

ECONOMIC POLICY UNCERTAINTY AND BANK VALUATIONS

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Abstract

This paper examines the relation between economic policy uncertainty and bank valuation. We use financial data and stock data of U.S bank holding companies over the period of 2002-2015. We use Tobin's Q as the dependent variable and economic policy uncertainty (EPU) index as independent variable. We find that the results differ across banks of different size and over different time period. Before and after the financial crisis, a negative relationship is roughly held. However, during the crisis, the results are mixed. Notably, for small banks, the impacts from monetary policy and overall economic policy uncertainty become insignificant. For large and medium banks, the monetary policy uncertainty becomes positively related to bank valuation. And probably because of the cancel-out effect, the overall economic policy uncertainty turns out to be non-negatively associated with bank valuation. We think the results may be explained by "too big to fail" and "constant probability of disaster" theories.

Keywords: bank; valuation; economic policy; uncertainty; monetary; fiscal; financial crisis

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1. Introduction

Nowadays, many researchers have conducted many papers related to valuation of the bank. Most studies about the valuation of the bank focus on internal factors such as diversification (Laeven and Levine, 2007) , loan growth (Niu, 2016b), Insider ownership (Niu, 2016a). There are merely no papers to evaluate the relationship between external factors and the valuation of the bank. Some may argue external factors such as GDP and federal fund rate are too general to evaluate banking industry alone. Unlike other industry, banking industry is based on a highly leveraged model. That means banking industry is more sensitive to external factors especially some risk factors. Moreover, the banking industry has dramatically changed after the recent financial crisis. Regulators ask banks to hold more capital than before, and they are paying more attention to risk management than they were before. Banks in average lower their return on equity but hold more capital after the crisis.

Recently, Baker, Bloom, and Davis (2016) developed a new kind of index called EPU to seek the macroeconomic volatility from public awareness. Moreover, they categorize EPU index into different areas such as monetary policy risk and fiscal policy risk. Those categorical indices can assist us to evaluate bank performance from different angles. In other words, we may identify risks that are important to the banking industry and how market reflects such risks.

Therefore, the relationship between category EPU's and the valuation of the bank is worth to investigate. Some potential questions may come to people's mind: Do the too-big-to-fail affect the bank to deal with external risks? Do the better capital ratio and risk management immunize banks against external risks? Our paper is to provide empirical evidence for these issues. To the best of our knowledge, we are the first to examine the relation between economic policy uncertainty and bank valuation. We expect our research might make some contribution to regulators and managements.

In order to achieve the goal, we apply the multiple regression technique to seek the impact of the categorized EPU's on the valuation of the bank by introducing the quarterly data from all US bank holding companies over the first quarter of 2002 to the fourth quarter of 2015. We also define the recent financial crisis period to be from the third quarter of 2007 to the fourth quarter of 2009. We add some external economic factors that may affect the valuation of banks directly, such as GDP and federal fund rate. In addition, we consider some internal factors that may affect the valuation of the bank from prior research papers such as Laeven and Levine (2007).

Our results suggest that there exist negative relations between any kind of the external risks and the valuation of banks both before and after the crisis. However, we saw some risks factors have no significant correlation with the valuation of banks during the crisis, and results related to monetary risks for large and medium banks even provide positive relationship. We are thinking that these may be caused by several factors. ``Too big to fail`` is a real benefit to lead banks to grow bigger. Moreover, some abnormal risk, such as the probability of disaster is constant, which is provided by Gabaix (2012), may be considered.

2. Literature Review

There are nearly no prior research papers about the direct relationship between the EPU and the valuation of the bank. Luckily, there are some researches that can assist us to indirectly seek the relationship between EPU and the valuation of the bank.

2.1 EPU and Bank Loan and liquidity

Many research papers have already demonstrated the positive relationship between loan growth, liquidity, corporate investment and the valuation of the bank. Recently some researchers have already identified the relationship between EPU and loan growth, corporate investment, bank spread as well as the liquidity of the bank.

According to numbers of researchers such as Gilchrist, Sim, and Zakrajšek, (2014), Caldara, et al.(2016) and Stokey (2016), investment defers because of higher volatility. In other words, the diminishment of loan growth of banks leads to a lower valuation of the bank (Niu, Loan growth and bank valuations, 2016b). Kim, H., & Kung, H., (2014) also mentioned that economic uncertainty may affect liquidation valuation negatively, which also leads to a lower valuation of the bank in sense of lower liquidity value (Berger, A. N., & Bouwman, C. H., 2009). Other researchers, such as Francis, B. B., Hasan, I., & Zhu, Y., (2014), showed that policy uncertainty provides better interest margin to the banks, which may affect the valuation of the bank positively.

