

Implications of Deregulations in the Financial Markets, 2008

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Academic literature has provided economic theories explaining the need or lack thereof for regulation of the banking industry. This paper revisits this debate with an analysis of the crisis experienced in the financial markets which peaked in 2008. On November 12, 1999 the Gramm-Leach-Bliley Act was passed which resulted in a repeal of the long-standing Glass-Steagall Act. The Glass-Steagall Act mandated the separation of commercial banking from investment banking in order to protect depositors from the hazards of risky investments and speculations as a reaction to the excesses discovered in the United State's Banking System in the aftermath of the stock market crash of 1929. This Act demonstrated a stellar record of regulating commercial banking in the United States from 1933 to 1999. By most accounts, this Act performed as expected until the banking industry began lobbying for its repeal during the 1980's, the go-go years of market fundamentalism, an outlook which embraced a minimalist role for federal government in the market place. This paper will perform statistical analysis on the relevant financial statement ratios of commercial banks in the United States from 1994 to 1999; then, perform the same statistical analysis of the same financial statement ratios of commercial banks in the United States from 2000 to 2007 to determine whether the banking industry meltdown could have been predicted. We explain the connections between liquidity, profitability, and efficiency. In contrast to the general public, did the corporate financial industry benefit most from the deregulation of financial markets? The results indicate significant financial relationship in the profitability and efficiency ratios, i.e., gross interest income increased significantly when compared to Stockholders' Equity, when compared to Net Income and when compared to Total Assets. As housing and financial markets were declining financial institutions benefited until the collapse began in 2007.

1. Introduction

With the global financial crisis which began by the end of 2007, interest is focused again on regulation of financial markets in the United States. Historically, the U.S. Congress enacted the Glass-Steagall Act of 1933 which separated commercial banks from investment banks to prevent conflicts of interest. The Glass-Steagall Act was passed as a result of the stock market crash of 1929 in the U.S. and the resultant bank failures

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which occurred from 1930 through 1935 (Flannery, 1998). As the stock market tumbled, people hurried to their banks and made massive withdrawals. In spite of the Federal Reserve System, the banks ran out of money and states were forced to close state chartered banks. Nevertheless, in the wake of the 1929 stock market crash, a nation-wide commercial bank failure occurred leading to The Great Depression.

The Glass-Steagall Act limited the freedom of commercial banks in securities markets, i.e., reduced bankers' ability to speculate with other people's money; prohibited commercial banks from owning insurance companies; and prevented the use of deposits in underwriting. Nonetheless, in 1999 the Gramm-Leach-Bliley Act was passed which essentially repealed the Glass-Steagall Act of 1933. The Gramm-Leach Bliley Act allowed the merger of commercial and investment banks, insurance companies, and securities underwriters. It also lifted restrictions on the use of derivatives, sub-prime mortgage lending, etc.

The objective of this paper is to explore the argument of Stigler and Peltzman who contend that deregulation of financial markets benefits corporate interest and leans toward aggressive financial behavior. This research will address the question: Does the financial statements of commercial banks indirectly predict the market failure of 2008? This research contrasts financial results for several years before and after the passage of Gramm-Leach-Bliley Act of 1999, i.e., 1994-1999 versus 2000-2007. The purpose is to determine if corporate interests profited more by the 1999 deregulation of financial markets.

Section 2 will provide a literature review of earlier research with a focus on two contending groups: those who call for regulations versus those who insist on deregulations. Supporters of a call for stringent regulations and restrictions believe that commercial and investment banking should be separated. In contrast, the supporters of deregulations call for more freedom within the market, i.e., less prohibition on commercial and investment banking. Section 3 provides the research methodology; section 4 the results; section 5 provides a summary and conclusion; and section 6 provides a brief review of the research limitations.

2. Literature Review

Since the 1971 publication of George J. Stigler's article, "The Theory of Economic Regulation," there has been a series of debates on the motivations of regulation. Stigler postulated that regulation is primarily designed and operated for the benefit of industry. Another alternative view is regulation is for the public at large, its benefit and protection (Stigler, 1971, p. 3).

