimal RoE sweet spot. To be certain that an institution will pass the test, a bank must maintain a safety cushion well above the published minimums (Figure 1).

And the stress-tests continue to tighten. The Federal Reserve has proposed increasing the minimum capital limit by including the G-SIB surcharge, a further capital cushion that ranges from 1% to 3.5 percent, a "stress capital" buffer, and

4 Data from Thompson Reuters.
5 "Safe Harbor" is a legal term used by the SEC, but not as yet by bank regulators.
6 Some observers assert that the CCAR is in violation of the Administrative Procedures Act of 1946 that requires government agencies to be transparent and publicly accountable [see Scott and Gulliver (2016)].



The figure illustrates the situation facing a capital market bank. The vertical axis is the risk of a banking portfolio and the horizontal axis is the size of the portfolio. Given a fixed amount of capital and core funding, there are three constraints that limit a portfolio: a liquidity constraint, a Basel III risk-weighted assets limit, and a leverage limit. These three constraints form a frontier along which a bank is employing all its capital while meeting all regulatory requirements. Along this frontier, there is a point that defines an optimal portfolio that will maximize a bank's RoE. But the CCAR process makes it impossible for a bank to reach this optimality. Moreover, the bank cannot move to another RoE optimality along the CCAR frontier because the CCAR test is dynamic and thus the frontier is constantly changing. This forces banks to maintain business portfolios well inside the limits of any CCAR test. Furthermore, it traps unused banking capital between the annual CCAR stress-test frontier and the regulatory minimum targets of core tier-1 capital ratio (CET1), liquidity, and leverage. This is a prescription for weak equity returns.

Figure 1 – Operating constraints of banks

a "countercyclical capital" buffer. These would further narrow the safe harbor of large bank corporate strategies and complicate defining an optimal balance sheet mix.

Adding to this operating problem is the fact that new, prescriptive regulatory rules continue to be introduced by regulators that require changed business procedures, additional regulatory capital, increased liquidity reserves, and expanding compliance and control systems.

In the U.S., the Federal Reserve is expected to soon adopt Basel/G-20 rules on a liquidity measure called the "net stable funding ratio." This will impose on BHCs four interrelated requirements consisting of a liquidity coverage ratio, a net stable funding ratio, a further G-SIB capital buffer, and a comprehensive liquidity assessment.

Further, regulators are continuing to boost large banks' "total loss-absorbing capital" by insisting that banks increase their issuance of long-term debt (so as protect balance sheets from overdependence on short-term bank deposits), and that long-term debt investors understand that they will be expected to participate in any losses resulting from any future bank restructuring efforts. This emphasis, of course, further affects the banks' debt ratings and interest rates paid on the debt and their regulatory and compliance costs have increased markedly as a result of these continuing changes.

In addition, there are unknown regulatory changes that may be on the horizon. Neel Kashkari, the President of the Minneapolis Federal Reserve Bank, is calling for the legal conversion of large banks into public utilities. And American politicians on both sides of the political spectrum support the system-wide breakup of large banks so that they can no longer be considered "too big to fail."

FALLING DOMINOS: LITIGATION, LIQUIDITY, TALENT, AND COMPETITION

Other changes have also occurred that were not foreseen when the new regulations were introduced. Key among these was an enormous wave of litigation that held the banks to be responsible for the economic harm imposed by the crisis, settlements of which further depleted their capital by approximately U.S.$200 billion by 2015 and which further increased during the following year as the U.S. Justice Department worked through its list of banks yet to settle charges of misselling mortgage-backed securities before and during the crisis of 2007-2008.[7]

Competitive changes also occurred – first was a migration of talent from G-SIBs to unregulated alternative asset managers, such as hedge funds (for traders) and private equity firms (for deal makers). Next was an increase in the number

7 These settlements resulted from litigation from regulators or other government agencies, predominantly in the U.S., and from some smaller class action settlements. They involved only about twenty banks. In the 2002-2005 period, following the failures of Enron, WorldCom, and many other technology firms, similar bank settlements of litigation totaled less than about U.S.$30 billion. The size of settlements in the recent period reflects the frustration by government officials and much of the public in the U.S. and Europe that banks should be punished, and their officials held responsible for their contribution to the economic hardship associated with the Great Recession. To date, many banking officials were investigated, but no one who was an officer or director of a bank during 2007-2010 was charged with an offence.

of independent investment banking "boutiques" set up by star bankers able to attract corporate clients and avoid the regulatory burden of the big banks. Since 2008, boutiques have doubled their share of the merger advisory business, to about 18% of deals, according to Dealogic.