2.2 EPU and Assets Pricing

Recently, many research papers try to evaluate the relationship between EPU and assets pricing. As most of the banks' assets are marketable assets, lower assets pricing means lower value of the bank.

Most researchers conclude that fear creates lower valuation. One early trade-off theory mentioned by Bernanke (1983) says that: "investment should be undertaken in this case only when the costs of deferring the project exceed the expected value of information gained by waiting." That means when the risk is high, the discounted rate of the future cash flow will be higher, which will lead to lower valuation of the assets. Hassler (1996) also mentioned that when the high-risk period continues, the value of the investment will stay low until the risk is off. Similarly, according to Bloom (2009), shocks to uncertainty can have huge impacts on the aggregate economy. That means the valuation is lower when the risk is higher. Bollersslev, Time and Todorov, Viktor (2011) also concluded that higher volatility causes lower price considering large negative movements. Da, Zhi, Joseph Engelberg, and Pengjie Gao., (2015) and Brogaard, Jonathan, and Andrew Detzel., (2015) also figured out fear creates lower valuation by using various models. Also some models implied shocks to future expected volatility with lower assets pricing: such as ICAPM model developed by Merton (1973); consumption-based model developed by Epstein, Larry G. and Stanley E. Zin (1991).

However, recent theory and empirical studies tell a different story. According to Dew-Becker, I., Giglio, S., Le, A., & Rodriguez, M. (2015), only the temporary part of realized

variance is priced. The permanent increase or decrease of volatility does not affect the valuation of assets. Besides, Gabaix (2012) stated that the probability of disaster is constant, so valuation is linked to the occurrence of the disaster instead of current consumption. This model is able to explain large negative premium on real stock return variance and zero premium about future variance.

2.3 EPU and Bank Valuation in different Geography

Another area about EPU that also draws our attention is the economy region variance in 2007 -2009 recession put forward by Shoag, D., & Veuger, S., (2014). They mentioned that the EPU cannot explain the economy region variance well, even if a lot of research papers mention that financial uncertainty is systematic. We want to expand this research and see whether or not the EPU affect all regional small banks negatively uniformly.

Therefore, based on our research, we expect that economic policy uncertainty is negatively associated with bank valuation. Besides, we consider economic policy uncertainty might have different effects on the valuation of various sizes of banks. Our following empirical research is going to verify these hypotheses.

3. Sample and variables

3.1 Sample and variables

Our sample contains a list of public-traded bank holding companies in the U.S., provided by the Federal Reserve Bank of New York. The sample period goes from 2002: Q1 to 2015: Q4. Our sample starts in 2002 because we want to avoid the effect of the prior crisis occurred after dot-com bubble and Enron Failure, and the sample ends in 2015 because data for year 2016 has not been published yet. The sample contains both accounting data and stock data. Our accounting data comes from the Bank Holding Companies database from Wharton Research Data Services (WRDS) and stock data comes from the Centre for research in Security Prices (CRSP).

Lots of the researchers such as Niu (2016b), Laeven and Levine (2007) and G. Caprio (2007) use Tobin's Q as a measure of bank valuation. Tobin's q is calculated as the ratio of the market value of equity plus the book value of liabilities to the book value of assets. Originally Tobin's Q measures the market value of assets that comprises the replacement costs of tangible assets. However, replacement cost is hard to measure so most empirical studies such as G. Caprio (2007), Laeven and Levine (2007), and Niu (2016b) treat book value as the replacement cost. Theoretically, Tobin's Q leads us to compare firms without considering risk and leverage. Unfortunately, some studies such as Brookl, Y., Hendershott, R. and Lee, D.(1998) mentioned Tobin's Q may mislead for highly leveraged banks. Also,

most of the bank's assets are financial assets whose market value and replacement cost are pretty similar.

To measure economic policy uncertainty, we employ the Economic Policy Uncertainty (EPU) index provided by Baker, Bloom, and Davis (2016). EPU index is designed to reflect the frequency of references to economic uncertainty and policy in 10 leading newspapers (6 newspapers prior 1985) from 1900. It is established by measuring the frequency of articles that contain the term 'uncertainty' and economic policies. EPU index has been tested to be a great proxy of real economic policy uncertainty. Category-specific policy uncertainty indices are also developed by specifying more restrictive standard for those articles that contain the terms about the economy, policy, and uncertainty. There are ten category-specific indices measuring uncertainties on economic policy, monetary policy, fiscal policy, taxes, government spending, healthcare, national security, entitlement programs, regulation, financial regulation, trade policy, and sovereign debt from 1985, respectively. According to Baker, Bloom, and Davis (2016), each sub-index requires "economic", "uncertainty" and "policy" terms as well as a set of category policy terms. For example, the "federal reserve" term will be included in monetary policy uncertainty sub-index. We use the overall EPU index, monetary policy index and fiscal policy index as our main research objects. Monetary policy uncertainty may affect the market expected interest rate which directly affects the value of banks in terms of interest margin, loan growth and marketable assets pricing. Fiscal policy uncertainty may affect expected government spending and tax policy, which may affect the overall economy including bank activities. As a result, we choose monetary policy uncertainty as well as fiscal policy uncertainty as the main EPU sub-indices we focus on in this paper.