The current financial crisis in the United States has witnessed abusive lending of sub-prime mortgages, derivatives, market failures and the federal financial bailout. All these and more focus attention on the need for more government regulation in the financial markets. In a perfectly competitive market, standard theory explains that goods and services will be produced efficiently and with low costs. However, the current market

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failures reopen debates on the need for more regulation of financial institutions. According to George J. Stigler, the political process and the resultant public policy may be imperfect. For instance, Stigler says, obtaining appropriate legislation is costly and prohibitively expensive. There is a tension between the desires of industry and the needs of the public. Political pressure, public outcry and contending interests have all influenced the regulation process. To have significant impact in the legislative process the public must have simultaneity of decision, i.e., a large number of voters simultaneously must make informed demands in unity on the political process. A general weakness for the public is a general lack of information among uninformed voters. For political representatives, the stake is very high. When political legislators rule against large industries, these financially strong industries are capable of redirecting their subsidies or money for another successor (Stigler, 1971, p. 11). According to Stigler, industry benefit most from regulation because they have the resources to invest, lobby and campaign for legislation (Stigler, 1971, p. 13). In contrast, consumer groups must organize, mobilize, and contribute resources to support a political party or public policy, persuade voters and perhaps offer a bribe (Peltzman, 1976, 213).

Sam Peltzman expressed agreement with some conclusions made in Stigler's theory of economic regulation but also expanded his thoughts on regulation. Like Stigler, he states that the "producer interest" usually prevails over that of "consumer interests." The commodity of the political process is the transfer of wealth. Those with the most effective demand will receive the wealth. In this case, the dominant group is usually the producer. Producers or industries are more effective in expressing their demands (Peltzman, 1976, 212-213).

Richard A. Posner continued the debate by focusing on two additional theories and contrasting them to Stigler's economic theory of regulation. They are the "public interest" theory and the "capture" theory. The public interest theory emphasize that government regulation is used to benefit consumers and correct market failure. The capture theory emphasizes how various interest groups capture and influence the passing of regulation for the benefit of its members (Posner, 1974, 335-336).

Posner contends that the form of both the "public interest" and the "capture" or "interest groups" theories are unacceptable. The public interest theory presumes that economic markets are fragile with a tendency to operate inefficiently. It also presumes that government regulation comes without costs. However, fifteen years of economic research shows no positive correlation with external economies and exposes the weakness in the presumptions made by the proponents of the public interest theory. Posner also concludes that dominant politicians have the power and opportunity to impose their own policy conceptions of the public interest groups want (336, 341).

In the case of the capture theory, one version postulates that regulatory agencies over time are gradually captured or dominated by the industries or interest groups they are suppose to regulate. However, Posner rejects this theory by stating that 1) it has no theoretical foundation; and 2) no evidence or reason to demonstrate how one interest

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group prevails over other interest groups to dominate a regulatory agency is provided. In contrast, Posner accepts Stigler's theory of economic regulation as "path breaking." Stigler's theory contains economic assumptions which can be analyzed and subjected to economic tests in future research (342-344).

Toward the early to mid-1990s, George L. Priest made additional observations concerning the stance taken in the Journal of Law and Economics. He notes that their publications challenged the need for government regulation of markets. The authors and the editors of the journal describe the government's attempts to regulate and prevent market failures as socialism. They extolled economic freedom and competition. As a consequence, various published articles in the Journal of Law and Economics focused on specific regulatory agencies and industries. The subjects in the journal ranged from regulations by the Federal Communications Commission (FCC), monopolies, occupational licensing, agricultural subsidies, etc. (Priest, 1993, 290-291).

Pablo T. Spiller focused on the differences between the initiation and purpose of regulation and the unobservable actions of the regulators whose interests may not be aligned with the political intent of regulation (Spiller, 1990, 65-66).

