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Raymond H. Lopez
Pace University

Surendra K. Kaushik
Pace University

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by

Raymond H. Lopez, Ph.D.
Professor of Finance
Lubin School of Business
Pace University

and

Surendra S. Kaushik, Ph.D.
Professor of Finance
Lubin School of Business
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Surendra S. Kaushik, Ph.D.

Raymond H. Lopez, Ph.D. is Professor of Finance, Lubin School of Business, Pace University.

Surendra S. Kaushik, Ph.D. is Professor of Finance, Lubin School of Business, Pace University.
ABSTRACT

This study describes the characteristics of the consolidation trend in the commercial banking industry over the last decade. Smaller banks are disappearing and the largest banks are growing rapidly. Due to economies of scale and scope, the largest banking entities have paid the highest rates on savings, charged the lowest rates on loans, and have been able to operate efficiently with the lowest levels of expensive equity capital. The study also suggests that these trends and patterns have not yet played themselves out, thus, continued consolidation is expected, at least over the next few years.
INTRODUCTION

The financial services industry in the United States has experienced dramatic changes in scale, scope, and structure over the last quarter century. This has been the era of deregulation and it has significantly affected every institution operating within the industry. The objective of this study is to examine forces influencing the changing structure of the commercial banking sector as it competes with other financial service entities.

In the years before deregulation, there were relatively clean lines of distinction between depository institutions operating in the financial services marketplace. The largest participants, measured by assets or operating income, were the commercial banks whose primary characteristics were the offering of checkable deposits and the making of commercial loans. Mutual savings banks as well as savings and loan associations offered passbook savings accounts while making residential mortgage loans. Captive finance subsidiaries of manufacturing or service corporations (General Motors Acceptance Corporation, General Electric Credit Corporation, Ford Motor Credit, etc.) made customer loans to support the sales efforts of their parent corporations. Credit unions (financial cooperatives) offered share savings accounts on which dividends were paid and made consumer installment loans to their members.\(^1\)

In the last three decades, the unique characteristics and distinctions of these institutions have blurred. Each group has expanded and diversified its product and service portfolio of offerings to both lenders and borrowers. As new opportunities for providing financial services have evolved, there has been increased competition from other market segments. Full service brokerage houses, investment bankers, money market mutual funds, and mutual fund families have created new savings and investment instruments while advertising and marketing them nationwide. Perhaps repeal of the Glass-Steagall Act in 1999 was the final legislative act that resulted in creation of the first “one-stop” financial services institution.

COMPETITIVE PERSPECTIVE OF THE FINANCIAL SERVICES INDUSTRY

Influenced by both internal and external forces the structure of the commercial banking industry has evolved over the last quarter century. Inside the industry, data show enhanced efficiencies due to asset size, technological innovation, and an improving financial condition, especially since 1991, providing customers with expanded products and services at increasingly competitive prices. External forces such as the deregulation of geographic and product restitutions have contributed to the evolving structure and profile of the industry. The competitive landscapes of financial services in general and
commercial banking in particular have created challenges and opportunities that must be addressed by managers, executives, and boards of directors.

The consolidation trend began in earnest in the 1980s as market, legal and regulatory developments evolved in a number of ways. Perhaps most significant, change allowed commercial banks limited entry into product and service market segments that were previously offered exclusively by other institutions in the financial services marketplace. Through an average of 345 mergers per year in the decade of the 1980s, commercial banks consolidated their numbers and increased their presence in the industry. The pace quickened in the 1990s to an average of 550 combinations per year, resulting in a decline of approximately 30 percent in the number of banks during that period.(2)

Development of the bank holding companies (BHCs) has facilitated the concentration movement. In 1990 the 50 largest BHCs held 55.3 percent of commercial bank assets. By the end of 1999 this figure was up to 68.1 percent and is currently in the low 70 percent range. The top ten BHCs have more than one half of all bank assets.

The compositions of these BHCs continue to change, primarily due to the merger movement of the industry. Of the 50 largest BHCs in 1990, only 23 were still independent entities in 1999. The other 27 were “transferred” to the 23 surviving institutions.(3)

Rapid technological innovation has been a major contributing factor in enhancing the viability of the BHCs. Information technology favors larger operating entities by enabling them to develop new transaction and distribution networks such as Automatic Teller Machines (ATMs) and the more recent on-line banking phenomenon. Larger financial institutions can better afford to devise complex financial products and efficiently employ risk management techniques. They also generate economies of scale and scope by leveraging large information technology investments across many products and customers in their business portfolios. These investments then create informational advantages and enhance cross-selling opportunities for BHCs with larger customer bases.