Similar to Laeven and Levine (2007) investigating the relationship between diversification and bank valuation, we use most of their empirical specification to select control variables. In particular, our control variables include bank size, measured as the natural logarithm of total assets, capital ratio which is the ratio of equity to total assets, loans which is the ratio of loans and leases to total assets, deposits which is the ratio of domestic deposits to total assets, and ROE (return on equity) which is the ratio of pre-tax profit to the book value of equity.

In addition, we also include two macroeconomic variables in our sample: the short-term federal fund rate and the real GDP growth. We believe those variables can well explain the macroeconomic conditions. We download the sample from credit sources such as government or the federal reserve website. Some newly literature argue that the expectation component of the university of Michigan's Index of consumer sentiment regarding the figure is outperforming federal fund rate (Bordo, M. D., Duca, J. V. & Koch, C.,2016). However, the short term federal fund rate is still widely acceptable as macroeconomic indicator.

Table 1 presents all the defined variables used in this paper. Some variables in our sample contain outliers, so we winsorize bank – level continuous variables at the 1% and 99% levels to reduce the effects of outliers.

Table 2 illustrates summary statistics for major variables. The mean of Tobin's Q is 1.042, which indicates the premium of the market assets to book assets is 4.2%. Meanwhile, loans

account for 66.8% of total assets, deposit for 74.8%, and capital for 9.59%. The ROE is 10.1% in average. Our result is consistent with Laeven and Levine (2007) and Niu (2016), with a slightly higher capital ratio and a lower loans ratio because it weighs more recent data.

4. The Model and Empirical results

4.1 Model estimation

In order to seek the relationship between the value of the bank and economic policy uncertainty, we estimate the following multiple linear regression model:

$$\text{Tobin's } Q_{i,t} = \beta_0 + \beta_1 * \text{EPU}_{\text{categ}_{i,t}} + \beta_2 * \text{deposits}_{i,t} + \beta_3 * \text{size}_{i,t} + \beta_4 * \text{capital}_{i,t} + \beta_5 * \text{loans}_{i,t} + \beta_6 * \text{ROE}_{i,t} + \beta_7 * \text{RealGDP}_{i,t} + \beta_8 * \text{ShortFedfund}_{i,t} + \varepsilon_{i,t}$$

In this equation, β_1 is the coefficient on one kind of EPU index, and it illustrates the relationship between EPU and the valuation of the bank. Similarly, β_2 is the coefficient on deposit; β_3 is the coefficient on size; β_4 is the coefficient on capital ratio; β_5 is the coefficient on loans; β_6 is the coefficient on ROE; β_7 is the coefficient on real GDP growth; β_8 is the coefficient on short term fed fund rate. $\varepsilon_{i,t}$ is the error term we assume in the model.

To estimate the effect of each categorical EPU index on the valuation of various sizes of banks, we divide banks in our sample into three groups, and then run regressions for each group. Similar to Niu (2016b), we treat any observation under 1 billion labeled as a small bank; any observation between 1 billion and 10 billion labeled as a medium bank; any observation over 10 billion labeled as a large bank. Also, we divide the dataset into three time periods: Before the crisis (2002: Q1 to 2007: Q2), during the crisis (2007: Q3 to 2009:

Q4), and after the crisis (2010: Q1 to 2015: Q4). Thus, we conduct a total of nine separate regressions on different sizes of banks during different time periods. We listed three core EPU indices: the overall EPU index, the Monetary EPU index and the Fiscal EPU index in Appendix A, and the regression results of the rest of categorical EPU indices are listed in Appendix B.

4.2 Regression results

4.2.1 Pre- financial Crisis Period

Table 3, 4 and 5 and tables in Appendix B are about the pre-financial crisis period. We could see that for almost all sizes of banks, during this period, all these indices are significantly and negatively associated with Tobin's Q, indicating that higher economic policy uncertainty will lead to lower bank valuation. EPU about trade policy for small banks is the only negative but insignificant variable (Table 18). The fact that some small banks may not involve in international business may cause the risk factor not that significant. This result is consistent with traditional trade-off theory or wait-and-see theory supported by different researchers such as Bernanke (1983). The results indicate that economic policy uncertainty reduces bank valuation before the crisis in which the economy enjoys high growth with normal interest rate and the bank grows with high leverage and high ROE.