Benson and Kaufman focused on the fragility of the banking system and the view of others who emphasized the need for strong government regulation of banks. They quoted Feldstein's article of 1991:

At some point, greed overcomes fear and individual investors take greater risks in the pursuit of greater returns. A shock occurs and the market prices of assets begin to collapse. Bankruptcies of leveraged individuals and institutions follow. Banks and other financial institutions fail in these circumstances because they are inherently leveraged (Benston and Kaufman, 1995, 15).

Overall, Benston and Kaufman suggests that banks may be more prone than other industries to failure not because the banking system is fragile, i.e., they state banks are not inherently fragile, but because of the "exogenous withdrawals of bank reserves (largely gold) and restrictions on U.S. banks (211).

During the 1990s the stage was set which divided proponents into groups 1) those that pushed from deregulating or decreasing government control of markets and 2) those who called for continued regulation separating commercial and investment banking.

In 2002, a University of Virginia professor, Edmund W. Kitch explains that it was necessary to repeal the Glass-Steagall Act for four reasons and that there also was a push to repeal portions of the 1933 Securities Act. The four reasons offered are:

First, the separation principle of the statute was evaded in practice. Second, the prohibition, at variance with the standard practice in most other important commercial jurisdictions, created problems for the

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international competitiveness of U.S. commercial and investment banks. Third, although the separation principle was evaded in practice, doing so imposed significant costs on U.S. firms. Fourth, the belief in the policy sense of the prohibition had been undermined by academic work that challenged the assumptions underlying the prohibition. Similar developments are well underway in relation to the 1933 Securities Act (Kitch, 2002, 54).

Kitch also explained that Benston and Kaufman's 1990 publication, "The Separation of Commercial and Investment Banking: The Glass-Steagall Act Revisited and Reconsidered" was effective in dissolving the intellectual argument supporting Glass-Steagall (56).

In December 2008, after more than a full year of global economic crisis, Louis Grumet writes that government must regulate two "market influences: fear and greed." He explains that the allowed merger of Citicorp with Travelers Group effectively weakened the restrictions of Glass-Steagall and led to its eventual repeal. He proclaims that the drive for deregulation exceeded appropriate and reasonable boundaries.

We allowed the interests of banks, insurance companies, and investors to merge. The resulting concentration of wealth fueled a level of greed that has seemingly overcome good business sense. With no regulatory restraint, financial companies went on a binge until the housing market bubble burst. In 2008, the public then lost confidence in the markets, and has paid dearly. . . Almost all of the major assumptions of the last several decades should be questioned and examined. . . It may be time to reinstate the Glass-Steagall Act, or to craft new legislation with a similar goal. The case for regulation has never been stronger. Two years after Glass-Steagall's repeal, Enron fell. Today, seven years after the fall of Enron, the United States finds itself in the middle of another financial crisis with generations-old financial institutions vanishing and families losing their homes. (Grumet, 2008)

Using Stigler and Peltzman's theory, the current financial crisis which peaked in late 2007, indicates that the corporate interests benefited most from the 1999 legislation deregulating the financial markets, i.e., the use or misuse of risky assets benefited corporate producers at the expense of the general public.

Historically and not without controversy or disagreements, financial institutions and financial markets are regulated in various ways in different countries. In Germany, commercial banking and investment banking are not separated. In Japan and in contrast to the United States, greater restrictions are placed on commercial banks. In the United States, the Glass-Steagall Act of 1933 separated investment and commercial banking activities. At the time, "improper banking activities" or what was considered overzealous commercial bank involvement in stock market investment, was deemed the main culprit of the 1929 financial stock market crash. According to this reasoning,

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commercial banks took on too much risk with depositor's money (Barth, 2000). Additional and sometimes non-related explanations for the Great Depression evolved over the years, and many questioned whether the Glass-Steagall Act hindered the establishment of financial services firms that can effectively compete against each other for the good of depositors.

As a collective reaction to one of the worse financial crisis at the time, the Glass-Steagall Act set up a regulatory firewall between commercial and investment banking activities, both of which were curbed and controlled. Banks were given a year to decide whether they would specialize in commercial banking or investment banking. Only 10% of commercial banks' total income could stem from securities, however, an exception allowed commercial banks to underwrite government –issued bonds (Barth, 2000). Financial giants at the time such as JP Morgan & Company, which were seen as part of the problem, were directly targeted and forced to cut their services and hence, a main source of their bank revenues. By creating this barrier, the Glass-Steagall Act was aiming to prevent the banks' use of deposits in the case of a failed underwriting job.