Finally, other large banks, such as HSBC, Wells Fargo, and Royal Bank of Canada (RBC) that had previously not been considered capital markets leaders, increased their shares of the market for capital market activity. By 2014, Wells Fargo and HSBC ranked ninth and tenth among originators, respectively, and RBC had built strong franchises in North America and the E.U. These new participants did not attempt to duplicate the global strategies of the conglomerate banks, but rather chose to pursue a strategy of selective competition. They offered limited high margin capital markets services to particular clients in targeted regions and industries.

Beginning in 2010, it was clear that the capital market banks would have a hard time earning an appropriate return on their equity capital. By 2015, it was also clear that the top ten originators of capital market transactions were losing market share. Together, the top ten accounted for an 81% market share in 2009, but this share was reduced to 67% in 2015.[8] On the basis of revenues from investment banking activities Dealogic reported a similar loss of market share among the top ten ranked banks.

Further, secondary market trading in fixed income, currencies and commodities, and in equities declined considerably as banks withdrew capital from this activity in order to reduce risk-weighted-assets that were subject to greatly increased capital requirements. Markets, thus, were deprived of important liquidity. The previously prized, leveraged trading business model, characterized by former Morgan Stanley CEO John Mack, as "credit was free and you were paid to take risk" is gone [Mack (2009)].

DOUBTFUL ECONOMIC VIABILITY

Nearly a decade after the crisis, the large conglomerate banks are still standing, but investors do not believe that they are capable of delivering adequate returns over the next five years [Broadridge and Institutional Investor (2015)].

As a result, these banks face a grim future of forced restructuring and change. Capital requirements have depleted much of the value in large balance sheets dedicated to trading and flow monster business models. Banks will have to be smaller and more manageable, at least until they settle in to a new economic model that works. They will also be less leveraged, less dependent on trading, and are prohibited from making large acquisitions to achieve growth targets.

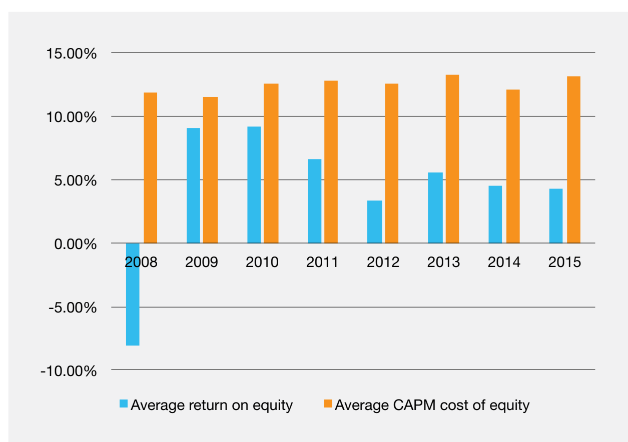
After a one-year RoE rebound in 2009, the major capital market origination banks have been unable to consistently earn a return on their equity capital greater than the cost of that capital. And, while the large capital market banks are certainly financially stronger because of capital increases and required risk-reduction efforts, it is arguable that the massive integrated global capital markets business that was built over twenty-five years is no longer viable, and its leading firms are no longer safe.

We judge this through a simple calculation of "economic value added" (EVA),[9] the difference between reported RoE and the cost of equity capital.[10] The average EVA for the top ten capital markets banks ranked by origination and advisory volume[11] for the eight-year period 2008-2015 was -8.6%. The average EVA was -23.6% in 2008, the worst year, but was still -9.2% in 2015 (Figure 2).