In a marketplace that is growing more global every day, large BHCs’ cross-selling efforts are becoming more and more effective. An increasing array of products and services are offered to current and potential customers. The advertising and promotional costs and efforts are more likely to be spent by the BHCs than by more specialized banking institutions. This is especially the case for retail buyers of financial services who have fairly clear incentives to shop for loans, bill paying services, insurance products, and asset management services at a single site.(4)

Economies of scale have been and are expected to continue to be an important contributing factor motivating the growth of BHCs. Credit card lending and mortgage banking are two lines of business that exhibit scale economies and these products are increasingly being consolidated in larger institutions. In terms of accounts and balances, the top ten credit card issuers hold in excess of three-quarters of the entire market. Large firms
tend to be well equipped to supply these highly standardized, commodity-like activities. These types of products can be produced and distributed in large volumes at low unit costs. The more recent expansion of the Internet is also well suited to delivering highly standardized products in large volumes.

The average assets of almost all commercial banks have increased over the last three decades, growing with the average assets and business volume of their customers (businesses as well as individuals) (Table 5). Therefore, these larger banks have the capacity to keep larger loan balances from any single customers, while controlling the risks of those loans since they are part of larger, more diversified portfolios. These trends have contributed to the rising financial strength of most large banking entities.

At the other end of the product spectrum are the customized financial services marketed to smaller numbers of a wealthier clientele. These services may be highly desirable for a bank’s prestige as well as its profits. Given the impersonal nature of technology, the Internet has proven to be a poor distribution channel for delivering these types of customized financial services. Providing private banking customers with customized asset management solutions or evaluating the credit worthiness of a small or medium size businesses requires more labor-intensive and less capital-intensive strategies. It is in these areas that smaller and more localized banking institutions have been successful in exploiting their natural advantages at service-relationship-based niches in the marketplace. (5)

The commercial banking sector of the United States economy has evolved over the last two decades. Especially since the early 1990s, banks have increased their capital (Table 10) through enhanced financial efficiencies. Bank profits in the last two years (2003 and 2004) have been at record levels, while problem loans were at relatively low volumes. They also derive a growing proportion of their operating income from non-interest, less volatile sources (Table 9). Loan portfolios have been diversified within the bank’s overall asset portfolios.

Absolute and relative growth has been experienced in their real estate lending versus their more traditional commercial and industrial lending. By expanding their business lines they have reduced reliance on interest income from lending, a trend that has been observed especially in larger institutions.

Improved risk management has also contributed to the enhanced operating efficiency and profitability of banks. Asset securitization, loan syndication, and hedging via derivative instruments as well as portfolio diversification have reduced unwanted risks in the balance sheets of the industry.
HOW HAS THE CONSOLIDATION TREND BEEN IMPLEMENTED?

Commercial bank consolidation over the last quarter century has been fueled by mergers and acquisitions as well as the actual closing of some banking entities. In the late 1980s and early 1990s many of these deals involved relatively weak banking companies being acquired by somewhat stronger organizations. In contrast, over the last decade mergers have been observed between quite successful firms in order to expand the market reach of the new entity, or achieve economies of scale and scope in overlapping regions. Even though the markets served by the merged firms are growing, none of the three largest banks (Citigroup, Bank of America-Fleet Boston, or JPMorgan Chase-Bank One) has come close to having a franchise that spans all 50 states.\(^{(6)}\)

A mega-merger may be defined as the combination of two institutions which both have assets in excess of $1 billion. Approximately two-thirds of these deals may be classified as “market extension” mergers – each of the firms had originally operated in different geographic markets before the deal. The remaining one – third of mergers were horizontal deals – those firms operated primarily in the same market.