The Glass-Steagall Act, however, was considered harsh by most in the financial community, and it was reported that even Glass himself moved to repeal the Glass-Steagall Act shortly after it was passed, claiming it was an overreaction to the crisis.

3. Methodology

This research examines the financial trends and statistics of commercial banks to derive the implications of deregulation and its influence on the transfer of wealth. It primarily focuses on the income statements of commercial banks and their accounting results to analyze their performance and efficiency. This will allow an investigation of the associations and changes before and after the passage of the Gramm-Leach-Bliley Act of 1999. It addresses the question: Do the financial results and condition as revealed through this analysis indicate more aggressive behavior on the part of financial institutions in their pursuit of wealth after the passage of the Gramm-Leach-Bliley Act of 1999?

The following data was analyzed using a modified F Test (Test of Means) of the top 100 Commercial Banks, (which represent 85% of all Commercial transactions) to determine if the sum of their variances before the repeal of Glass-Steagall as contrasted to the sum of the variances after the repeal of Glass-Steagall differ in any way that is statistically significant. The results for the years 2000-2007 will be contrasted to the years 1994-1999.

4. Results

Results of this analysis were as follows:

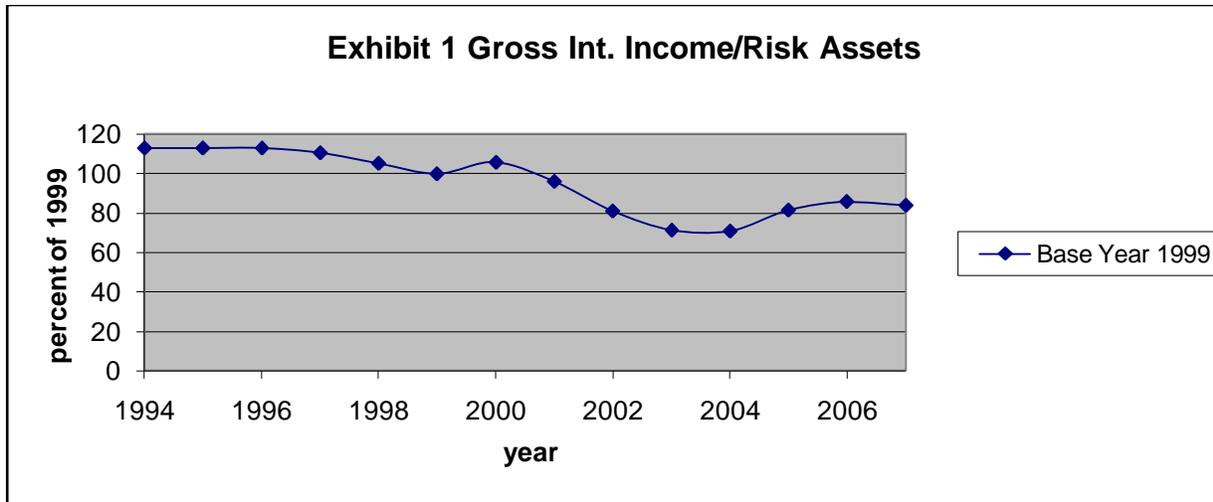
- I. Efficiency Ratio: Gross Interest Income/Risk Assets is closely related to liquidity ratios. The results demonstrated no significant effect for the relationship between Gross interest Income and Risk Assets ($F = 4.713022$, d.f.12, $p=.053437$). This result would be expected as the purpose of assets, to begin with, is to use up these assets and generate revenue (Gross Interest Income) in return. We must recognize that the internal management of these commercial banks are very highly compensated, accomplished, skilled and talented, thus it would be predicted that they would maximize Gross Interest Income as more risk assets (sub-prime mortgage obligations, etc.) were brought on line. This is exactly what happened.