As Figure 2 illustrates, the banks have suffered from unusually high costs of equity capital, largely because of the high volatility of the bank's stock (its beta), a measure of the riskiness of future earnings. Despite a clear reduction in balance sheet risk as a result of the regulatory changes, and presumably because of strategic and other uncertainties of the future, these betas rose after the crisis to levels close to 2.0. In the past, it was thought that a regulated bank's stock beta ought to be close to 1.0, or about the same as the volatility of the entire market. The average beta for the top ten capital market originators in 2015 was 1.8 (Morgan Stanley's was 2.3, Citigroup's was 1.9).

8 Based on Global Capital Market originations in 2009 and 2015, prepared by the authors.
9 EVA is a registered service mark of Stern Value Management, an affiliate of Stern Stewart & Co.
10 For our purposes, RoE is the reported return on all equity capital, and the cost of equity capital is determined by the Capital Assets Pricing Model (i.e., the "risk free rate" plus the product of the equity risk premium of the market and the banks' own beta).
11 The capital markets banks that originated and advised on the largest dollar value of transactions over the period 2008-2015, based on Dealogic data, were Barclays, Bank of America, BNP-Paribas, Credit Suisse, Citigroup, Deutsche Bank, Goldman Sachs, J.P. Morgan, UBS, and Morgan Stanley. On an annual basis, this ranking is different. On a revenue basis, the top ten ranking is also somewhat different.

Concern over strategic uncertainties is justified. Changed capital requirements and business prohibitions have turned the large balance sheets dedicated to trading into stranded assets. Proprietary trading has been banned. The model of market making in which liquidity was provided to clients to capture flow for positioning is largely gone. Leverage limitations and regulatory oversight have scaled back prime brokerage and matched-book repo customer lending. The move to central clearing of derivatives has compressed profits that previously flowed from the natural turnover and modification of bilateral swaps books-of-business. And, "skin in the game" rules and continuing customer skepticism about opaque product structures has constrained securitization volumes. These factors together suggest that longstanding business models in the industry need to be changed (Table 1). The uncertainties are no longer over whether to do this, but how and to what extent.



Source: Mergent, Inc. Data: Summary financial data and ratios for the period 2008-2015 (2016). Mergent Online database. University of Arizona Library, 4 August. 2016. Analysis by Hintz.

Figure 2 – Average RoE of top 10 global capital market banks as ranked by origination and advisory activity level

	2008-2015 origination and advisory activity rank	2015 origination and advisory activity rank	8-year average EVA© spread (%)	2015 EVA© spread (%)
J.P. Morgan	1	2	-0.9%	-2.3%
Bank of America	2	1	11.2%	-6.3%
Goldman Sachs	3	3	-0.9%	-5.4%
Citigroup	4	6	-13.7%	-6.2%
Morgan Stanley	5	4	-6.6%	-7.9%
Barclays	6	5	-13.7%	-13.5%
Deutsche Bank	7	7	-12.7%	-23.1%
Credit Suisse	8	8	-7.5%	-18.9%
UBS	9	10	-13.3%	-1.0%
BNP Paribas	10	11	-5.6%	-6.3%
Average of top 10			-8.6%	-8.9%

Source: Thomson, Dealogic, Mergent, YCharts, Aswath Damodaran, and analysis by Hintz and Smith.

Table 1 – Capital efficiency of the top 10 global capital markets banks as ranked by origination and advisory activity level

With cost of capital still high and RoEs still low, the banks have also suffered from low price-to-book value ratios;[12] the stocks of the top ten capital market banks have averaged a 0.77 price-to-book ratio for 2015, with half below 0.70 (The average was 0.78 in November 2016). Banks sell at less than book value because investors either doubt the value of their assets or the future efficacy of their strategy. That is, if the bank's basic business strategy is in doubt, then investors will not want to pay full liquidation value for it.

RETHINKING BUSINESS STRATEGIES

Thus, the global banks are caught in a global regulatory dilemma that has limited their freedom and undermined their business performance. Today, many bankers believe their "'number 1 client is the government," [Wall Street Journal (2013)] and this seems unlikely to change.