Market extension mergers increase the nationwide concentration of bank deposits. At the local level, these deposits merely change their ownership from the acquired bank to the acquiring bank, without reducing the number of banks competing in either of the two local markets. In contrast, in horizontal deals, regulators will usually require the sale of some of the acquired branches and/or deposit accounts before the deal is completed.\(^{(7)}\)

Although mega-mergers have grabbed the headlines, they actually have accounted for only a small percentage of all merger and acquisition activity over the last 20 years. Since the mid-1980s through the end of the 1990s, M & A activity reduced the number of commercial banks in the United States by between 4 percent and 6 percent in every year. Most of the banks that disappeared were small. In three quarters of the more than 6,000 mergers of unrelated commercial banks between 1980 and 1994, the target bank held less than $100 million in assets. Another measure of the impact of these merger deals has been a growing concentration of deposits in larger institutions. The ten longest commercial banks had 19 percent of those deposits in 1980 and 37 percent by 1998.\(^{(8)}\)

While many would believe that bank mergers result in reduced costs, studies show that only a bit over one-half of these deals are actually successful in this area. However, those banks with extensive experience at making acquisitions are generally more successful at achieving cost savings, compared with the infrequent purchasers. In addition, market extension mergers tend to reduce the volatility of bank earnings, with a concurrent increase in bank valuations. Finally, bank revenues tend to grow after a merger because loans and other assets of the acquired banks get invested more effectively.\(^{(9)}\)
A parallel development to the role of M & A activity in bank consolidation has been the changing and evolving policies of the Antitrust Division of the Justice Department. They have encouraged the evolution of a more efficient banking structure, while protecting consumers from potential anti-competitive effects of bank consolidations. The department analyzes and evaluates the effects of each proposed merger on local market concentration. They also examine the ability of banks in a localized market, either through unilateral or coordinated actions, to influence pricing of products and/or services. This focus on localized competitive conditions is due to the fact that many individuals as well as small and medium size businesses have traditionally relied on local banks for credit and other banking services. In contrast, larger businesses generally have a wider array of choice for their financial needs.  

Over the last few years, development of the Internet and e-commerce are allowing financial services firms to offer banking products to retail and business customers without establishing a physical presence in a local market. Although electronic banking and advances in credit scoring techniques have improved each year, security concerns and confidentiality of accounts and privacy are still concerns of large numbers of customers. The result has been that most retail customers as well as small and medium size businesses do most of their business with local banks.

The Justice Department has taken the position in recent years that “product expansion” mergers do not create antitrust problems. Rather, their position is that this type of expansion is actually pro competition, leading to greater efficiency and smaller underwriting spreads.

Another contributing factor to the consolidation trend has been and continues to be the transition from a paper-based financial delivery system towards a more electronic-based payments system. A number of elements are playing important roles in this movement, affecting both the scale and scope of commercial bank operations. Convenience requires resources needed to conduct financial transactions. Electronic transactions can take place at any time (24-7-365), resulting in privacy and security concerns that have an adverse effect on consumer confidence in that delivery system. There are trade-offs in these new systems and improvements are being made consistently to alleviate problems. Finally, the degree of complexity involved in bringing standardization and automation to key features of a transaction can affect utilization rates.

It is estimated that approximately 5 percent of the total banking market may currently be classified as “Internet Banking.” Users are heavily skewed to the younger segment of the population, which generally has limited financial resources in terms of assets, but generate larger numbers of transactions. As this cohort moves through their financial life cycle, patience and innovation will be needed to meet their changing needs. For the rest of the population age groups, more patience and innovation will be required to bring them into the evolving technological “main stream.” There is a huge potential financial reward for those firms that effectively exploit these opportunities.
DEREGULATION LEGISLATION

Since the commercial banking segment of the industry is the largest in terms of assets, branches, products, etc., it has had an impact on shaping every institution operating in the marketplace. In the 1990s, two key pieces of legislation have had a direct impact on commercial bank structure and an indirect impact on other players in financial services.

In September of 1994, Congress passed the Riegle-Neal Interstate Banking and Branching Efficiency Act, allowing banks and bank holding companies to establish branches across state lines. This action proved to be the final stage of a decade’s long process of bank branching deregulation in the United States whose restrictions dated from the Banking Act of 1933. Along with the relaxation of state restrictions on statewide and interstate branching in the 1970s and 1980s, higher asset concentrations in the banking industry have been observed for decades.\(^{(13)}\)

In addition to reducing and then eliminating branching restrictions, important technological innovations have contributed to the consolidation movement throughout the financial services industry. The computer revolution for data gathering, storage, and analysis as well as growing ATM utilization by the public has had an impact on industry structure. Gains in efficiency are greatest in large, high-tech financial institutions with customers deriving the benefits of lower product costs and enhanced speed of transaction execution.