	<u>Variable 1</u>	<u>Variable 2</u>
Mean	.07239	.093199
Variance	9.96E-05	2.11E-05
Observations	100	100
df	7	5
F	4.713022	
P (F<=f) on	.053437	
F Critical Factor	4.875872	

Comparing gross interest income to risk assets is a measure of the efficiency of assets. They reveal the effectiveness of an organization's use of its assets. Although statistically, the results indicate no significant effect, the ratios before and after the 1999 Act provides additional insight and portrait before the financial crisis among commercial banks and before economic collapse and recession which began late in 2007.

In Exhibit 1 observe that the years 1994 to 2000 reveal a greater efficiency in using risk assets to generate revenue than the years 2001 to 2007. Also observe that after the year 2000 there was a steady and gradual decline in the efficient use of risk assets to generate interest income with a slight increase in 2005-2007. Nonetheless, years 2001 to 2007 never regained the efficiency of the years 1994-2000. Moreover, in 2004, regulators began to warn that borrowers were being encumbered with unaffordable mortgages by subprime lenders. Exhibit 1, therefore, reveals a decreasing efficiency in the use of risk assets to generate income.

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II. Efficiency ratio #two: Another measure of a company's efficient use of its assets is to compare gross interest income to total assets, i.e., Gross Interest Income/Total Assets: The results demonstrated a significant effect for the relationship between Gross Interest Income and Total Assets ($F = 20.38915$, d.f.12, $p=.002154$). The skill, talent, and managerial ability of these highly compensated senior managers would predict a significant effect in the relationship between Gross Interest Income to Total Assets. The responsibility of senior management is to make total assets available to maximize revenue (Gross Interest Income). This is exactly what happened.

	<u>Variable 1</u>	<u>Variable 2</u>
Mean	.063255	.007561
Variance	.000175	8.6E-06
Observations	100	100
df	7	5
F	20.38915	
P (F<=f) on	.002154	
F Critical Factor	4.875872	

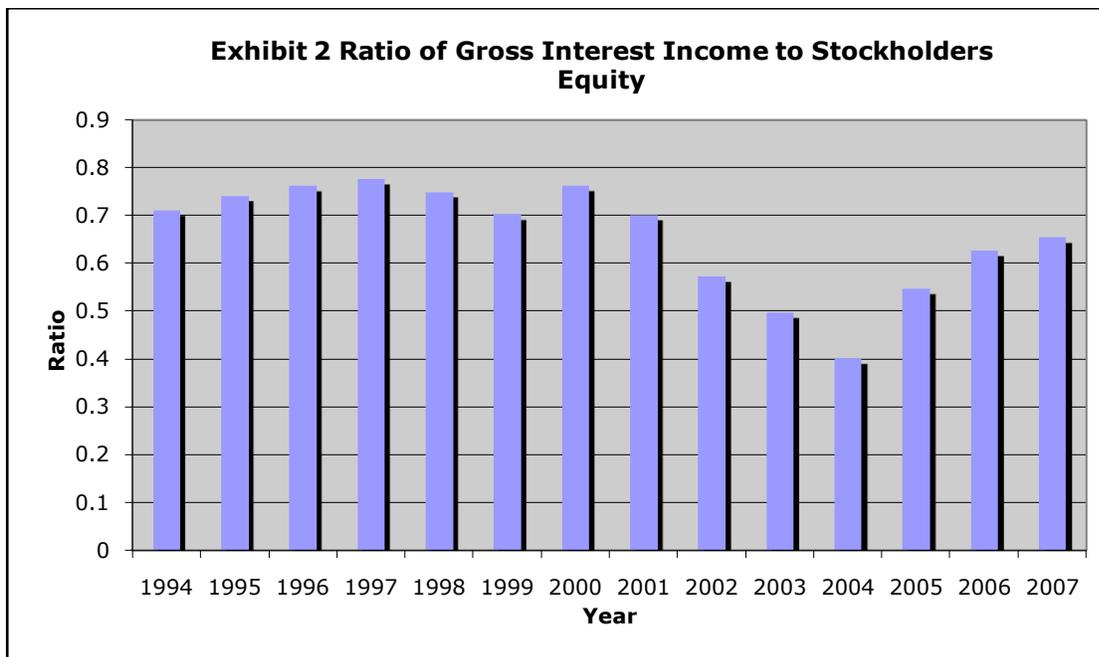
As the value of risk assets began to decline, the potential to collect interest income also began to weaken. In the next section Gross Interest Income is compared to Stockholders' Equity