This fact makes the choice of a new business strategy that will generate reasonable long-term returns for a global capital markets bank a challenging task. The inherent volatility of the capital markets business, the differing impact of new regulation on each sector of the business, the strengths and weaknesses of product-line market shares, and the geographic strengths and shortcomings of each firm preclude a standardized approach to strategy. Still, there are several observations regarding strategies and change that external observers of the industry can make.

Capital markets mix

Banks that have higher-margin businesses within capital markets have an advantage. That is, banks with a greater portion

12 Book value is the accounting estimate of the liquidation value of the bank – its assets are recorded at either market value or values reflecting reserves for losses, and its liabilities are at face value.

of equity underwriting, high margin fixed income underwriting, and mergers and acquisitions advisory revenues have the flexibility to improve performance by adjusting their capital markets business mix and constraining the growth of trading. Goldman Sachs and Morgan Stanley have the industry's highest percentage of high-margin banking businesses relative to total capital markets revenues.

Reliance on trading revenues

Banks that have relied more on sales and trading revenues, and particularly on lower margin fixed income revenues, are at a disadvantage. The capital rules implemented over the last eight years have reduced the RoE that is achievable from trading to single digits.

The operating prohibitions of the Volker anti-proprietary trading rule has changed the business model of trading, sharply curtailing the risk taking previously employed in the business. Leverage and liquidity rules have constrained balance sheets, increased funding costs, and reduced the ability of the banks to provide customer financing. Essentially, every new regulation that has been implemented since 2008 is telling the global capital market banks to constrain or shrink their trading units.

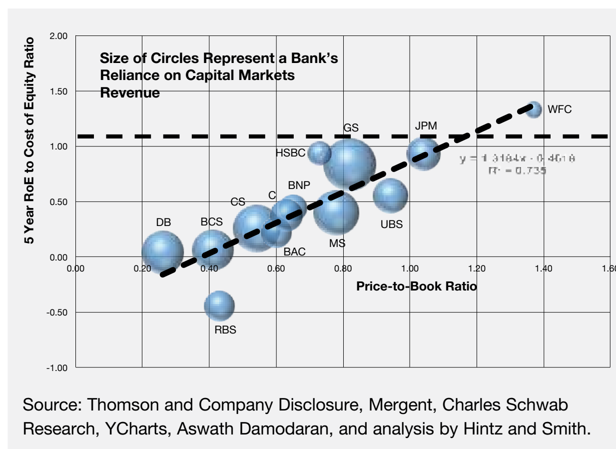
Diversification

With the sole exception of Goldman Sachs, over-reliance on capital markets remains a weakness for any bank. Banks with profitable revenue sources outside of capital markets are now able either to deliver better RoE and/or to weather what is likely to be a prolonged period of adjustments in the market making business until profitability is returned.

Among the global capital markets leaders, J.P. Morgan, Citigroup, HSBC, and RBC have capital markets units that now represent 25% or less of total revenue.

Those banks most exposed to trading, notably to fixed income trading, may not have the flexibility to wait for the eventual re-pricing and restructuring of the trading businesses and may need to exit before any restoration of market making profitability fully occurs. Moreover, several of these banks have highly profitable businesses that still generate reasonable returns, such as credit cards, mortgage origination, retail deposit, and middle market lending that may allow the bank to continue a war of attrition or last-man-standing strategy in their capital markets franchises.

Among capital markets banks, Goldman Sachs, Credit Suisse, and Barclays are most reliant on capital markets activities, with nearly 60% of revenue generated from trading and investment



Source: Thomson and Company Disclosure, Mergent, Charles Schwab Research, YCharts, Aswath Damodaran, and analysis by Hintz and Smith.

Figure 3 – Reliance on capital markets and RoE (price-to-book ratio versus 5-year average RoE/cost of equity ratio)

banking. Barclays and Deutsche Bank are most reliant on fixed income, currencies and commodities (FICC) businesses, with over 35% of total revenues from this source.