4.2.2 Post- financial Crisis Period

After crisis tables shows similar results as pre-financial crisis period. Table 9, 10 and 11 and Appendix B show that all the coefficients on EPU indices are significantly and negatively associated with Tobin's Q, indicating an increase in economic policy uncertainty is associated with a decrease in bank valuation for all banks after the crisis. That is also in line with prior researches. The results show that in period of economic recovery, EPUs are providing risk premium to the value of the banks. In other words, during the time without stress, higher economic policy uncertainty provides lower valuation to the banks.

4.2.3 Financial Crisis Period

During-crisis tables do not illustrate similar results as pre-financial crisis and post-financial crisis period. Instead, different categorical EPU index shows different results on different size of banks.

For large banks, most category-specific EPU indices, including overall EPU index, show an insignificant relationship with bank valuation. What's more, EPU index related to monetary policy shows a significant positive relationship with the valuation of the bank. That means when the monetary risk is higher, the valuation of the bank is higher instead of lower. In other words, monetary risk provides a negative premium. Still some EPU indices show significant negative relationship with the bank valuation including EPU about the fiscal policy and trade policy. Those numbers may offset each other and cause overall EPU index become insignificant.

Similar to large banks, EPU's show different relationships with medium banks' valuation during the crisis. Overall EPU index shows a positive relationship with 95% confidence but not at 99% level. EPU about monetary policy shows a significant positive relationship while fiscal policy shows a significant negative relationship.

For small banks, most categorical EPU indices show a significant negative relationship with the valuation of the bank. Monetary policy EPU demonstrates an insignificant positive relation with bank valuation. The overall EPU index is also insignificant.

Many reasons may explain the abnormal results during the crisis. The sample EPU we get during the crisis may be not enough to determine the relationship between EPU and the valuation of the bank. EPU data is monthly basis; however, the stock market is real time quote basis. That may cause the correlation during the crisis lower than the actual one. Many researchers use this reason to explain the lower than actual correlation between the alternative investment and stock market during the crisis. Moreover, those EPU's provided negative premium mostly related to monetary policies for medium and large banks. When such risk is high during the crisis, investors may believe the Federal Reserve will step in and try to save banks in order to maintain the stability of the financial system. Small banks are not that important to the financial system so the relationship is not significant. Some other theories can also explain the abnormal during the crisis. For example, the model developed by Gabaix (2012) says that the probability of disaster is constant. When a financial crisis happens, the expectation on another financial crisis decrease. This element is not considered in our model and may cause our results abnormal.

5. Conclusion

In this paper, we examined the relationship between economic policy uncertainty and bank valuation. We use a panel of U.S. bank holding companies during 2002 to 2015. To control for the impact of bank size, we divide our sample banks into small, medium, and large banks. To control for the impact of recent financial crisis, we separate sample period into pre-financial crisis period, financial crisis period and post-financial crisis period.

We find that before the financial crisis, economic policy uncertainty is basically negative associated with bank valuation. Results are almost the same during post-financial crisis period. However, during the financial crisis, the results are mixed. For small banks, the negative relation still holds for most category-specific EPU indices. However, monetary policy uncertainty has no significant relation with bank valuation. For large banks, monetary policy uncertainty is positively related to bank valuation while fiscal policy uncertainty is negatively related. And the cancel-out effect make the relationship between overall economic policy uncertainty and bank valuation insignificant. For medium banks, monetary policy uncertainty is positively associated with bank valuation and fiscal policy uncertainty is negatively associated. The overall EPU index is significantly and positively related to bank valuation.

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Appendix

Appendix A

Table 1: Variable definitions.

Variable	Definition
Tobin's q	The ratio of the market value of equity plus the book value of liabilities to the book value of assets
Size	The natural logarithm of total asset
Capital	The ratio of equity to total assets
Loans	The ratio of loans and leases to total assets
Deposits	The ratio of domestic deposits to total assets
ROE	The ratio of pre-tax profit to the book value of equity

Table 2: Summary statistics.