III. Gross Interest Income/Stockholders' Equity: The results demonstrated a significant effect for the relationship between Gross interest Income and Stockholder's Equity ($F = 22.6161$, d.f.12, $p=.001686$). The management of these commercial banks would maximize Gross Interest Income from the more speculative opportunities made available in the main because of the repeal of the Glass-Steagall Act. The change in equity, as would be

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expected, would not rise as fast as the change in Gross Interest Income. That is, the increase in total assets, lead by the increase in Risk Assets, would be significantly offset by increase in demand deposits.

	<u>Variable 1</u>	<u>Variable 2</u>
Mean	.594488	.735414
Variance	.013404	.000593
Observations	100	100
df	7	5
F	22.6161	
P (F<=f) on	.001686	
F Critical Factor	4.875872	



In Exhibit 2 observe from 2000 to 2004, the percentage decline of Gross Interest Income when compared to Stockholders' Equity. A major part of this decline could be impacted by the loss of investor confidence in financial markets after the 9/11 terror attack coupled with financial fraud and scandals resulting from such companies as Enron, etc. However and again, the use or misuse of subprime mortgage lending continued to rise after 2004 providing a temporary and illusionary increase in Gross Interest Income from 2005-2007 when compared to the more static Stockholders' Equity. Note also that in 1999 the ratio was approximately 70 percent, in 2004 it was a low of 40 percent and by 2007 Gross Interest Income was approximately 65.3 percent of Stockholders' Equity.

- IV. Liquidity ratio: Current Assets/Current Liabilities is a measure of a company's ability to pay its current debt when due and the ability to generate revenue.

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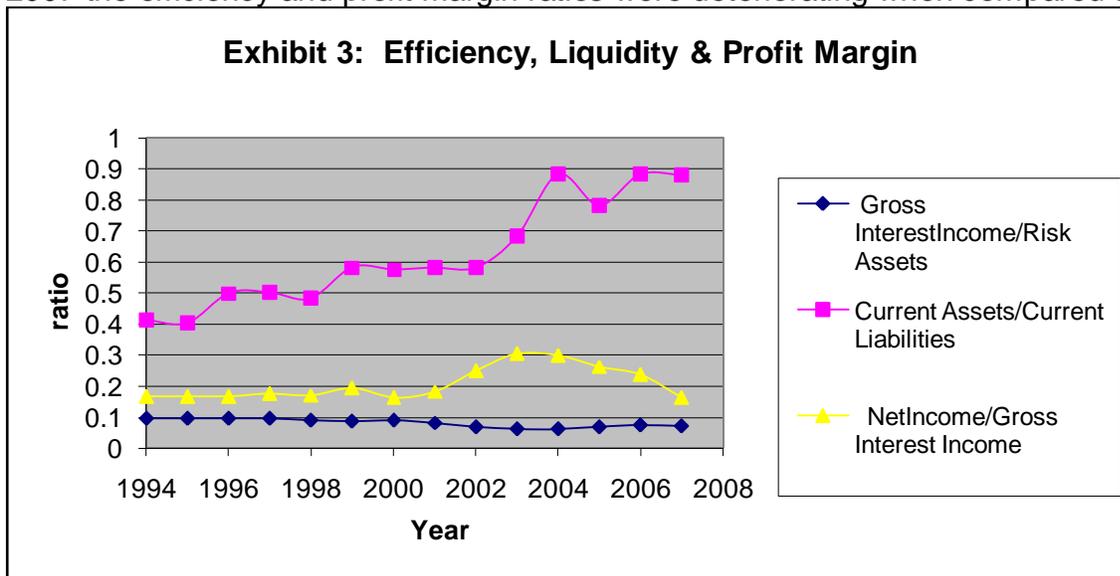
The results demonstrated no significant effect for the relationship between Current Assets and Current Liabilities

($F = 4.748455$, $d.f.12$, $p=.052662$). It would be predicted that the change in Current Assets (primarily represented by an increase aggressive mortgage obligations) would be significantly offset by increase in demand deposits (Current Liabilities).