Execution market share

Trading is currently a significant drag on capital markets performance but it is difficult for any capital market bank to totally exit the business. Superior market share within trading units enhances operating leverage, allowing banks to efficiently spread the cost of trade execution technology and risk management systems across multiple trading desks and geographies.

Clients still demand secondary liquidity, consequently many executives within the industry believe that pricing in both fixed income and the institutional equity business will eventually adjust to absorb the cost of balance sheet constraints and regulatory changes on the market makers.

But the repricing of liquidity has not happened yet, partly because of the number of banks still seeking to maintain market share despite a limited future for them in the business.

And, it's not for everybody. Those banks with smaller market shares (and particularly those banks that have not invested in electronic execution systems and front-to-back office processing) run the risk of negative operating leverage as they attempt to adjust their revenue mix in capital markets.

There is a "just-right" level of market share in trading. If it is too large, the necessary large balance sheet commitment to a low return business will pull down total returns. But negative operating leverage can also be costly to players with too small a share.

J.P. Morgan, Citigroup, Barclays, and Deutsche Bank have the largest market shares in FICC. Those banks with large combined market positions in both equities and fixed income will have the option of sharing technology between trading units. Goldman Sachs and J.P. Morgan have the highest combined market share in fixed income and equities.

Geography

Capital market revenues are closely correlated with both global wealth and the global GDP. The most rapidly growing economies in the world are in the emerging markets, while the world's wealth is still largely located in the developed markets.

Banks with strong regional market shares will continue to profit from the growth of the emerging markets by capturing new issue flows and by participating in the maturation of Asian and other markets. But the new resolution rules and subsidiary capitalization and liquidity standards around the world are making it costlier and operationally challenging to maintain a global platform. A strategy of fully global banking no longer works for most capital markets banks. For many, a strategy of better-than-average market share in targeted high growth markets will likely be an acceptable alternative, particularly if the bank has some important legacy associations with these markets.

In developed markets, banks with strong wealth management or asset management franchises will be able to capture and retain profitable client relationships. These franchises can generate asset management revenues, incremental execution volume, and risk management services from capital markets units.

It is also useful to note that the large lending banks, with powerful syndicated loan market shares and those banks with strong operational businesses, such as wire transfer, cash management, and trade finance, can leverage these relationships with corporate clients to capture capital markets mandates.

Goldman Sachs and Morgan Stanley have the strongest global capital markets franchises. Deutsche, Barclays, and J.P. Morgan have powerful global fixed income franchises. The largest global loan syndicators are J.P. Morgan, Bank of America, Deutsche Banks, BNP-Paribas, Barclays, and Wells Fargo. Banks also have different strengths in regional markets – in the end they need to trade off market share, achievable margins, and regional comparative advantages to their best advantage. But that best advantage may be elusive for some, and the banks may be better off closing down operations in areas or product markets in which they won't be able to achieve satisfactory returns.

Expense control

Expense control remains key to achieving reasonable returns from capital markets. In the last eight years, banks have reduced head count significantly. Managing director pay has been reduced. Trading desks have been resized. But a "meat ax" approach to cost control is no longer effective. Despite success in controlling compensation ratios, non-compensation expenses remain stubbornly high. RoEs are still not adequate and there is little fat that is left to cut in front-office compensation.

In a survey of European investors, over seventy percent of respondents believed that banks have not been aggressive enough in reengineering their processes and two-thirds believe that banks have not invested enough in new technology [Broadridge and Institutional Investor (2015)].

This should not be a surprise to industry insiders. Few large banks have focused management attention on business unit redesign or back office rethinking. Expense allocations are negotiated between units rather than quantitatively determined. And in technology, costly legacy systems are allowed to run long past their expected lifespan, while a "not invented here" mentality frequently lead units to build rather than buy new applications.

The successful banks will focus on bottom line performance and count pennies. Industrial engineers, cost accountants, and technologists must rethink the business models and support systems of capital markets. While management teams need to consider participation in industry utilities and outsourcing of generic business activities.