Variable	Mean	Std.dev.	Minimum	Maximum	N
Tobin's q	1.042	0.0659	0.924	1.255	20615
Size	14.69	1.61	11.94	21.67	20615
Capital	0.0959	0.0264	0.0368	0.196	20615
Loans	0.668	0.128	0.173	0.892	20615
Deposits	0.748	0.126	0.134	0.903	20615
ROE	0.101	0.213	-1.264	0.402	20443

Table 3: large banks before the crisis

	q	q	q
epu	-0.027 (6.41)**		
epu_monetary		-0.014 (5.76)**	
epu_fiscal			-0.023 (6.49)**
size	-0.008 (6.62)**	-0.008 (6.64)**	-0.008 (6.59)**
capital	0.950 (16.15)**	0.953 (16.14)**	0.950 (16.15)**
loans	-0.097 (9.40)**	-0.097 (9.40)**	-0.097 (9.45)**
deposits	0.009 (0.91)	0.009 (0.85)	0.010 (0.96)
roe	0.384 (26.26)**	0.384 (26.16)**	0.383 (26.20)**
gdp	-0.001 (1.28)	-0.001 (1.29)	-0.001 (0.73)
federal_funds	-0.004 (3.92)**	-0.003 (2.74)**	-0.005 (4.24)**
_cons	1.160 (46.56)**	1.148 (46.47)**	1.156 (46.70)**
R^2	0.48	0.47	0.48
N	1,213	1,213	1,213

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 4: medium banks before the crisis

	q	q	q
e pu	-0.032 (13.06)**		
e pu_monetary		-0.015 (10.18)**	
e pu_fiscal			-0.026 (12.60)**
size	0.010 (8.50)**	0.010 (8.45)**	0.010 (8.52)**
capital	0.315 (10.10)**	0.313 (9.96)**	0.318 (10.20)**
loans	-0.035 (5.08)**	-0.033 (4.75)**	-0.034 (4.93)**
deposits	0.054 (7.00)**	0.054 (6.87)**	0.054 (6.96)**
roe	0.191 (28.67)**	0.191 (28.35)**	0.189 (28.32)**
gdp	-0.000 (0.78)	-0.000 (0.20)	0.000 (0.67)
federal_funds	-0.005 (7.91)**	-0.003 (4.78)**	-0.005 (8.12)**
_cons	0.898 (42.70)**	0.877 (41.70)**	0.890 (42.44)**
R^2	0.24	0.22	0.23
N	4,005	4,005	4,005

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 5: small banks before the crisis

	q	q	q
e pu	-0.026 (12.30)**		
e pu_monetary		-0.011 (9.20)**	
e pu_fiscal			-0.018 (9.80)**
size	0.012 (7.41)**	0.012 (7.27)**	0.013 (7.62)**
capital	0.238 (7.67)**	0.236 (7.56)**	0.241 (7.73)**
loans	0.012 (2.13)*	0.013 (2.17)*	0.013 (2.18)*
deposits	0.142 (18.74)**	0.141 (18.44)**	0.142 (18.58)**
roe	0.132 (22.37)**	0.131 (22.01)**	0.130 (21.92)**
gdp	0.001 (2.13)*	0.002 (2.97)**	0.002 (4.02)**
federal_funds	-0.002 (3.90)**	-0.000 (0.43)	-0.002 (3.15)**
_cons	0.766 (32.04)**	0.751 (31.26)**	0.749 (31.28)**
R^2	0.23	0.22	0.22
N	4,187	4,187	4,187

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 6: large banks during the crisis

	q	q	q
e _{pu}	0.006 (0.67)		
e _{pu_monetary}		0.021 (3.49)**	
e _{pu_fiscal}			-0.018 (2.00)*
size	-0.008 (4.46)**	-0.008 (4.58)**	-0.008 (4.45)**
capital	-0.706 (6.71)**	-0.686 (6.59)**	-0.709 (6.77)**
loans	-0.061 (2.91)**	-0.063 (3.03)**	-0.061 (2.93)**
deposits	-0.030 (1.51)	-0.031 (1.58)	-0.030 (1.49)
roe	0.091 (11.65)**	0.090 (11.59)**	0.091 (11.73)**
gdp	0.000 (0.33)	0.001 (1.74)	-0.001 (1.39)
federal_funds	0.011 (7.98)**	0.007 (3.91)**	0.009 (5.05)**
_cons	1.250 (30.23)**	1.245 (31.28)**	1.278 (30.92)**
R^2	0.46	0.48	0.47
N	528	528	528