	<u>Variable 1</u>	<u>Variable 2</u>
Mean	.732459	.480507
Variance	.020253	.004265
Observations	100	100
df	7	5
F	4.748455	
P (F<=f) on	.052662	
F Critical Factor	4.875872	

Many times, emphasis is placed only on the income statement, i.e., net income compared to variables such as gross interest income or comparing one variable on the income statement to one variable on the balance sheet. However, the current ratio, i.e., current assets/ current liabilities, focuses on the balance sheet and should be examined when examining the income statement. There is a danger in misinterpreting financial data when attention is primarily focused only on the income statement or when the liquidity on the balance sheet appears to have improved. In actuality when the cash balance is declining and there is also an increasing balance of loan receivables coupled with declining receipts from customers, in the short run the current ratio can falsely give the appearance of improvement. Such was the case leading up to the 2007 declaration of economic recession and subsequent financial crisis among commercial banks.

As we examine exhibit 3 it reveals in 2007 a 51 percent increase in the current ratio (liquidity ratio) when compared to the base year of 1999. Moreover, exhibit 3 reveals in 2007 the efficiency and profit margin ratios were deteriorating when compared to 1999.

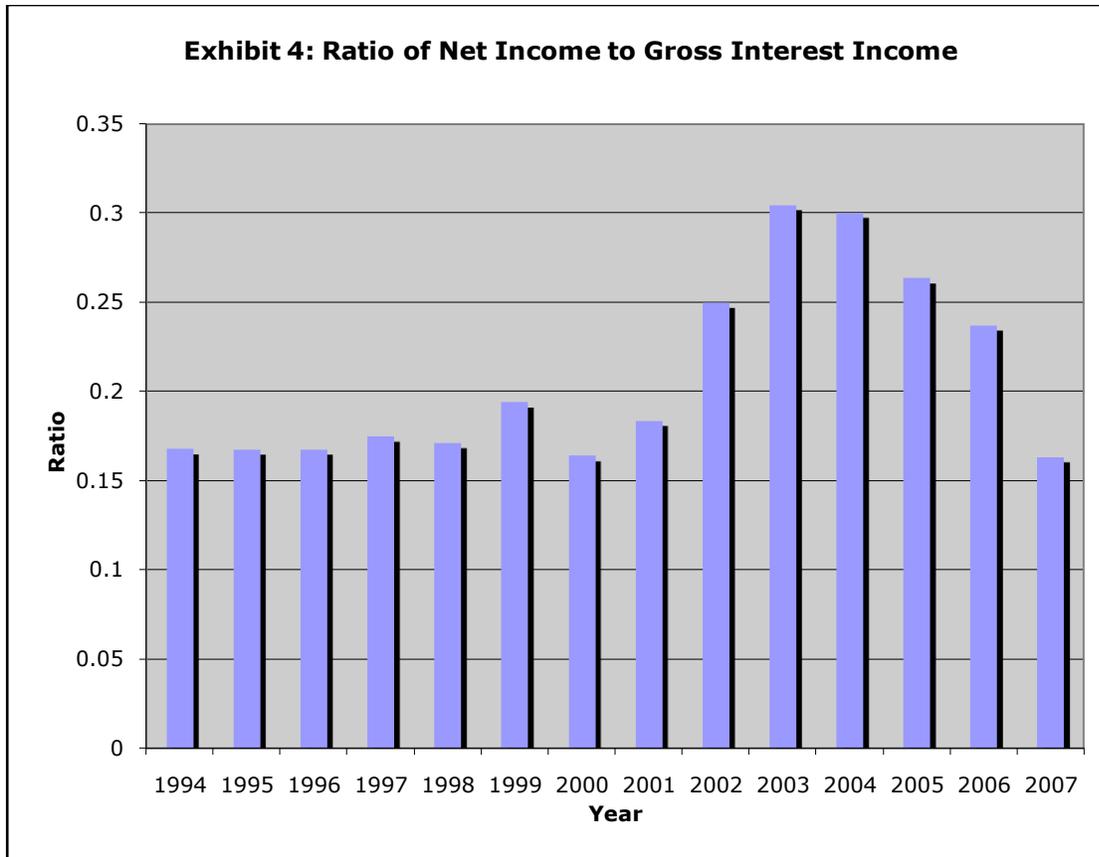


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- V. Profitability ratio: Net Income/Gross Interest Income-- The results demonstrated a significant effect for the relationship between Gross interest Income and Net Income ($F = 30.98596$, d.f. 12, $p = .000795$). The skill, talent, and managerial ability of these very competent and highly compensated managers of commercial banks would most easily be seen by the analysis of Gross Interest Income to Net Income. The skill of these managers in creating the additional revenue while simultaneously, managing expenses was to be predicted as this is the quintessential measure of the quality of highly compensated middle managers. This is exactly what happened.

	<u>Variable 1</u>	<u>Variable 2</u>
Mean	.23324	.174756
Variance	.00328	.000106
Observations	100	100
df	7	5
F	30.98596	
P (F<=f) on	.000795	
F Critical Factor	4.875872	

As a Profitability ratio or Profit Margin, comparing Net Income to Gross Interest Income is used to reveal if an organization has received an adequate return on invested capital. Therefore, Exhibit 4 shows the Net Income as a percent of Gross Interest Income. Observe that the greater profitability is shown for the years 2002 through 2006 with its peak and greatest profitability in year 2003 of 30.45%. By 2007 the percent had declined to 16.32%, a rate even lower than that of 1994 of 16.76%. By the end of 2007, the United States was in an economic recession.