Culture

Historically, the common idea of the culture of a commercial bank was that of a colorless, bureaucratic, risk-averse, hierarchal institution that was committed to reproducing in the future all that had worked in the past. The common portrait of an investment bank was of a small, flexible, opportunistic enterprise dedicated to making money for its owners by taking short-term risks and pursuing innovative products and solutions. Over time these two cultures were brought together through the many mergers that formed the large banks of today.

The sheer size of these organizations and their periodic need for large-scale layoffs over time weakened the loyalty employees have felt to their firms. A bureaucratic mindset led to weak risk management and financial controls, and performance expectations from the top to generate revenue led to an "eat

what you kill" culture at some organizations. And it was culture drift that facilitated the overaggressive activities that had to be paid for by loan write-offs, penalties, or litigation since the end of the financial crisis.

Regulators in the U.S. and Europe seem now to regard managers and employees of large banks as untrustworthy remnants of a corrupted subculture of big business. This view appears to be widely shared by the general public, and even among corporate and institutional clients and counterparties of large banks. This loss of reputation for integrity has been expensive to the banks in many ways, including loss of political support and weakened, less loyal and trusting client relationships.

According to Charles D. Ellis, a financial writer with a lifetime interest in what makes great firms what they are, those firms that rise to the top of their fields have distinctive cultural characteristics that stand out. These characteristics vary, but seem to share some important values that are inculcated down through their organizations by a chain of leaders that have devised and supported the values over a long period. These include a commitment to excellence in whatever they do, comparative disinterest in size per se, the importance of teamwork, and a mutual exchange of loyalty to employees by the firm, and to the firm by employees.

To return to a normal, sustainable business will require that banks get the economic model right, but it will also require a major cultural transformation. In global banking, this begins with a reputation for competence, excellence in service, and reliability. Much of this relates to the bank's ability to process transactions efficiently, legally, and by the rules, with high importance devoted to enforcing ethical standards. For such a business, teamwork and organizational integrity is more important than the contributions of a few star individuals, no matter how entitled to stardom they may be. But individuals are important as team leaders, and need to be trained and motivated to be the best managers they can be. Good managers act as on-the-scene referees, spotting and stopping infractions before they occur.

RIGHT-SIZING

The search for a different business strategy must begin with the recognition that all banks will have to change and many will have to make massive changes. Rethinking the future has to start will realistic assessments of their upward potential from where they are.

One obstacle to many is size. Many banks have proven to be too big or complex to manage. Shrinking and simplifying seems a simple solution, but banks have been reluctant to pursue such a course, despite its obvious appeal. So far, markets have punished banks for their lack of effort with extremely low stock prices and EVAs. These performance factors will ultimately force boards of directors, or activist investors to consider more severe restructuring approaches.

So far only two banks have undertaken significant strategic moves to change their business mix:

In 2012, Morgan Stanley acquired the brokerage business of Citigroup (Smith Barney) as a strategic move that would divide the firm into two approximately equal parts, one a large, low-risk broker-dealer and other a leading investment bank subject to capital market volatility. However, Morgan Stanley has continued to struggle to demonstrate that this strategy is viable: in 2015 its price-to-book ratio was 0.73 and EVA -7.9%.[13]

UBS has sharply reduced its reliance on trading businesses while retaining a portion of its high margin investment banking revenues. The bank announced in 2014 that it was abandoning FICC proprietary trading and would limit market-making activities to the needs of its core clients, and would shift the bank's strategic emphasis to asset management and wealth management. This was an easy call because UBS' wealth management franchise was so vast, and it has paid off. In 2015, UBS stock was trading at 1.34 times book value, with a dividend yield of 3.6% that would increase further when the bank reached its near-term goal of a 50% dividend payout. Its EVA was +1.0% in 2015, though in 2014 it had fallen out of the top ten originators.

Some other European capital market banks have also said they would significantly shrink their trading businesses, though they do not have the extensive and profitable nonbanking business that UBS has to fall back on.

Citigroup has also followed this approach, having reduced its balance sheet assets by more than 20% since 2007, but so far without convincing the markets that its basic commitment to capital markets has changed meaningfully.

