REQUEST FOR APPROVAL TO USE W-DESIGNATION

LSC #_____
Action _____

COVER SHEET: Request for Approval to Use W-Designation

TYPE I. PROFESSOR COMMITMENT

☐	Professor _____	Phone _____
☐	Writing Workshop? (If not at IUP, where? when?) _____	
☐	Proposal for one W-course (see instructions below)	
☐	Agree to forward syllabi for subsequently offered W-courses?	

TYPE II. DEPARTMENT COURSE

☑	Department Contact Person Dr. Mukesh Chaudhry	Phone 7-5746
☑	Course Number/Title Seminar in Finance (FIN 422)	
☑	Statement concerning departmental responsibility	
☐	Proposal for this W-course (see instructions below)	

TYPE III. SPECIFIC COURSE AND SPECIFIC PROFESSOR(S)

Professor(s) _____ Phone _____
Course Number/Title _____
Proposal for this W-course (see instructions below)

SIGNATURES:

Professor(s) _Mukesh k. Choudhry_

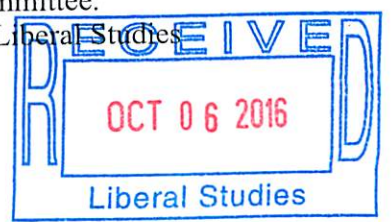Department Chairperson _Ibrahim Affaneh_

College Dean _____

Director of Liberal Studies _Edel Reilly_

COMPONENTS OF A PROPOSAL FOR A WRITING-INTENSIVE COURSE:

I. "Writing Summary"--one or two pages explaining how writing is used in the course. First, explain any distinctive characteristics of the content or students which would help the Liberal Studies Committee understand your summary. Second, list and explain the types of writing activities; be especially careful to explain (1) what each writing activity is intended to accomplish as well as the (2) amount of writing, (3) frequency and number of assignments, and (4) whether there are opportunities for revision. If the activity is to be graded, indicate (5) evaluation standards and (6) percentage contribution to the student's final grade.

II. Copy of the course syllabus.

III. Two or three samples of assignment sheets, instructions, or criteria concerning writing that are given to students. Limit: 4 pages. (Single copies of longer items, if essential to the proposal, may be submitted to be passed among LSC members and returned to you.)

Please number all pages. Provide one copy to Liberal Studies Committee.
Before you submit: Have you double-checked your proposal against "The Liberal Studies Committee's Most Frequently Asked Questions"?

UWUCC Co-chair _Gail Sechrist_ 10/18/16

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Statement of Commitment to Writing Intensive Course by the Department of Finance and Legal Studies.

The Department of Finance and Legal studies is committed to teaching the course FIN 422 (Seminar in Finance) as a Writing Intensive Course. The Department Chair will assign the course to a Finance Faculty who is qualified to teach the course as Writing Intensive. Each faculty assigned to teach the course should adhere to the following guidelines:

1) Writing assignments should enhance the written communication skills of each student;

2) Writing assignments should include writing reports on 25-30 cases; journal articles; summary of presentations; formal essays and a research project (Syllabus requires 10-page report). Also, there will be 4-6 presentations by Guest Speakers and a final report on their presentations.

3) Instructor provides students with instructions on the format and organization of a research report (Syllabus requires students to use a scientific approach with 8 stages to prepare the reports);

4) Assignments will be graded on writing quality, form, style and substance. Improvement of student learning is a clear objective (Syllabus indicates the weighting for cases at 40%, the research report for 15% of the total grade in the course);

5) Students will submit the reports for critical evaluation by the instructor who will provide feedback to the student.

Finance and Legal Studies Department Statement of Responsibility for All Writing-Intensive Course:

The Department Chair shall provide a copy of this agreement to each faculty member assigned to teach a Writing-Intensive course. Each faculty member assigned to teaching a Program Writing Intensive Course agrees to the following criteria:

- Writing assignments are an integral part of the course, which promise to enhance student learning (not "exercises in writing for writing's sake").

- Writing assignments will include various forms of writing such as case studies, research articles and a research project.

- The improvement of student writing is a clear objective of the course.

- Students will be provided with written instructions that cover major criteria for the evaluation of the assignment(s).

- Students will receive guidance in conceiving, organizing, and presenting written material in ways appropriate to the field of finance.

- Students will produce at least 5000 words (15-20 typed pages) of writing will be critically evaluated.

- Each writing assignment will have specified length in terms of minimum number of pages required.

- Writing assignments include at least one major assignment (research) and several shorter different assignments (cases).

- Students will be required to submit drafts of at least one major writing assignment that will be returned with instructor comments/suggestions for improvement before the final copy of the assignment is due, so that students have an opportunity to revise their written work.

- Students will submit final copies of writing assignments for critical evaluation.

- Instructor evaluation of written work will comprise at least 55% of the course grade.

INDIANA UNIVERSITY OF PENNSYLVANIA
EBERLY COLLEGE OF BUSINESS and INFORMATION TECHNOLOGY DEPARTMENT OF FINANCE and LEGAL STUDIES

Fin 422-W01   Seminar in Finance- Spring 2016
Professor: Dr. Mukesh Chaudhry
Office: 322A Eberly College of Business and Information Technology
Phone: (724) 357-5746
Email: chaudhryW..iup.edu
Class Time: M 3:30 p.m. - 6;00 p.m. ECB 310
Office Hours: T, TH 1:30 p.m. – 3:30 p.m. and W 11:00 a.m. - 12:00 .m.

Prerequisites: FIN 320, FIN 324, Seniors only

Course
Description: Primarily for the senior Finance major and covers topics in the areas of finance by using recent articles, cases, discussions, speakers, and a research project .

Course
Objectives: This senior level capstone course will focus on two main areas: first, case analysis and research project; second, is to help students improve their writing skills.

A. CASE STUDY

Case analysis deals with complex problems of financial management. The case method approach **provides an opportunity for you to develop fundamental** techniques **of analysis needed to resolve basic financial questions.**

The cases depict a wide variety of financial situations and represent different industries, time periods and phases of the life cycle of business firms. Therefore, **you will be exposed to different types of managerial problems.** You are asked to place yourself in the executive's position to analyze the problem, and finally to decide upon the appropriate course of action to be taken. Each of you should be prepared to adequately defend your analysis and decisions during classroom discussions.

Seminar in Finance presupposes an in-depth understanding of the theory of financial decision-making. Where this is lacking, you must expect to perform voluntary supplementary study in order to comprehend the various facets of the cases. You will find it helpful to refer to your standard finance texts for background information, which is not provided in the case materials. In addition, you are expected to read one good financial publication such as The Wall Street Journal, Barron's, or Financial Times on a regular basis.

Approximately 25-30 cases and problems will be assigned during the semester and will include topics as follows:

1. Financial Analysis and Forecasting
2. Capital Budgeting and Resource Allocation
3. Estimating Cost of Capital
4. Managing Firm's Equity: Dividends and repurchases
5. Management of the Corporate Capital structure
6. Risk Management and Hedging
7. Lease Financing
8. Bonds Valuation
9. Valuation Principles and Mergers and Acquisitions
10. Firm Valuation and Stock Repurchases
11. Valuing a Takeover Opportunity and Valuation of an Enterprise for sale
12. Retirement Planning

B. RESEARCH PROJECT (Due Date April 25, 2016):

The purpose of this part of the course is to enable students to undertake a research project dealing with one of the current financial problems. The area selected should be of significant interest so that the rationale for such project work can be suitably justified. Self-initiative is one of the basic factors for success in this endeavor. General guidance will be provided but the burden of effort will rest mainly with the student(s).