In November of 1999, Congress passed the Financial Services Modernization (Gramm-Leach-Bliley) Act allowing the creation of a new type of institution, the financial holding company (FHC). This entity could now offer banking, insurance, securities, and other financial services under one controlling corporation and regulated the collecting of private consumer data. The pace of consolidation in financial services accelerated throughout the 1990s and has continued into the new century. By July 2001, 558 financial holding companies had been formed, with 19 of the 20 largest commercial banks in the U.S. belonging to a financial holding company.\(^{(14)}\) By year-end 2003, there were over 80 of the largest banks, measured by assets, in this category.

Commercial banks could now offer one-stop financial services to their customers. Bank services in the marketplace would depend upon the ability of the institution to adopt and operate efficiently in this new environment. Efficiency is generally measured in terms of cost advantages generated by increases in the scale and scope of a firm’s operations. Scale and scope allow a firm to spread the significant costs of new information and transaction technology over a larger customer base to improve overall organization efficiency.

Other provisions of the Gramm-Leach-Bliley Act were intended to increase competition and efficiency not only within the banking industry but throughout all financial service institutions. These changes encompass the flows of entry and exit by organizations, the
optimum size and scale of operations, growth prospects and the degree of vertical and horizontal integration of servicing entities providing financial services.

Successful and competitive performance derives from improvements in competency in marketing and market segmentation. Those firms that best use information technology to carve out well-defined niches will not only survive but also thrive and prosper.

OVERVIEW OF THE COMMERCIAL BANKING INDUSTRY

There has been a dynamic change in the size and structure of the commercial banking industry since the recession of 1990-1991. During the decade of the 1990s, the number of commercial banks decreased by one-third, ending the decade with 8,580 institutions. In the last four years, through year-end 2003, another 545 banks have disappeared (Table 1).

When analyzing these data in more detail, it may be observed that the entire decline in bank numbers has been in the asset size category under $100 million. In the 1990s 2,777 of these banks disappeared, with a further 1,243 institutions of this size closing through 2003. Every other asset size category has experienced growth since 1992 from a net of 317 banks in the $100 million to $300 million category to 12 in the $1 billion to $10 billion category and 32 in the $10 billion plus category.

Table 2 presents commercial bank numbers in relative terms. While the under $100 million asset category still represented just over one-half of all banks in 2003, this group declined from 72.3 percent in 1992. Many of these smaller banks have either grown into the $100-300 million category or been absorbed by much larger institutions. Although the $10 billion plus banks are only 1.1 percent of the total industry at year end 2003, they have more than doubled their relative position in the last 12 years.

The consolidation trend has been even more pronounced when commercial bank assets are analyzed by bank asset size (Table 3). In the 1990s total bank assets nearly doubled with another approximately 50 percent rise through year-end 2003. Once again, banks with assets in the under $100 million category saw their assets decline from $346 billion in 1992 to $200.8 billion in 2003. All other bank asset groups to $1 billion experienced asset expansion. The $1 billion to $10 billion category declined from a peak of $1,072.3 billion in 1994 to $879.3 in 2000. Since that year, the group has been expanding once again to $947.3 billion in 2003.

The most dynamic performance may be observed in the $10 billion plus asset category, with steady yet almost spectacular asset growth from $1,445.3 billion in 1992 to $5,543.1 billion in 2003. This market segment now represents 72.9 percent of industry assets, up from 41.2 percent in 1992. Interestingly, this is the only asset category that has grown in relative terms! (Table 4).
The average asset size of commercial banks has more than tripled in the 1992 to 2003 period from $305.9 million to $978.3 million. The largest percentage increase was again found in the $10 billion plus category, with smaller gains in all but two groups. The $500-1 billion banks average size declined by 2.3 percent while the $1-10 billion asset banks declined by 11.6 percent.

Another hypothesis that may be tested is that larger commercial banks, by being more efficient and competitive, pass along some of these benefits to their customers (clients) in the form of lower average rates on their lending portfolios. These data must also be used carefully because the composition of those loan portfolios could account for different levels of average rates being charged. Data in Table 6 presents Interest Income as a percent of Net Loans and Leases for commercial banks by asset size. With declining interest rates during most of the last decade, all asset size categories reflect this trend. However, the highest percentage is found in the smallest size banks with a general declining slope each year as asset size increases. By 2003 the $10 billion asset group was down to 7.58 percent, from 12.81 percent at the start of the period (1992). This performance translates into a decline of 40.83 percent. At the other end of the size spectrum, the smallest banks were at 15.00 percent in 1992 and at 8.73 percent in 2003 for an even larger decline of 41.8 percent.