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 7: medium banks during the crisis

	q	q	q
eup	0.012 (2.27)*		
eup_monetary		0.021 (6.62)**	
eup_fiscal			-0.017 (3.28)**
size	0.006 (3.19)**	0.006 (3.21)**	0.006 (3.22)**
capital	-0.057 (1.27)	-0.053 (1.20)	-0.060 (1.34)
loans	-0.106 (9.14)**	-0.105 (9.18)**	-0.107 (9.22)**
deposits	-0.076 (5.65)**	-0.077 (5.74)**	-0.075 (5.57)**
roe	0.038 (11.22)**	0.038 (11.40)**	0.038 (11.30)**
gdp	-0.000 (0.67)	0.000 (1.04)	-0.002 (4.39)**
federal_funds	0.012 (15.41)**	0.007 (6.94)**	0.009 (9.52)**
_cons	1.028 (32.32)**	1.027 (33.05)**	1.061 (33.34)**
R^2	0.31	0.32	0.31
N	1,967	1,967	1,967

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 8: small banks during the crisis

	q	q	q
e _{pu}	-0.007 (1.09)		
e _{pu_monetary}		0.004 (0.90)	
e _{pu_fiscal}			-0.015 (2.33)*
size	0.011 (2.29)*	0.011 (2.28)*	0.011 (2.27)*
capital	-0.181 (3.11)**	-0.179 (3.07)**	-0.180 (3.10)**
loans	-0.085 (6.35)**	-0.085 (6.34)**	-0.086 (6.40)**
deposits	0.028 (1.93)	0.028 (1.94)	0.029 (1.99)*
roe	0.036 (7.52)**	0.036 (7.58)**	0.036 (7.58)**
gdp	-0.001 (1.63)	-0.000 (0.51)	-0.001 (2.41)*
federal_funds	0.013 (14.07)**	0.012 (10.02)**	0.011 (9.58)**
_cons	0.891 (12.99)**	0.882 (12.91)**	0.902 (13.15)**
R^2	0.29	0.29	0.29
N	1,010	1,010	1,010

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 9: large banks after the crisis

	q	q	q
eup	-0.032 (10.75)**		
eup_monetary		-0.033 (8.74)**	
eup_fiscal			-0.015 (9.66)**
size	-0.017 (15.84)**	-0.016 (15.16)**	-0.017 (15.55)**
capital	-0.243 (4.77)**	-0.214 (4.16)**	-0.230 (4.50)**
loans	0.009 (0.94)	0.008 (0.86)	0.008 (0.86)
deposits	-0.120 (12.39)**	-0.114 (11.66)**	-0.117 (12.06)**
roe	0.245 (25.12)**	0.250 (25.33)**	0.246 (25.08)**
gdp	-0.000 (0.15)	0.001 (0.77)	0.000 (0.06)
federal_funds	0.009 (0.30)	0.007 (0.22)	0.009 (0.30)
_cons	1.431 (55.08)**	1.403 (54.09)**	1.411 (54.53)**
R^2	0.43	0.41	0.42
N	1,462	1,462	1,462

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 10: medium banks after the crisis

	q	q	q
eup	-0.030 (18.09)**		
eup_monetary		-0.025 (11.82)**	
eup_fiscal			-0.014 (16.77)**
size	0.014 (12.82)**	0.015 (13.01)**	0.014 (12.84)**
capital	0.108 (3.70)**	0.130 (4.39)**	0.116 (3.98)**
loans	-0.039 (5.84)**	-0.031 (4.50)**	-0.038 (5.64)**
deposits	-0.031 (3.14)**	-0.027 (2.72)**	-0.028 (2.89)**
roe	0.053 (14.26)**	0.058 (15.49)**	0.054 (14.61)**
gdp	-0.001 (2.05)*	-0.000 (0.26)	-0.001 (1.74)
federal_funds	-0.001 (0.03)	-0.009 (0.55)	0.002 (0.14)
_cons	0.875 (43.73)**	0.842 (41.57)**	0.857 (42.88)**
R^2	0.20	0.17	0.19
N	4,429	4,429	4,429

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 11: small banks after the crisis

	q	q	q
epu	-0.021 (9.52)**		
epu_monetary		-0.016 (5.94)**	
epu_fiscal			-0.010 (8.63)**
size	0.002 (0.66)	0.003 (0.91)	0.002 (0.69)
capital	0.058 (1.74)	0.071 (2.12)*	0.070 (2.10)*
loans	0.000 (0.06)	0.002 (0.19)	0.000 (0.03)
deposits	0.035 (2.82)**	0.042 (3.28)**	0.040 (3.16)**
roe	0.028 (6.54)**	0.031 (7.02)**	0.029 (6.67)**
gdp	-0.001 (1.18)	0.000 (0.01)	-0.000 (0.96)
federal_funds	0.012 (0.53)	-0.019 (0.82)	0.014 (0.63)
_cons	0.939 (19.08)**	0.911 (18.26)**	0.923 (18.71)**
R^2	0.10	0.07	0.09
N	1,642	1,642	1,642