To make certain that work is progressing; however, a one-page report will be submitted every other week throughout the semester. This short report will indicate the progress made during the previous two weeks and what you expect to accomplish within the next two-week period. Failure to observe this procedure can seriously jeopardize your grade.

For this project each of you will work independently. Using the scientific approach, you will help identify and structure a significant problem. The final report should contain creative reflection with regard to most of the following stages:

1. Problem identification	5. Data collection and analysis
2. Literature review	6. Results interpretation
3. Hypothesis development	7. Recommendation listing
4. Instrument design	8. Benefit contribution

This effort is designed to (1) aid in the development and/or sharpening of research skills, and (2) increase your awareness of financial problems and how they may be solved or structured through scientific endeavor mainly; however, it should also enhance your written communications skills.

The topic for the research paper must be discussed with and approved by the instructor by no later than four weeks after the beginning of the semester. A proposed detailed outline of your work is due on or before the fifth week of the semester. The report should not exceed ten typewritten pages of text material. Charts, graphs, tabulations of data, bibliography, etc., can be placed in an appendix where appropriate. The final report is expected to be of high quality and will be graded on the basis of form, style, and substance. The completed papers are due two weeks before the end of the semester. Presentations of your findings will be made to the class as part of the project.

Note: Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Terms and Conditions of Use posted on the Turnitin.com site.

Grading:

Cases/Problems	40
Mid-Term Exam	20
Final Exam	25
Research Project	15
	100

Required Texts:

Robert F. Bruner, Kenneth M. Fades, and Michael J. Schill. <u>Case Studies in Finance Managing for Corporate Value creation 7t Edition Mcgraw Hill -- Irwin 2014</u>

As the course progresses, articles and other materials reflecting current topics will be distributed and available for discussion.

Students are required to obtain Bloomberg Certification and must utilize Bloomberg's extensive database for their research project. Bloomberg stations are located in room 407. Student Assistants will be available for help.

Indiana University of Pennsylvania and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office for Civil Rights, the University requires faculty members to report incidents of sexual violence shared by students to the University's Title IX Coordinator. The only exceptions to the faculty member's reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project.

Faculty members are obligated to report sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred to the Department of Human Services (1-800-932-0313) and University Police (724-357-2141).

Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: http:l/www.iup.edulsocialequity/policiesltitle-ixl

Bibliography:

Benninga, Simon, Principles of Finance with Excel (New York, Oxford University Press, 2006)

Berk, Jonathan, Peter DeMarzo and Jarrad Harford, Fundamentals of Corporate Finance (Prentice-Hall, 2011)

Copeland, Tom, Tim Keller, and Jack Murrin, "Valuation: Measuring and Managing the Value of Companies," 2"d Ed. (New York: John Wiley and Son, Inc., 1994).
Fraser, Lyn M., Understanding Financial Statements (Englewood Cliffs, NJ: Prentice-Hall, 1992).

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Hirt, Geoffrey A. and Stanley B. Block, Fundamentals of Investment Management, 7th Ed. (New York: McGraw-Hill-Irwin, 2003).
Livingston, Miles, Money and Capital Markets (Cambridge, Mass.: Blackwell, 1996).

Marlton, Felicia, and Robert S. Hanes, "Risk and Return: A Revisit Using Expected Returns," Financial Review, February 1993, 117-137.
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Sharpe, William F., Investments (Englewood Cliffs, NJ: Prentice-Hall, 1995).

Shapiro, Alan, Multinational Financial Management, 7th Ed., (New York: John Wiley and Son, Inc., 2003).

Wallace, Anise, "Beta Dead?" Institutional Investor, July 1980, 23-30.

"There will be absolute enforcement of every prerequisite requirement for the coursework offered by the Eberly College of Business and information Technology. This means that students cannot postpone prerequisites and take them after the course in question.

The Dean's office is responsible for monitoring course prerequisites. Students who manage to register for coursework in spite of the fact that they do not have the appropriate prerequisite will be subject to unilateral withdrawal after the course has commenced. At that time, no appeal will be accepted and adding a different class after the official registration period will not be approved."

The individual course withdrawal deadline date will be enforced. You may complete this withdrawal through the computer registration system.

A "Request for a Deadline Waiver" must be sought through the Assistant Dean for Academic Services in Room **208.** *Requests will only be granted: 1)"contingent upon documentation of catastrophic circumstances" as stated in the IUP Undergraduate Catalog; and/ or 2) through written feedback from the instructor noting advisement to the student to postpone normal withdrawing pending an additional test or assignment.*

Tentative Schedule FIN 422 (Seminar in Finance)

Setting Some Themes

January 25, 2016
Case#l: Warren E. Buffet, 2005 To think like an investor

February 1, 2016 - Patrick Wallace - Seminar on Financial Planning

February 8, 2016
Case#2: The Battle for value, 2004: Fed Ex Corp vs. United Parcel Service: Value creation and economic profit
Presenters: To be announced

Financial Analysis and Forecasting

February 8, 2016
Case #3: The Financial Detective, 2005: Ratio Analysis and Case #4 Value Line Publishing: Financial ratios and forecasting
Presenters: To be announced

Estimating the Cost of Capital
February 8, 2016
Case#5: Nike Inc.: Cost of Capital
Presenters: To be announced

February 15, 2016 -- Jim Leda -- Seminar on Bankruptcy

February 22, 2016
Case #6: The Boeing 7E7: Project specific risk and
Return
Presenters: To be announced

Capital Budgeting and Resource Allocation

February 22, 2016
Case #7: The Investment Detective: Investment criteria and discounted cash flow
Presenters: To be announced

February 22, 2016
Case #8: Worldwide Paper Company: Analysis of an expansion investment
Presenters: To be announced

February 29, 2016 - Guest Speaker

March 14, 2016
Case #9: Target Corporation: Multifaceted capital investment decisions
Presenters: To be announced

March 14, 2016
Case #10: The University of Virginia Health System: Analysis of an investment in a not-for-profit
organization
Presenters: To be announced

Management of the Firm's Equity: Dividends and repurchases
March 14, 2016
Case #11: Gainesboro Machine Tools Corporation: Dividend payout decisions
Presenters: To be announced

March 21, 2016 - Guest Speaker

March 28, 2016: Mid Term Exam

April 4, 2016 -- Guest Speaker

Management of Corporate Capital Structure
April 11, 2016
Case#12: An Introduction to Debt Policy and Value: Effects of debt tax shields
Presenters: To be announced

April 11, 2016
Case #13: California Pizza Kitchen: Optimal leverage and Case#14: Horizon Lines Inc:
Bankruptcy/restructuring
Presenters: To be announced

Valuing the Enterprise: Acquisitions and Buyouts
April 11, 2016
Case#15: Methods of Valuation for Mergers and Acquisitions: Valuation Principles
Presenters: To be announced

April 18, 2016 - Guest Speaker

April 25, 2016
Case #16: American Greetings: Firm valuation and stock repurchase decisions
Presenters: To be announced

April 25, 2016
Case #17: Jet Blue Airways TPC) Valuation: Initial public offering valuation

April 25, 2016
Case #18: The Timken Corporation: Financing an Acquisition

Deadline for Submission of Research Project April 25, 2016
May 2, 2016 - Guest Speaker

Final Exam: May 4, 2016 2:45 p.m. - 4:45 p.m.