So far only UBS has convinced the markets that it has moved on to a more viable long-term strategy. The market leaders,

13 In July 2016, ValueAct, an activist hedge fund, acquired a 2% interest in Morgan Stanley with the idea of "working with management" to improve performance.

J.P. Morgan and Goldman Sachs continue to struggle to trade above book value and to post positive EVAs. As Exhibit 3 illustrates, all the rest have settled into price-to-book and EVA levels that are too low to be acceptable.

Some have considered selling their investment banking units, but there appears to be few willing buyers of such risky and constrained businesses, and, in any event, bank buyers would have to be approved by regulators, which may not be something they could count on.

SPIN-OFFS

The step that none of the banks have been prepared to take so far is to separate their businesses into commercial and investment banking units through a spin off operation in which present shareholders would own a stake in each business. Such an operation would be complicated, and almost certainly involve recapitalizing the investment bank so it could access credit markets on its own (probably requiring at least a Baa level bond rating). In 1994, American Express spun off its Lehman Brothers investment banking unit to its shareholders, after which the share prices of both units increased significantly. We believe that such an exercise could be successful for large capital market banks trading well below book value.

Investors would see the main, commercial banking activity being liberated from the hazards of risky capital market activities, and made more manageable as a single purpose enterprise. The capital markets unit, on the other hand, would be free to return to the more opportunistic and flexible ways of an investment bank. Each could perform according to its comparative advantages.

Regulators should also prefer the separate version of the two units: it would self-effect a breaking up of the banks that many regulators have preferred. In the case of Barclays, U.K. banking rules already require that it separate its U.K. retail business from its non-U.K. and wholesale activities in 2019.[14] The two units would be separately capitalized and have separate boards of directors. The further transition into two separately owned companies by spinning off shares of the investment bank to the present shareholders of Barclays does not seem to be a large step.

When large, complex companies appear to languish for a time in a business strategy that seems to be falling short, investors lose confidence in management and the board to make any sort of radical change. The companies don’t like to admit that their longstanding business strategy has failed, or necessarily want to break up the business into smaller, less important units. Such changes may be what are needed but they can be risky and difficult to execute, so they get deferred.

For many years, General Electric struggled with the weight of an underperforming GE Capital Corp., its large finance subsidiary that was significantly affected by the crisis of 2008. Efforts at a gradual adjustment of the size and influence of GE Capital on GE by spinning off its consumer financing business (now called Synchrony, which it did in 2013), and selling a substantial portion of its real estate holdings and some other businesses (which it did in 2014 and subsequently), made little difference to GE’s stock price. The message did not get through to investors until the announcement by chief executive Jeffrey Immelt on April 10, 2015 that GE would get rid of all but a few necessary customer-financing parts of GE Capital. The GE Capital share price quickly gained 10%, and outperformed both Honeywell and the S&P 500 over the following year. Clearly the market liked the idea of getting out of the dangerous finance businesses that contributed more problems than value for most of the prior eight years, and avoiding the slow, piecemeal approach management had earlier indicated it preferred.

In October 2016, Metropolitan Life, the largest U.S. life insurance company, announced that it would spin off to its shareholders 80% of its retail life insurance business, Brighthouse Financial, for strategic reason. Brighthouse is not only the firm’s original whole life underwriting and sales business formed in 1868, it still represents about a third of MetLife’s total assets under management.[15]

14 “Ringfencing” is a U.K. requirement for dividing the bank into two separately capitalized units, a domestic bank and a global and wholesale one, with significant restrictions on funding the global one with resources of the deposit insurance–protected domestic one.

15 Earlier in the year, MetLife won a lawsuit in federal court that reversed a Financial Stability Oversight Council ruling that it should be designated one of four “systemically important non-banks,” making it subject to capital adequacy and other regulation by the Federal Reserve. The U.S. government has said it will appeal the ruling.

FACING REALITIES

No large capital market bank wants to renounce its integrated business model of operating in banking and financial markets. To spin off or rid itself of one of their primary revenue producing units is thought to be a step backward from where modern finance is headed. And, to separate a unit for spin off would involve a painful process of allocating debt, capital and personnel between existing units, and being sure that both the spun off unit and its former parent would be adequately capitalized and equipped with technology and other resources.

