

PROPOSAL

The Differential Impact of Dodd-Frank on Small- and Medium-Size Banks

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Abstract

We propose to test empirically whether the Dodd-Frank Wall Street Reform and Consumer Protection Act (DF) has had a differential impact on the performance of banks across asset size. To the extent there are fixed costs associated with complying with the Act, larger banks should be more able to absorb those costs than could smaller banks. If this is true then relative to their larger industry members, smaller banks should have lower post-DF profitability, and higher post-DF non-interest expenses.

Specific Aims

DF was signed into law in July 2010 as a political backlash against the finance industry, particularly the banking system. The United States had just emerged from one of the worst recessions in history, a recession some accused the finance industry of precipitating. In this view, systemically important banks colluded with self-interested ratings agencies to offer unsuspecting investors highly-rated mortgage-backed securities (MBS). These MBS, many of which were rated AAA by Standard & Poor's, were backed by portfolios of subprime mortgages offered to borrowers who did not have the ability to repay the loans. This house of cards collapsed when the high-flying housing industry finally came back to Earth and those subprime borrowers began walking away from their under-water mortgages.

DF was aimed at the relatively small number of large money center banks involved in securitization of mortgages, which were deemed "too big to fail". Despite attempts to insulate DF's effect on smaller, non-systemically important banks, there is anecdotal and survey-based evidence of significant detrimental effects of the legislation on small, community banks (see Marsh and Norman, 2013). It is our aim, with this proposed study, to provide a more rigorous empirical examination of DF's differential impact on small versus large banks.

Significance

In allocating capital from savers to borrowers, America's banking system is obviously a key component of the capitalistic economic system. While any single small bank is not systemically important for this system, that bank may be vital to the community it serves and in which it operates. The costs of complying with these well-intended federal regulations tends to

unintentionally swing the competitive balance in favor of larger banks, which produces detrimental effects on these small communities. While anecdotal and survey-based studies provide important viewpoints, a rigorous empirical study would be more likely to sway legislators into carving out more significant exceptions from the more onerous, costly aspects of DF.

Innovation

As noted above, there have been studies of community banking in the post-DF period. For example, Marsh and Norman (2013) contains a treasure trove of details regarding the Act itself and surveys much of the non-academic literature relating DF to community banking. This literature includes the FDIC publications *Statistics on Depository Institutions* and *Community Banking Study*, as well as testimony of various people before Congress. Hughes, Jagtiani and Mester (2016) analyze publicly-traded American banks under \$50 billion in assets and find that in general larger banks tend to both outperform and have higher valuations than smaller banks. In a study closest in spirit to our proposed project, Brewer and Russell (2016) use a regulatory index developed by Al-Ubaydli et al. (2015) to proxy for industry-level regulatory impact, and report that as this regulatory impact measure increases, banks' return on assets decreases. That is, regulation tends to reduce performance. Our proposed project would add significantly to the literature by presenting the first comparison between pre- and post-DF performance of banks by size.

Approach (Design and Methods)

We intend to analyze the performance effects of DF implementation within a quasi-experimental design framework. Our performance measures will include return on assets, return on equity, net interest margin, non-interest expense to assets, etc. We plan to separate banks into quintiles by size (less than \$250m, less than \$1 billion, less than \$10 billion, less than \$50 billion and less than \$500 billion). Our first set of results will consist of an analysis of the change in each performance measure before and after implementation of DF by quintile. If DF is more onerous for smaller banks, we would expect to see higher performance measures and lower non-interest expense margins, as group size increases, and for the between-group differences to widen post-DF. Secondly, we plan to use a benchmarking procedure in order to make a group-by-group analysis of adjacent groups. Most benchmarking procedures include a size variable to help identify the benchmark company that most closely resembles economically the sample company. Since size is the variable of interest in our study, we are unable to use size as a benchmarking variable. Instead, we will use the performance variable of interest, and identify benchmark banks based on the group of banks in the next higher size quintile in the pre-DF period. We will then look at the difference in difference in performance measures of sample and benchmark banks from the pre- to post-DF periods. If DF becomes more onerous for smaller banks, we would expect the post-DF differences to widen over the pre-DF differences.

Our primary data source come from the FDIC Uniform Bank Performance Report (UBPR) dataset, which are located at FDIC.gov. The UBPR contains financial data for all banks insured by the FDIC. This includes publicly-traded and private banks. Inclusion of these privately-held banks will allow us to examine the impact of DF on bank performance for the smallest banks in the nation.

Human Subjects – The proposed research does not involve human subjects.

Itemized Budget

Project Timeline

While we hope to get started on this project early, due to teaching duties, the prime period for uninterrupted research is summer. The following is a tentative schedule with this in mind:

Timeline	Month:	Jan-Mar	Apr-Jun	Jul-Sep	Sep-Dec
Task	Hours				
Literature review	100				
Data collection	20				
Data formatting and analysis	200				
Writing, local presentation	300				
Revision & submission to conference	100				
Revision & submission to journal	150				

The data collection is nearly complete. Formatting and analysis will be a time consuming task as we have to combine FDIC annual datasets across all U.S. banks. Analysis will be fairly straight-forward once the data is formatted. We believe this project will have a great deal of local interest, and have already spoken with President Gordon Johnson of Bozeman-based American Bank, and Commissioner Melanie Hall of the Montana Banking Division, both of whom expressed interest in the results of this study. In addition, we plan to do a separate analysis of Montana-based banks for in-state consumption. This project is an ideal candidate for presentation at the FDIC’s community bank conference.

References

Brewer B, Russell L, (2016), “Impact of Dodd-Frank on small community lenders”, University of Georgia working paper.

Hughes J, Jagtiani J, Mester L (2016), “Is bigger necessarily better in community banking?” Federal Reserve Bank of Cleveland working paper.

Marsh T, Norman J, (2013), “The impact of Dodd-Frank on community banks,” American Enterprise Institute working paper.