Alexandra Larch

Fin 422

Dr. Chaudhry

February 9, 2016

<center>FedEx Corp. Vs United Parcel Service, Inc</center>

FedEx and UPS have had a strong rivalry throughout their histories. In 2005, UPS was larger in every area including: ground vehicles, packages shipped, assets, revenues, and net income. The one area that FedEx beat UPS was in number of aircraft. UPS has 583 aircraft compared to FedEx at 625. FedEx and UPS also differed in their strategies. FedEx was given the Malcolm Bridge National Quality Award in the 1990s. This is a perfect example of how FedEx valued quality and customer service over all else. In addition, they valued their employees and garnered a great reputation as a responsible employer. In contrast, UPS had many strikes and angry employees because they valued time efficiency to a fault.

During the period of 1998-2004, UPS cumulative compound annual return was deviated by over 200%. Although both companies returns beat the S&P 500 index by 400%. UPS had a higher Return on Assets in 2001-2003 as well as a higher Return on Equity. The companies weighted average cost of capital (WACC), which calculates how much of the company's assets are financed by either debt or equity. An increase in WACC notes a decrease in valuation and a higher risk. In most years FedEx and UPS were only a 1% difference. As for the net profit margin FedEx and UPS differ greatly for 2001-2003. FedEx net profit margin ranges between 2-4% while UPS ranges 7-10%. The net profit margin is an indicator of a company's pricing strategies and how well it control costs. From the stark difference between the to, it can be summarized that UPS is better at control costs. However, strategy take into account more than just cost control, but also quality and how well customers and employees are treated. To conclude, although UPS looks better on paper, it can be debated that FedEx is the better company because they treat their customers and employees better.

Alexandra Larch

Fin 422

Dr. Chaudhry

February 23, 2016

<p style="text-align:center">The Boeing 7E7: Project Specific Risk & Return</p>

Boeing is an aircraft manufacture tasked with a large goal in 2003 – to develop a quicker, solid aircraft at less than 50% of the cost of their previous aircrafts. In 2002, Boeing dominated 57% of the unit commercial-aircraft industry which comes to 53.5% of the dollar value market share. For the 176 orders Boeing received that year, their main competitor Airbus, received 233. These pressures to keep costs low and to maintain market share weighed on management in 2003, but these were not the only pressures. The commercial-aircraft industry had to deal with the cultural environment they were living in also. The United States was in a war and SARS disease was abound, the airline industry was struggling to make a profit due to these headlines.

The last aircraft Boeing had made up until 2003 was the Sonic Cruiser. The Sonic Cruiser was made to travel 15-20% faster, but for a premium price. These aircrafts put Boeing into debt and are the reason they needed to vastly decrease their costs on the new aircraft. The Boeing 7E7 was designed to allow for lower fuel consumption, lower maintenance costs, longer range of flight, and improved passenger comfort.

Assuming that Boeing could deliver on their promises, it was predicted that the 7E7 could provide an internal rate of return on 16%. This calculation is sensitive to the assumptions that the Stretch version of the 7E7 would sell for $114.5-144.5 million and that customers would be willing to pay a 5% premium on the price. With all new ventures a company takes there is always the huge risk of market and economic downturn. In 2003, China announced an outbreak of a disease that was spreading to other countries. As Boeing continues to build new airplanes in the future they must keep in mind the risks that consumers may not want what they wanted five years ago and that the market may be on a downturn depending on current events.

Alexandra Larch

Fin 422

Dr. Chaudhry

March 14, 2016

Gainesboro Machine Tools Corporation: Dividend Payout Decisions

Gainesboro is a machine company founded in 1923 that designed and manufactured machinery parts including: metal presses, dies and molds. This company was a strong competitor and industry leader by 1980. In the past Gainesboro paid dividend even while the company was producing losses. It did not pay a dividend in 2005, but committed to paying one later in the year. A dividend is monetary compensation that is paid by a company to the shareholders out of its profits. When there isn't profits it can be paid out of the retained earnings. Typically, paying a dividend is viewed to be a use of profits that are not being reinvested in the company. A mature company in a slower industry will on average pay a higher dividend than a new company in a growth industry because the latter will use its funds to grow their business. However, holding on to funds may lead to excessive executive compensation and unproductive use of assets. Generally, companies will make a decision regarding dividend disbursement based on their free cash flows and what they want to signal to the market.

In the case of Gainesboro Machine Tools Corporation the management made the decision to not disburse a dividend in 2005 based on their lagging performance in the former years. The market initially will take this as a negative because shareholders will not be getting a dividend that they priced into the stock, but long-term shareholders should view this as a positive because the company will be taking that money and reinvesting it and producing profits in the future. In conclusion, the decision to disburse a dividend will affect the stock price and how the shareholders perceive the management and company.

Alexandra Larch

Fin 422

Dr. Chaudhry

April 11, 2016

California Pizza Kitchen: Optimal Leverage

California Pizza Kitchen operates a casual dining, premium pizza chain. Headquartered in Los Angeles, California, it is run by Rick Rosenfield and Larry Flax who are Co-Presidents. This chain prides themselves with having "designer pizza at off-the-rack prices". This means the company provides various soups, salads, pasta, sandwiches, and desserts at a high quality for low prices. This company was created in 1985 and by 2007 had 213 location in 28 states as well as 15 franchises in 6 foreign countries. California Pizza Kitchen has three sources of income including: sales at company owned restaurants, royalties from franchisees and royalties from partnership with Kraft Foods.

The pizza industry has two main sectors: full-service and limited-service. The restaurant industry has many challenges like high labor costs and low consumer spending growth. Consumers will not pay high price for high quality because the economy is not doing as well in the 2007-2008 time period. The high labor costs come from the fact that they must pay minimum wage or higher to attract people into low skill jobs like waitressing and cooking.

California Pizza Kitchen faced a decision in 2007. Should they repurchase their shares? They had record-breaking quarterly profit, strong revenue, strong competitive advantage and their share declined 10%. A share repurchase signals that management believes in the company and their expecting a higher value in the future. Higher financial leverage will increase their ROE, however this creates concern with higher risks. Unlevered beta is 0.85. If they bought back about 50,000 shares levered beta would be about 0.915. In conclusion, if California Pizza Kitchen buys back shares they will increase the beta of the company, the cost of equity, and lower the WACC.

Alexandra Larch

Fin 422

Dr. Chaudhry

April 25, 2016

<div align="center">Jet Blue Airways IPO Valuation: Initial Public Offering Valuation</div>

Jet Blue is an airline service that has a strategy of simplicity, low fares, comfort, and unique amenities. The company was started in July 1999 by David Neeleman. By 2002, the company had 24 aircrafts, 108 flights per day and 17 destinations. The airline service industry was not for the faint of heart. 87 new-airline failed in the last 20 years and the terrorist attacks lost the industry $7.7 billion dollars in 2001. Jet Blue believed they had a unique strategy and competitive advantage against their competition of Southwest and Frontier. In 2001, Jet Blue produced the lowest cost per seat of any major airline of 6 cents to the industry average of 10 cents.