5. Summary and Conclusion

The repeal of Glass-Steagall encouraged Commercial banks to become more aggressive as demonstrated in the significant effects of: Gross Interest Income and Stockholder's Equity, Net Income and Gross Interest Income, and Gross Interest Income and Total Assets. The U.S. Commercial banks did, however, demonstrate some restraint as there was significant effect of: the relationship between Gross Interest Income and Risk Assets (indicating that bankers understood the relationship between risk and reward (Graham & Horner, 1988). The interpretation of this event is that bankers required higher rewards (interest income) consistent with higher risks (Risk Assets). Additionally as the current portion of loan assets (current assets) rose, demand deposits (current liabilities) also rose, which would be expected in economic good times (Graham & Horner, 1988).

Overall, the resulting financial collapse and global recession indicate the need to revisit the debates of the 1970s and 1980s on the theory of regulation. The debates focused on the strength of relationships politically, the regulatory process and distribution of wealth. In repealing the Glass-Steagall Act through passing the Gramm-Leach-Bliley Act of 1999, this action

- allowed the merger of banks, insurance companies and securities underwriters

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- led to concentration of wealth among corporate power brokers
- weakened the protection of investors, consumers and local institutions
- And negatively impacted the housing market.

As the current research reveals, the full impact of financial, economic and accounting policies and decisions are not always immediately manifested in financial results. Over time or a matter of several years, i.e., 2000-2007 and the resultant economic recession and market failure, the need for more regulation of financial markets was again brought to the forefront.

6. Research Limitations

Additional research is needed which focuses on specific commercial and or investment banks who failed as a result of aggressive financial decision-making leading to the financial crisis which began by the end of 2007 and climaxed in 2008, i.e., companies such as Lehman Brothers, Countrywide, sub-prime mortgage lenders, etc. This research does not address specific bank failures, bankruptcies, and subsequent lawsuits on bank and mortgage company officials, their CPA firms and others associated with bank failures.

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