Commercial banks obtain funds from investors and savers in a variety of ways, the most common being savers deposits, which earn interest. In Table 7 the ratio of Interest Expense to Interest Bearing Deposits also exhibits the parallel downward trend in interest rates over the last decade. In fact overall interest rates paid by the commercial banking industry declined by 58.2 percent. With respect to asset size, the largest banks have paid higher average rates to their depositors in every year of this study! While the gap of 2.82 percentage points between the smallest and largest groups in 1992 had narrowed to only .23 percentage points in 2003, savers still get the highest returns in the largest institutions.

Another measure of commercial bank performance and efficiency is Net Interest Income to Total Income. Over the 12 years of this study, this percentage has increased fairly steadily from 44.64 percent in 1992 to 68.63 percent in 2003 (Table 8). There is also a clear positive relationship of this ratio to bank asset size. The largest banks were at 60.41 percent in 1992, compared with only 20.00 percent for the smallest banks. By 2003 the gap had closed marginally with the largest banks at 78.17 percent, compared with the smallest banks at 28.34 percent.

Another important trend in the evaluation of commercial banking, spurred on by technological innovation along with the merger and acquisition movement, has been the diversification of commercial bank activities. While traditional lending to consumers and business entities continues, generating interest income for each institution, the stream of non-interest income has been increasing in absolute and relative size. The Non-Interest Income to Total Income data in Table 9 show that this ratio has been rising almost every year for every asset size group. It also shows an interesting pattern between these groups. The highest ratios are clearly in the largest asset group, but the second highest ratios are
almost always found in the smallest asset group. The percents dip lower for the mid range banks, especially those in the $300-500 million range and those in the $1-10 billion range. For the industry in total, the ratio was relatively stable through 1996, but since then it has risen steadily and significantly each year.

In the last 1980s and early 1990s, the commercial banking industry was buffeted by a slowing economy, rising loan losses, and a weakened equity capital position. Remembering the Savings and Loan crisis of the early 1980s, managements and industry regulators were concerned about the safety, soundness, and stability of the industry. As the 1990s progressed, a great deal of time and effort was directed towards building the capital strength of the industry as it diversified even more into new market segments as well as expanding geographic areas of the world.

Table 10 shows the progress made by the industry to its position today where its financial strength is the greatest in more than half a century. What is interesting is that, while every asset size group has rebuilt its equity capital to decade high levels, the lowest equity capital to asset ratios by a significant margin are found in the $10 billion plus asset banks. At 8.6 percent they are more than one percentage point behind the $300-500 million group at 9.7 percent and 2.7 percentage points below the top group, the smallest banks, with 11.3 percent equity capital ratios. When it is recalled that equity capital produces an element of financial safety for a bank, it should also be remembered that it is the most expensive source of funds. Therefore, by not building equity capital to more extreme levels, the largest banks are balancing the various characteristics of equity to the benefit of their shareholders.

SUMMARY

Analysis of the data presented in this study explains the underlying reasons for growth and consolidation experienced by the commercial banking industry from 1992 through 2003. Larger asset service banks provide their customers with a more varied portfolio of financial products and services in a more efficient and cost effective manner. Lending rates and terms are lower, savings rates are higher, and more higher margin products are available at larger institutions. More efficient management of equity capital and more diversified product categories also are found at the larger banks.

Is it just a matter of time before all of the “small” banks (under $100 million in assets) will disappear? There will always be small banks to provide certain specialized services to some portion of the population. Although the entire decline in bank numbers has been in this group, their average bank’s assets have, in fact, grown from $41.7 million in 1992 to $51.3 million in 2003. So, strategies by some of these bank managements have generated some growth in the marketplace. However, the number of banks in this category continues to decline and it may be expected that these declines will continue for some years to come.
As far as the overall composition of the industry is concerned, all of the factors supporting past consolidation have continued to manifest themselves in 2004. Therefore, it should not be a surprise that the number of commercial banks is likely to decline by 150 to 200 per year for at least the next few years. While asset growth could be expected in some of the asset size categories used in this study, it will most likely be the $10 billion plus group that grows the fastest as well as being the most profitable. The next few years will be quite interesting for the financial services industry in general and the commercial bank segment in particular.


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