With their competitive advantages in mind, Jet Blue decided to offer an initial public offering in April 2002. This was risky because it was only a few months after the September 2011 terrorist attacks. The advantages of going public include: raising addition capital which helps growth, greater public awareness which helps sales, and increased liquidity which also helps growth. The disadvantages of going public are that there will be public pressure by stockholders and increased costs. Also, the airline industry was in a decline due to the terrorist attacks which weighed on the minds of management.

There are four methods that can be used to value a company: Price to earnings multiple, total capital multiple, EBIT multiple, and the discount free cash flows. In 2002, Morgan Stanley valued the company at $22-$24 dollars. However, demand for the company and the shares being offered increased the price to $25-$26 dollars. In 2016, Jet Blue is trading around $19.

THE EFFECT OF THE DODD-FRANK ACT ON COMMUNITY BANKS

Alexandra Larch

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very well done

— A

ABSTRACT

This study examines the effects of the Dodd-Frank Act on community banks in the Northeastern region of the United States. Using annual financial data from years 2010 to 2014 gathered on 82 banks. A regression equation is estimated using General Method of Moments (GMM) technique described by Arellano and Bover (1995). The dependent variables are return on equity, return on assets, and net interest margin. The independent variables can be placed into the three categories: regulation determinants, profitability variables, and macroeconomic indicators. The results indicate regulations have an impact on the profitability of banks and that the smaller a bank is the less profitable it will be. This suggests that The Dodd-Frank Act has impacted community banks' profitability. The findings also indicate bank profitability is negatively impacted by non-performing loans, cost efficiency, the growth of total deposits, and the FRASE index. Bank profitability is positively impacted by credit quality, assets and real GDP.

Financial Protection Bureau is an agency that was established to identify and prevent potential issues with consumer products. The CFPB implemented new rules on recordkeeping which could hold potential to pressure banks to hire additional compliance staff in order to meet the new regulations. The Dodd-Frank Act made a change to the FDIC and raised its insurance limit to $250,000 from $100,000. Whenever there is a increase in insurance coverage, the premiums rise. Some banks saw reductions in premiums while others saw their premiums raise. The hard cap on the size of the fund was eliminated, and this could mean higher premiums in the future. Finally, new restrictions on lending practice and loan terms have been put in place. The Dodd-Frank Act has changed almost every regulation regarding mortgage financing, which means that banks will need to institute different lending systems and processes. As a results, banks may come to find that the new regulations make consumer mortgage financing too costly to offer.

This paper's aim is to ascertain whether or not the Dodd-Frank Act has had an adverse effect on community banks, in order to help policymakers understand its implications, and resolve the problems before the United States' economy loses a vital part of an industry that drives growth.

2. LITERATURE REVIEW

Dietrich and Wanzenried (2011) investigated bank profitability before and during the financial crisis of 2008. The periods in the study are pre-crisis (1999-2006) and mid-crisis (2007-2009) for 372 commercial banks in Switzerland. Using the generalized method of moments (GMM) estimator, Dietrich and Wanzenried (2011) analyze profitability by Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margins (NIM) and its relationship with bank-specific, macroeconomic, and industry-specific determinants. The overall results of

this study suggest that the crisis did have a significant impact on bank profitability in Switzerland.

Naceur and Omran (2011) studied the influence of bank regulations on commercial bank margins. Their model used panel data that also used the GMM estimator to estimate their model. They used 16 years' worth of data on 173 banks. They found that bank capitalization and credit risk have a positive and significant impact on banks' net interest margins, cost efficiency, and profitability. Their dependent variable, the natural log of net interest margin was lagged one period. This paper found that macroeconomic and financial development variables had no significant impact on the dependent variable, except for inflation which had a negative impact.

Athanansoglou, Brissimis, Delis (2008) used bank-specific, industry-specific and macroeconomic determinants to study bank profitability. These Greek banks were studied from 1985-2001 using the GMM technique. The dependent variables, Return on Assets (ROA) and Return on Equity (ROE), were lagged one period. All bank-specific variables were found to affect profitability. These variables include: capital, credit risk, productivity, and expense management. In addition to these variables, control variables were used including: inflation, interest rates, cyclical output, industry size, and market concentration. The Herfindahl-Hirshman index was used to account for market concentration of the banking industry. Consistent with Athanansoglou et al. (2008), Ozkan, Cagnur, Varan (2014) used the Herfindahl-Hirshman index and macroeconomic control variables and capital variables. In contrast to their paper Ozkan et al. (2014) used total loans and non-performing loans as well as ROA as dependent variables.

Kanas, Vasiliou, Erotis (2012) analyzed U.S. bank profitability using a semi-parametric approach to uncover the effects of certain variables. These variables include: monetary policy, bank loan portfolio, and diversification of bank income. This is studied used Return on Assets

and Return on Equity as the dependent variables. The paper found that the change in loan portfolio was significant in both models. While the change in short term interest rate was significant at the 5% level. Diversification was only significant at the 10% level when ROA was used as the dependent variable.

3. HYPOTHESIS DEVELOPMENT

In order to measure Dodd-Frank's impact on banking, this study uses return on equity (ROE), return on assets (ROA) and net interest margin (NIM) as the dependent variables.

3.1 Independent Variables and Expected Signs

Regulation Determinants

Three variables are used to account for community bank status. The other variables (ASSETS) and (LOGASSET) are used to account for the size of the bank's assets. One variable (FRASECUR) is used to account for how federal regulation affect each state in lagged one year. Al-Ubaydi and McLaughlin (2015) created the FRASE Index that allows the size and scope of the Dodd-Frank Act to be quantified. A FRASE score of 1 means that federal regulation affect a stat to precisely the same degree that they do the nation as a whole. The Northeast in general has a low FRASE score (see map in Appendix Table 8).

Profitability Determinants

Profitability determinants were decided upon based on the literature. The variables include: total deposit growth (TOTDEPG), interest income share (INTINCESHARE), diversification (DIV), cost efficiency (COSTEFF), credit quality (CREDITQUAL), bank portfolio (BANKPORT), and non-performing loans (NPLG). Table 2 summarizes the definitions of each variable along with their expected signs.

Total deposit growth (TOTDEPG) is the percentage change over a one-year period of total deposits. A bank's operating efficiency is how well they convert deposits into loans. A bank's credit risk is how many high quality loans they issue. Interest income share

(INTINCESHARE) is a percentage of interest based income divided by non-interest income. Another variable that uses income to determine profitability is diversification. Diversification (DIV) is similar to interest income share in that it uses interest and non-interest income in its calculation. The cost efficiency (COSTEFF) variable takes a look at how operating efficiency translates into profitability. Credit quality (CREDITQUAL) is used by Athanasoglou, Brissimis, and Delis, (2008) to account for the increased exposure to credit risk a bank may take on. Two variables that account for the types of loans a bank holds are bank portfolio (BANKPORT) and non-performing loans (NPLG). The bank portfolio variable was used by Kanas, Vasiliou, Erotis (2012), to determine if consumer loans or commercial loans are more profitable. Finally, non-performing loans are taken into account to measure the asset quality a bank holds. Ozkan, Balsari, and Varan (2014) used non-performing loans as their dependent variable as a proxy for banks' performance. Non-performing loans are loans that are in default and are not accruing interest, and therefore not making the bank money.