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Appendix B

Table 12: large bank before the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.021 (6.36)**								
governmentspending		-0.025 (6.24)**							
healthcare			-0.023 (5.25)**						
nationalsecurity				-0.007 (6.19)**					
entitlementprograms					-0.012 (4.22)**				
regulation						-0.024 (4.86)**			
financialregulation							-0.004 (2.08)*		
tradepolicy								-0.022 (3.16)**	
sovereigndebtcurrencycri									-0.038 (3.85)**
size	-0.008 (6.59)**	-0.008 (6.59)**	-0.008 (6.63)**	-0.008 (6.62)**	-0.008 (6.62)**	-0.008 (6.62)**	-0.008 (6.62)**	-0.008 (6.65)**	-0.008 (6.62)**
capital	0.951 (16.15)**	0.950 (16.13)**	0.956 (16.16)**	0.954 (16.19)**	0.959 (16.15)**	0.952 (16.07)**	0.960 (16.08)**	0.960 (16.12)**	0.957 (16.10)**
loans	-0.097 (9.44)**	-0.097 (9.41)**	-0.097 (9.39)**	-0.098 (9.44)**	-0.097 (9.35)**	-0.097 (9.30)**	-0.097 (9.30)**	-0.098 (9.36)**	-0.097 (9.34)**
deposits	0.010 (0.96)	0.010 (0.94)	0.009 (0.86)	0.009 (0.90)	0.008 (0.82)	0.008 (0.81)	0.008 (0.77)	0.008 (0.76)	0.008 (0.81)
roe	0.383 (26.18)**	0.384 (26.19)**	0.383 (26.00)**	0.382 (26.08)**	0.383 (25.89)**	0.383 (26.00)**	0.383 (25.75)**	0.385 (25.95)**	0.384 (25.97)**
gdp	-0.001 (0.76)	0.000 (0.05)	-0.000 (0.53)	-0.001 (1.26)	-0.001 (0.95)	-0.001 (0.99)	0.000 (0.12)	0.002 (2.34)*	0.002 (2.38)*
federal_funds	-0.004 (4.11)**	-0.005 (4.24)**	-0.005 (3.86)**	-0.003 (3.33)**	-0.003 (2.74)**	-0.004 (3.23)**	-0.001 (1.01)	-0.001 (1.15)	-0.001 (0.87)
_cons	1.155 (46.65)**	1.151 (46.65)**	1.159 (45.82)**	1.146 (46.67)**	1.147 (45.72)**	1.157 (45.64)**	1.132 (45.41)**	1.133 (45.80)**	1.131 (45.98)**
R ²	0.48	0.48	0.47	0.48	0.47	0.47	0.46	0.46	0.47
N	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213	1,213

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 13: large bank during the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.016 (1.88)								
governmentspending		-0.016 (1.67)							
healthcare			0.001 (0.22)						
nationalsecurity				0.014 (1.95)					
entitlementprograms					-0.001 (0.15)				
regulation						0.006 (1.58)			
financialregulation							0.002 (2.21)*		
tradepolicy								-0.062 (3.91)**	
sovereigndebtcurrencycri									0.024 (1.98)*
size	-0.008 (4.45)**	-0.008 (4.44)**	-0.008 (4.46)**	-0.008 (4.49)**	-0.008 (4.45)**	-0.008 (4.49)**	-0.008 (4.51)**	-0.008 (4.54)**	-0.008 (4.50)**
capital	-0.709 (6.77)**	-0.706 (6.73)**	-0.711 (6.74)**	-0.689 (6.54)**	-0.709 (6.74)**	-0.699 (6.66)**	-0.695 (6.63)**	-0.715 (6.90)**	-0.701 (6.69)**
loans	-0.061 (2.92)**	-0.062 (2.97)**	-0.060 (2.82)**	-0.065 (3.09)**	-0.060 (2.88)**	-0.062 (2.97)**	-0.063 (3.01)**	-0.059 (2.85)**	-0.061 (2.92)**
deposits	-0.030 (1.49)	-0.029 (1.47)	-0.031 (1.53)	-0.029 (1.43)	-0.030 (1.51)	-0.030 (1.50)	-0.030 (1.50)	-0.032 (1.62)	-0.031 (1.55)
roe	0.091 (11.72)**	0.091 (11.69)**	0.091 (11.66)**	0.090 (11.59)**	0.091 (11.66)**	0.091 (11.65)**	0.090 (11.61)**	0.093 (12.09)**	0.090 (11.52)**
gdp	-0.001 (1.36)	-0.001 (0.90)	-0.000 (0.17)	0.000 (0.70)	-0.000 (0.21)	0.000 (0.08)	0.000 (0.57)	-0.001 (2.11)*	0.001 (1.10)
federal_funds	0.009 (5.41)**	0.009 (5.06)**	0.011 (6.29)**	0.011 (8.13)**	0.011 (6.54)**	0.012 (8.10)**	0.011 (8.06)**	0.013 (8.97)**	0.010 (7.12)**
_cons	1.276 (30.92)**	1.270 (31.17)**	1.255 (30.57)**	1.247 (30.99)**	1.258 (30.87)**	1.247 (30.81)**	1.253 (31.36)**	1.278 (32.04)**	1.255 (31.40)**
R^2	0.47	0.47	0.46	0.47	0.46	0.47	0.47	0.48	0.47
N	528	528	528	528	528	528	528	528	528