The reality is that the increased (and not yet fully applied) regulatory burden for G-SIBs may be too great for some banks to manage while attempting to remain an economically viable enterprise. The EVAs of the industry demonstrate the point; but it is really the markets' reaction to years of work-around efforts to return to "normal" that indicates the extent to which confidence has been lost in the integrated banking business model.

A few banks may be able to manage their way back to normal – by further reducing RWA and related exposures to a modest portion of the balance sheet, but others that trade at prices reflecting exceptionally low levels of market confidence will not be able to. In September 2016, the price-to-book ratio of Deutsche Bank had sunk to 0.31, Barclays' was at 0.43, Credit Suisse's was at 0.59, and Citigroup's and Bank of America's were just a little higher. At these levels a break up valuation of the banks' separate parts would surely indicate a post-spin off combined market value far greater than the banks' present market values.

In the case of Barclays, for example, its UK business (based on RWA) is only about one-third the size of its global capital markets unit. If we applied the price-to-book ratios of the peers of the two units proportionately (e.g., Lloyds and Royal Bank of Scotland in the U.K., and, say, Morgan Stanley globally) we get an estimate of what the combined market value of the two units might be. Using 1.1 for the U.K. unit and 80% of Morgan Stanley's price-to-book ratio, instead of Barclays' 0.43 ratio, the new combined market capitalization is more than doubled. From this amount must be subtracted some transactional expenses and provisions for additional capitalization of the capital markets unit, but the net result should still represent a potential increase in shareholder value from a spin-off of 50% to 70%. Such a potential increase in market value should appeal to shareholders (and activist investors), to regulators, and to credit rating agencies.

Some banks may be hoping that some substantial regulatory relief will result from the election of Donald Trump as President of the U.S. It might. Mr. Trump said during his campaign that we "have to get rid of Dodd-Frank," it was holding back lending necessary for economic recovery because "the regulators are running the banks" [Schlesinger (2016)]. There is an argument for repealing Dodd-Frank based on the fact that capital and other requirements of Basel III and the Financial Stability Board, together with the stress-tests and other requirements of the Federal Reserve, provide adequately for bank safety, and that Dodd-Frank (passed before these other measures were in place) only extends the burden and cost of regulation to such an extent as to threaten the long-term viability of the banks. Whether Mr. Trump could garner enough votes in the Senate to repeal the law is questionable, however. If not, he might be able to amend the law significantly and to replace members of the board of the Federal Reserve with others more amenable to a lighter touch. It will probably take a year or more before we know what the outcome is, but even if Dodd-Frank were repealed, the ensuing regulatory relief may still not be enough to allow banks to escape having to address the strategic realities we have discussed.

Indeed, financial historians know that the current state of the global banking industry is the fourth major wave of transition since the 1930s. These transitions have been caused by regulatory actions and the market forces resulting from them. Not all of the regulatory changes have been wise or efficient, but nevertheless they have forced an element of Schumpeter's "creative destruction" on the industry. After Glass Steagall, firms like Morgan Stanley were formed by spin offs from powerful commercial banks. In the 1980s, regulators intervened to prevent banks from failing after a competitive lending binge, forcing many mergers among large players. After the repeal of Glass Steagall in 1999, many more mergers occurred as banks sought to keep up with Citigroup, the new colossus of the capital markets. The present wave of reorganization, forced after 2008 by the globally concerted effort to de-risk the banking industry, is only in its beginning stage.

What historians also know is that through each of these transitional waves, the leading players change almost totally. Of the top 80 banks and investment banks in business in 1990, all but two or three have disappeared into mergers or have failed. During this period, however, the market capitalization of the world's tradable debt and equity securities grew from U.S.$54 trillion to U.S.$300 trillion [McKinsey Global Institute (2016)]. Capital markets continue to grow and expand globally, but the principal competitors in the market turn over continually.

The current transition will take several years to complete.

During this time different ideas and structures for the industry may be tested but the markets themselves will determine the winners and thus the next world order in the global banking industry.

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