Macroeconomic Indicators

The macroeconomic indicators serve as control variables to ensure that trends in the industry and the economy are accounted for in the model.. These variables include: consumer price index (CPI) is the percent change for all urban consumers in the Northeast lagged one period. The percent change in real gross domestic product (RGDP) and the 30-year interest rate (INTRATE) lagged one year are also used. This study is the Herfindahl-Hirshman index (HHI) for each state which was calculated for each state and each year using the FDIC market share data.

4. INSTRUMENT DESIGN

Five separate models were run for three different dependent variables: return on equity, return on assets, net interest margin. In order to test the hypothesis, General Method of Moments

(GMM) estimation technique was used to examine the parameters of the data, with the classical

assumption that the errors are normally distributed.

4.1 Model Specification

To empirically examine the panel data set of 82 banks over the years 2010-2014 and the

effects of profitability (PROF), regulation (REG), and macroeconomic (MARCO) factors on

each dependent variable the following models were used:

$$ROE = \beta_0 + \beta_1 PROF + \beta_2 REG + \beta_3 MACRO + \varepsilon$$
$$ROA = \beta_0 + \beta_1 PROF + \beta_2 REG + \beta_3 MACRO + \varepsilon$$
$$NIM = \beta_0 + \beta_1 PROF + \beta_2 REG + \beta_3 MACRO + \varepsilon$$

The Wald-test indicates a goodness of fit that is accepted in all models. The Generalized

Method of Moments (GMM) estimator accounts for endogeneity within the model by using

lagged values of the dependent variable in levels and in difference of instruments, as well as,

lagged values of other regressors which could potentially suffer from endogeneity following

Dietrich and Wanzenried (2011). According to Naceur and Omran (2011) who cited Arellano

and Bover (1995) and Blundell and Bond (1998,) the GMM system is used to remove the

unobserved fixed effects by taking the first difference in the equation, independent variables are

instrumented using lagged values of the regressors and the equation in first difference in levels

are jointly estimated. The system is tested using the Hansen-test of over-identifying restrictions

and a test of the absence of serial correlation of the residuals. Autoregression is found when a

variable is influenced by its own value in previous periods. For ROE, ROA, and NIM the only

models that reject the second-order autocorrelation by the test for AR (2) errors is model 3 and

for ROA model 5. All other models may have autoregression and results may reflect that. The

Levin, Lin, and Chu test for unit roots and found that all of the variables rejected the null of unit

roots. Model 1 of all dependent variables was ran using all independent variables. Model 2-5 are

differenced by one period.

5. DATA COLLECTION AND ANALYSIS

This study examines panel data of 82 banks in the Northeast region of the United States

to determine profitability. Table 1 includes a list of the 82 banks that are being used in our study

along with what state they are headquartered in and whether or not they classify as community

banks. The sample is comprised of financial performance indicators for the years 2010 to 2014 in

order to measure the impact of Dodd-Frank from its implementation to the presently available

data. The data for this study was acquired using Bloomberg's software, as well as data from the

Federal Reserve Economic Data and the FDIC. The data have been sorted into two categories:

macroeconomic indicators and profitability determinants. Table 7 reports the correlation matrix

which does not indicate any variables being highly correlated to one another.

5.2 Descriptive Statistics

Table 3 outlines the descriptive statistics for each variable including the three dependent

variables. The average return on assets was 0.71. This means for every dollar in assets their

income is $0.71. The average return on equity was 6.73, which translate to every common

stockholder getting $6.73 of net income. Finally, the average net interest margin was 3.46. In

other words, for every asset that is considered to be earning a company money there is $3.46 of

interest income.

6. RESULTS INTERPRETATION

6.1 Regulation Variables

Assets (ASSET), assets squared (ASSET2) and the log of assets (LOGASSET) were used

as proxy for bank size. The log of assets was significant and positive for net interest margin.

Naceur and Omran (2011) found that there is an effect on banking size and net interest margins,

also. The FRASE index is significant and negative with profitability. This indicates that as there

is more regulation in a state the less profitable a bank becomes. This directly concerns The

Dodd-Frank Act and gives evidence that it does in fact affect profitability. It is also one of the largest coefficients in determining profitability, along with cost efficiency.

6.2 Profitability Variables

The cost efficiency (COSTEFF) variable is significant and negative for the dependent variables ROA and ROE. This shows that an efficient bank is more profitable. Credit quality (CREDITQUAL) variable is significant and positive for the ROA and ROE dependent variables. Growth of total deposits (TOTDEPG) is significant and negative for ROA and ROE. The Dodd-Frank Act requires banks to hold a larger portion of high quality liquid assets an example of this could be cash deposits. If they have to hold these reserve, they are not being converted into profits. Interest income share (INTINCSHARE) is positive, significant but small for return on assets. Another variable that takes this into account is diversification (DIV). Diversification has mixed empirical evidence in literature. In this study it was not significant for any of the dependent variables. This is consistent with Kanas, Vasiliou, and Erotis (2012) who did not find significance in their semi-parametric model. Bank loan portfolio (BANKPORT) take into account the changes in commercial loans to consumer loans. This is significant, negative but has a small impact for return on equity. Kanas, Vasiliou, and Erotis (2012) found that commercial and industrial loan changes affect profitability in non-linear manner. Non-performing loan (NPLG) have negative and significant effect on profitability. This sign makes sense because non-performing loans are put in non-accrual and do not create wealth for the bank, rather take up resources and potential cut into profitability.

6.3 Macroeconomic Variables

Bank concentration in the form of the Herfindahl-Hirshman index did not appear significant in this research for any of the dependent variables. Other studies conclude that market

concentration tends to be negative for profitability. The small sample size of this study could be a reason that the Herfindahl-Hirshman index is not significant. The interest rate (INTRATE) is significant and negative for all three dependent variables indicating that the thirty-year interest rate impacts profitability and the interest spread. This may be misleading because it has a negative sign however, this data is the change year over year for the year 2010-2014. The change in real GDP (RGDP) is significant and positive to profitability which is in contrast to Naceur and Omran (2011) that found no impact. Inflation (CPI) is negative and significant for net interest margins.

7. RECOMMENDATION LISTING

By examining explanatory variables for 82 banks in the years 2010-2014 factors affecting each dependent variable have been determined. Return on Equity is influenced negatively by growth of total deposits, cost efficiency, bank loan portfolio, non-performing loans, interest rate, FRASE index and positively by credit quality, assets, and real GDP. Return on Assets is influenced positively by the net interest margin, credit quality, real GDP and negatively by the FRASE index, non-performing loans, cost efficiency, and growth of total deposits. The Net Interest Margin is influenced negatively by inflation, and the interest rate and positively by non-performing loans. According to the models, there is an impact on profitability of banks since the enactment of the Dodd-Frank Act. This is evidenced by the negative correlation between profitability and the FRASE index indicates that as there is more regulation in a region profitability is decreased. In addition, this impacts community banks more since there is a positive sign on asset size which is interpreted as small bank is less profitable than a large bank. These findings are similar to findings by Naceur and Omran, (2011). The Dodd-Frank Act requires more liquidity and there is evidence that holding more deposits negatively affects

profitability. However, The Dodd-Frank Act may have impacted the credit quality of banks and increased the quality of loans held, which there is evidence that increases profitability.

8. BENEFIT CONTRIBUTION

The issue that has been addressed is the effect of the Dodd-Frank Act on community banks. This topic has been previously unexamined econometrically, and has only been explained through anecdotal and survey-based research. There is survey-based evidence that community banks are unnecessarily strained by the new compliance requirements imposed by the Dodd-Frank Act. This paper's goal was to add to the existing literature on regulations and their effect on banking.

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Appendix

Table 1: Banks & Locations Data

Bank Code	Bank Name	State	Community Bank
1	Peoples United Bank	CT	No
2	Webster Bank	CT	No
3	PB Bancorp, Inc	CT	Yes
4	Salisbury Bancorp, Inc.	CT	Yes
5	SI Financial Group, Inc.	CT	Yes
6	United Financial Bancorp, Inc.	CT	Yes
7	Boston Private Financial Holdings, Inc.	MA	Yes
8	Bershire Hills Bancorp, Inc.	MA	Yes
9	Brookline Bancorp, Inc.	MA	Yes
10	Chicopee Bancorp, Inc.	MA	Yes
11	Century Bancorp, Inc.	MA	Yes
12	Meridian Bancorp, Inc.	MA	Yes
13	Enterprise Bank and Trust Company	MA	Yes
14	Independent Bank Corp/MA	MA	Yes
15	Westfield Finanacial, Inc	MA	Yes
16	Bar Harbor Bank & Trust	ME	Yes
17	Camden National Corporation	ME	Yes
18	First Bancorp, Inc.	ME	Yes
19	Northeast Bancorp	ME	Yes
20	Lake Sunapee Bank Group	NH	Yes

21	Hudson City Bancorp	NJ	No
22	Valley National Bancorp	NJ	No
23	BCB Bancorp Inc	NJ	Yes
24	First Constitution Bancorp	NJ	Yes
25	Cape Bancorp, Inc.	NJ	Yes
26	ConnectOne Bancorp	NJ	Yes
27	Lakeland Bancorp	NJ	Yes
28	Maguyar Bancorp, Inc	NJ	Yes
29	Northfield Bancorp, Inc.	NJ	Yes
30	OceanFirst Financial Corp.	NJ	Yes
31	Oritani Financial Corp	NJ	Yes
32	Ocean Shore Holding Co.	NJ	Yes
33	Providnet Financial Services, Inc	NJ	Yes
34	Peapack-Gladstone Financial	NJ	Yes
35	Parke Bancorp	NJ	Yes
36	Sussex Bancorp	NJ	Yes
37	Stewardship Financial Corporation	NJ	Yes
38	Two River Bancorp	NJ	Yes
39	Unity Bancorp, Inc	NJ	Yes
40	Bank of NY Mellon	NY	No
41	Citigroup	NY	No
42	First Niagara Financial Group Inc.	NY	No
43	M&T Bank Corp	NY	No
44	New York Community Bancorp, Inc	NY	No

45	JPMorgan Chase & Co	NY	No
46	Signature Bank	NY	No
47	The Bridgehampton National Bank	NY	Yes
48	Financial Institutions	NY	Yes
49	TrustCo Bank Corp	NY	Yes
50	Arrow Financial Corp	NY	Yes
51	Chemung Financial Corp	NY	Yes
52	First of Long Island Corp	NY	Yes
53	Flusing Financial Corp	NY	Yes
54	Suffolk Bancorp	NY	Yes
55	Tompkins Financial Corp	NY	Yes
56	FNB Corp	PA	No
57	Fulton Financial Corp	PA	No
58	PNC Financial Services Group	PA	No
59	Bryn Mawr Bank Corp	PA	Yes
60	First Commonwealth Financial Corp	PA	Yes
61	Orrstown Financial Services, Inc	PA	Yes
62	S&T Bancorp Inc	PA	Yes
63	Univest Corp of Pennsylvania	PA	Yes
64	ACNB Bank	PA	Yes
65	AmeriServ Financial Inc.	PA	Yes
66	Beneficial Bancorp Inc	PA	Yes
67	CNB Financial Corp	PA	Yes
68	Codorus Valley Bancorp	PA	Yes

69	First Citizens Community Bank	PA	Yes
70	DNB First, National Association	PA	Yes
71	The Fidelity Deposit and Discount Bank	PA	Yes
72	First Keystone Community Bank	PA	Yes
73	Republic First Bancorp, Inc	PA	Yes
74	Fox Chase Bancorp, Inc.	PA	Yes
75	Mid Penn Bank	PA	Yes
76	National Penn Bancshares	PA	Yes
77	Northwest Bancshares	PA	Yes
78	Norwood Fianncial Corp	PA	Yes
79	Prudential Bancorp	PA	Yes
80	Penns Wood Bancorp	PA	Yes
81	QNB Bank	PA	Yes
82	Royal Bancshares of Pennsylvania, Inc	PA	Yes

Table 2: Variable Description

Variable	Measure	Notation	Expected Effect
Bank Code	Corresponding code with each bank's name	BCode	?
Time Code	Corresponding code with each time period	TCode	?
Community Bank Status	<10 billion in assets is considered a community bank	BankStatus	-
Return on Equity	Net income / average common equity	ROE	+

Return on Assets	Net income / average assets	ROA	+
Net Interest Margin	Net interest income / earnings assets	NIM	+
Total Deposit Growth	The percentage change over a one year period of total deposits	TotDepG	?
Interest Income Share	The percentage of interest based income divided by non-interest income	IntIncShare	?
Cost Efficiency	Total operating expenses/total revenue + total deposits	CostEff	-
Credit Quality	Reserve for loan loss/total loans	CreditQual	+
Diversification	(Non-interest income/gross income)^2 / (interest income/gross income)^2	Div	?
Bank Portfolio	Total consumer loans/ total commercial loans	BankPort	?
Non-performing loans	Sequential growth from year before of loans in default (that do not accrue interest)	NonPerG	-
Herfindahl-Hirschman Index	The market shares of each state that the bank are headquartered	HHI	?
Consumer Price Index	The percentage change of the CPI lagged one period for all urban consumers in the Northeast	CPI	+
Interest Rate	The percentage change of the 30 year annual interest rate lagged one year	IntRate	+
Real Gross Domestic Product	The percentage change of RGDP each year	RGDP	+

Table 3: Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.
ROA	0.71	0.79	2.46	-2.87	0.54
ROE	6.73	7.78	26.65	-52.44	6.81
NIM	3.46	3.47	6.66	1.19	0.59
CREDITQUAL	1.45	1.32	5.98	0.00	0.66
DIV	2,692,880	0.45	157,000,000	0.00	17,352,034
BANKPORT	8.44	0.58	930.96	0.01	72.48
INTINCSHARE	6.73	4.78	163.95	-85.37	14.32
TOTDEPG	7.59	4.97	132.46	-23.53	13.89
COSTEFF	0.01	0.01	0.03	0.00	0.00
NPLG	5.78	-3.25	1871.20	-68.95	101.93
HHI	970.58	769.77	1740.00	476.11	343.48
RGDP	0.02	0.02	0.03	0.01	0.01
CPI	0.33	0.02	1.59	-0.13	0.63
INTRATE	-0.03	-0.13	0.33	-0.16	0.19

Table 4: ROE Dependent Variable: Model Results

*10% **5% ***1%		Model									
Dependent Variable:	Return on Equity	1		2		3		4		5	
	Regressor										
Coefficient	Lagged ROE	-0.222379	***								
T-Statistics		-4.641318									
P-Values		0.0000									
Coefficient	Growth of Total Deposits	0.042634	***	0.017546		-0.088893	***			-0.024719	***
T-Statistics		3.120637		-1.530967		-2.684342				-2.789861	
P-Values		0.0019		0.1271		0.0078				0.0057	
Coefficient	Interest Income Share	0.002709		0.014365						0.053697	*
T-Statistics		0.2229633		1.150026						1.853102	
P-Values		0.8186		0.2513						0.0651	
Coefficient	Cost Efficiency	-204.8525		-765.8297	***					-722.0357	***
T-Statistics		-1.184075		-7.28034						-4.593356	
P-Values		0.2376		0						0.0000	
Coefficient	Credit Quality	0.744468		4.740938	***	1.773751		2.127958	*		
T-Statistics		0.953958		2.654656		1.473657		1.914029			
P-Values		0.3411		0.0085		0.1419		0.0568			
Coefficient	Diversification	4.51E-09		3.23E-09							

Metric	Variable								
T-Statistics		0.209837		0.501367					
P-Values		0.834		0.6166					
Coefficient	Bank Loan Portfolio	0.004794	**	0.000723		-0.007029	***	-0.005287	***
T-Statistics		2.214442		0.159839		-5.887582		-11.84652	
P-Values		0.0278		0.8731		0.0000		0.0000	
Coefficient	Non-Performing Loans	0.001342	***	-0.001771	*	-0.002343	**		
T-Statistics		5.487847		-1.861327		-2.081315			
P-Values		0.0000		0.064		0.0385			
Coefficient	Market Concentration	-0.003152	**	0.000648		-0.002475		0.000163	
T-Statistics		-2.410379		0.297074		-0.792956		0.089649	
P-Values		0.0167		0.7667		0.4286		0.9286	
Coefficient	Inflation	-218.384	***	-0.114589					
T-Statistics		-16.29475		-0.25318					
P-Values		0.0000		0.8004					
Coefficient	Interest Rate	1.152717	**	-2.984662	**			0.914768	**
T-Statistics		2.037336		-2.318289				1.966565	
P-Values		0.0428		0.0213				0.0504	
Coefficient	Change in RGDP	2.917723	***	194.0825	***				
T-Statistics		0.085212		2.560604					
P-Values		0.9322		0.0111					
Coefficient	FRASE Current	26.20471	*	-84.99074	***	-15.12968			

		1		2		3		4		5	
T-Statistics		1.694851		-2.399252		-0.870833					
P-Values		0.0914		0.0172		0.3847					
Coefficient	Assets			0.0000425		0.001809	***				
T-Statistics				0.826166		2.901016					
P-Values				0.4096		0.0041					
Coefficient	Log Assets	-42.43464	***								
T-Statistics		-6.355648									
P-Values		0.0000									
	Wald-test (x2)	154.92		13.57753		74.94697		70.59398		17.1347	
	P-value	0.0000		0.0000		0.0000		0.0000		0.0000	
	Degrees of Freedom	(14,232)		(13,233)		(7,239)		(4,242)		(3,243)	
	AB test AR(1) (p-value)	0.2542		0.1213		0.0002	***	0.1128		0.1131	
	AB test AR(2) (p-value)	0.9036		0.2354		0.376		0.2852		0.2576	
	J-statistic	28.63165		13.27295		19.95601		16.9328		13.44474	

Table 5: ROA Dependent Variable: Model Results

*10% **5% ***1%		Model									
Dependent Variable:	Return on Assets	1		2		3		4		5	
	Regressor										
Coefficient	Lagged ROA	-0.11401	***					-0.163621			
T-Statistics		-3.330133						-5.606098			
P-Values		0.001						0.0000	***		

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Coefficient	Growth of Total Deposits	-0.003856	***	-0.001541		-0.001688	**				
T-Statistics		-6.394816		-1.519691		-1.96318					
P-Values		0.000		0.1300		0.0508					
Coefficient	Interest Income Share	-0.001538		0.00179		0.001819	***				
T-Statistics		-1.386022		1.27512		4.525778					
P-Values		0.1671		0.2035		0.0000					
Coefficient	Cost Efficiency	-46.10715	***	-70.00679	***	-69.3976	***				
T-Statistics		-4.319749		-11.49931		-10.40749					
P-Values		0.0000		0.0000		0.0000					
Coefficient	Credit Quality	0.132974	*	0.525914	***	0.55464	***	0.208041	***	0.227217	**
T-Statistics		1.659269		2.735755		3.073517		4.391417		2.441165	
P-Values		0.0984		0.0067		0.0024		0.0000		0.0154	
Coefficient	Diversification	5.73E-10		1.45E-10				6.94E-10		-1.53E-09	
T-Statistics		0.409704		0.179957				0.628326		-1.570014	
P-Values		0.6824		0.8573				0.5304		0.1177	
Coefficient	Bank Loan Portfolio	-0.000107		1.65E-05				0.000178		-0.000554	***
T-Statistics		-0.805297		0.063815				1.047966		-8.20177	
P-Values		0.4215		0.9492				0.2957		0.0000	
Coefficient	Non-Performing Loans	-6.52E-05		-0.000112	**	-0.000136	**				
T-Statistics		-1.151886		-2.111089		-2.340998					

P-Values		0.2506		0.0358		0.0201					
Coefficient	Market Concentration	-0.00029		-0.00011							
T-Statistics		-1.594879		-0.473904							
P-Values		0.1121		0.636							
Coefficient	Inflation	-8.384053		0.001042						0.034889	
T-Statistics		-8.407179		0.025535						1.13654	
P-Values		0.0000		0.9797						0.2569	
Coefficient	Interest Rate	0.094854		-0.186681		-0.221118	**	0.083999	**	0.050837	
T-Statistics		1.665884		-1.252933		-1.968304		2.207945		1.14635	
P-Values		0.0971		0.2115		0.0502		0.0282		0.2528	
Coefficient	Change in RGDP	-0.661256		14.82982	*	15.78036	**				
T-Statistics		-0.265494		1.740556		2.484227					
P-Values		0.7909		0.0831		0.0137					
Coefficient	FRASE Current	-0.951036		-7.303051	*	-8.005292	**				
T-Statistics		-0.746545		-1.924799		-2.723464					
P-Values		0.4561		0.0555		0.0069					
Coefficient	Assets	1.93E-07		3.69E-06							
T-Statistics		0.255622		1.016637							
P-Values		0.7985		0.3104							
Coefficient	NIM	0.425958		0.237762	**	0.221161	***				
T-Statistics		2.81375		2.217571		2.512385					
P-Values		0.0053		0.0276		0.0127					

	Wald-test (x2)	22.04917		24.87189		42.53674		17.33273		16.62161	
	P-value	0.0000		0.0000		0.0000		0.0000		0.0000	
	Degrees of Freedom	(15,231)		(14,232)		(9,237)		(6,240)		(5,241)	
	AB test AR(1) (p-value)	0.1021		0.711		0.0748	*	0.6988		0.0686	*
	AB test AR(2) (p-value)	0.8278		0.3571		0.3628		0.5684		0.657	

Table 6: NIM Dependent Variable: Model Results

*10% **5% ***1%		Model									
Dependent Variable:	Net Interest Margin	1		2		3		4		5	
	Regressor										
Coefficient	Lagged NIM	-0.135579	***								
T-Statistics		-4.419571									
P-Values		0									
Coefficient	Growth of Total Deposits	0.001211		0.0072							
T-Statistics		0.83382		0.477729							
P-Values		0.4052		0.6333							
Coefficient	Interest Income Share	0.001625		-0.000485		-0.000971				-0.000753	
T-Statistics		1.559869		-0.359968		-1.450526				-0.513956	
P-Values		0.1202		0.7192		0.1482				0.6078	
Coefficient	Cost Efficiency	-5.404967		1.361259				-4.227795		1.297272	
T-Statistics		-1.436229		0.208903				-0.555831		0.257015	

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P-Values		0.1523		0.8347				0.5788		0.7974	
Coefficient	Credit Quality	0.065634		0.058518				0.102466			
T-Statistics		1.0544747		0.528938				0.811536			
P-Values		0.2926		0.5974				0.4179			
Coefficient	Diversification	3.29E-10		-1.85E-10							
T-Statistics		0.0866369		-0.321003							
P-Values		0.3872		0.7485							
Coefficient	Bank Loan Portfolio	4.90E-04	***	-3.36E-05							
T-Statistics		7.913676		-0.154244							
P-Values		0		0.8776							
Coefficient	Non-Performing Loans	0.000384	***	9.80E-05		0.000149	***			0.000162	***
T-Statistics		5.845872		2.611361		4.224368				3.520371	
P-Values		0		0.0096		0.0000				0.0005	
Coefficient	Market Concentration	0.000284		-0.000379		-0.000344					
T-Statistics		1.083485		-1.231675		-1.49662					
P-Values		0.2797		0.2193		0.1358					
Coefficient	Inflation	7.285612	**	-0.050034		-0.059862	**	-0.05197	**		
T-Statistics		2.158094		-1.06382		-2.426619		-2.266222			
P-Values		0.0319		0.2885		0.016		0.0243			
Coefficient	Interest Rate	-0.083257		-0.162524		-0.201545	***				

T-Statistics		-0.831332		-1.009467		-4.936669					
P-Values		0.4066		0.3138		0.0000					
Coefficient	Change in RGDP	-6.836565		0.137335							
T-Statistics		-1.357096		0.016532							
P-Values		0.1761		0.9868							
Coefficient	FRASE Current	0.112943		1.068448							
T-Statistics		0.07641		0.304873							
P-Values		0.9392		0.7607							
Coefficient	Assets	0.00000158	***	7.83E-07		-5.80E-05		2.69E-05			
T-Statistics		-4.69457		0.33901		-1.425494		0.58416			
P-Values		0		0.7349		0.1553		0.5597			
Coefficient	Assets2					1.11E-11		-3.98E-12			
T-Statistics						1.420814		-0.481378			
P-Values						0.1567		0.6307			
Coefficient	Log Assets					2.165943	**				
T-Statistics						2.466267					
P-Values						0.0144					
Coefficient	ROA			0.138247		0.144513	***			-0.022064	
T-Statistics				1.384181		3.782389				-0.267735	
P-Values				0.1676		0.0002				0.7891	
Coefficient	ROE			-0.001807				0.003307		0.003685	
T-Statistics				-0.394199				1.189613		0.853875	

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P-Values				0.6938				0.2354		0.394	
	Wald-test (x2)	48.4524		102.2585		25.8496		3.078968		5.308015	
	P-value	0.0000		0.0000		0.000		0.0064		0.0001	
	Degrees of Freedom	(14,232)		(15,231)		(9,237)		(6,240)		(5,241)	
	AB test AR(1) (p-value)	0.3215		0.1046		0.0896		0.1327		0.1202	
	AB test AR(2) (p-value)	0.616		0.104		0.0616	*	0.1412		0.1504	
	J-statistic	20.2971		21.69154		14.98535		22.41962		32.3475	
	Prob(J-statistic)	0.009269		0.00991		0.452473		0.00764		0.000173	

Table 7: Correlation Matrix

	BANKPORT	COSTEFF	CPI	CREDITQUAL	DIV	HHI	INTINCSHARE	INTRATE	NPLG	RGDP	TOTDEPG	ROE	ROA	NIM
BANKPORT	1.000	0.021	-0.006	-0.067	-0.016	-0.079	0.519	0.025	-0.007	-0.012	-0.089	-0.080	-0.102	-0.292
COSTEFF	0.021	1.000	0.016	0.258	0.255	0.032	0.152	-0.013	-0.044	-0.015	0.035	-0.111	-0.103	0.053
CPI	-0.006	0.016	1.000	0.131	0.017	-0.165	0.040	-0.039	0.025	0.545	-0.011	-0.003	-0.027	0.115
CREDITQUAL	-0.067	0.258	0.131	1.000	0.125	-0.027	-0.026	-0.062	-0.066	-0.065	0.027	-0.015	-0.021	0.071
DIV	-0.016	0.255	0.017	0.125	1.000	0.249	0.035	0.010	-0.022	0.017	0.075	0.052	0.031	-0.066
HHI	-0.079	0.032	-0.165	-0.027	0.249	1.000	-0.052	0.046	0.085	-0.010	0.138	0.171	0.133	-0.143
INTINCSHARE	0.519	0.152	0.040	-0.026	0.035	-0.052	1.000	-0.004	0.045	-0.004	0.038	-0.008	-0.054	-0.154
INTRATE	0.025	-0.013	-0.039	-0.062	0.010	0.046	-0.004	1.000	-0.050	0.460	-0.130	0.050	0.051	-0.107
NPLG	-0.007	-0.044	0.025	-0.066	-0.022	0.085	0.045	-0.050	1.000	-0.015	-0.016	-0.026	-0.054	0.136
RGDP	-0.012	-0.015	0.545	-0.065	0.017	-0.010	-0.004	0.460	-0.015	1.000	-0.049	0.069	0.047	-0.062
TOTDEPG	-0.089	0.035	-0.011	0.027	0.075	0.138	0.038	-0.130	-0.016	-0.049	1.000	0.143	0.124	0.107
ROE	-0.080	-0.111	-0.003	-0.015	0.052	0.171	-0.008	0.050	-0.026	0.069	0.143	1.000	0.927	0.154
ROA	-0.102	-0.103	-0.027	-0.021	0.031	0.133	-0.054	0.051	-0.054	0.047	0.124	0.927	1.000	0.180
NIM	-0.292	0.053	0.115	0.071	-0.066	-0.143	-0.154	-0.107	0.136	-0.062	0.107	0.154	0.180	1.000

Table 8: FRASE Score Map

THE DIVERSE IMPACT OF FEDERAL REGULATION ON STATES AND REGIONS

FRASE SCORE

lowest ▓ NH

highest ▒ LA