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 14: large bank after the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.013 (9.39)**								
governmentspending		-0.012 (9.56)**							
healthcare			-0.012 (9.59)**						
nationalsecurity				-0.040 (8.66)**					
entitlementprograms					-0.009 (7.63)**				
regulation						-0.023 (10.82)**			
financialregulation							-0.011 (7.54)**		
tradepolicy								-0.016 (3.97)**	
sovereigndebtcurrencycri									-0.006 (9.46)**
size	-0.017 (15.48)**	-0.017 (15.43)**	-0.017 (15.69)**	-0.017 (15.26)**	-0.017 (15.12)**	-0.017 (16.02)**	-0.017 (15.35)**	-0.016 (14.64)**	-0.017 (15.31)**
capital	-0.227 (4.43)**	-0.223 (4.37)**	-0.242 (4.72)**	-0.220 (4.28)**	-0.218 (4.21)**	-0.253 (4.97)**	-0.229 (4.41)**	-0.201 (3.83)**	-0.215 (4.20)**
loans	0.008 (0.88)	0.007 (0.78)	0.009 (0.95)	0.008 (0.91)	0.008 (0.83)	0.011 (1.19)	0.010 (1.04)	0.009 (0.95)	0.007 (0.80)
deposits	-0.117 (12.01)**	-0.115 (11.87)**	-0.119 (12.25)**	-0.115 (11.81)**	-0.114 (11.62)**	-0.124 (12.75)**	-0.119 (12.00)**	-0.112 (11.25)**	-0.115 (11.82)**
roe	0.246 (25.01)**	0.248 (25.32)**	0.244 (24.80)**	0.247 (24.99)**	0.247 (24.90)**	0.240 (24.55)**	0.242 (24.36)**	0.245 (24.34)**	0.247 (25.14)**
gdp	0.000 (0.14)	-0.000 (0.50)	0.000 (0.61)	0.000 (0.33)	0.001 (0.89)	0.000 (0.06)	0.001 (1.83)	-0.001 (0.73)	0.001 (1.59)
federal_funds	0.021 (0.68)	-0.023 (0.76)	-0.023 (0.78)	-0.043 (1.40)	-0.026 (0.85)	0.005 (0.18)	0.050 (1.55)	-0.063 (1.97)*	-0.014 (0.46)
_cons	1.406 (54.39)**	1.408 (54.47)**	1.423 (54.44)**	1.415 (53.98)**	1.400 (53.59)**	1.436 (55.09)**	1.398 (53.56)**	1.392 (51.87)**	1.394 (54.32)**
R ²	0.41	0.42	0.42	0.41	0.40	0.43	0.40	0.39	0.42
N	1,462	1,462	1,462	1,462	1,462	1,462	1,462	1,462	1,462

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 15: medium bank before the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.024 (12.32)**								
governmentspending		-0.029 (12.56)**							
healthcare			-0.027 (10.76)**						
nationalsecurity				-0.008 (10.92)**					
entitlementprograms					-0.014 (9.05)**				
regulation						-0.031 (10.59)**			
financialregulation							-0.006 (5.83)**		
tradepolicy								-0.016 (3.80)**	
sovereigndebtcurrencycri									-0.051 (8.87)**
size	0.010 (8.51)**	0.010 (8.49)**	0.011 (8.50)**	0.010 (8.48)**	0.010 (8.46)**	0.011 (8.50)**	0.011 (8.43)**	0.010 (8.37)**	0.010 (8.41)**
capital	0.319 (10.20)**	0.318 (10.19)**	0.322 (10.26)**	0.319 (10.17)**	0.319 (10.13)**	0.316 (10.06)**	0.317 (10.01)**	0.319 (10.04)**	0.319 (10.14)**
loans	-0.034 (4.89)**	-0.035 (5.02)**	-0.033 (4.73)**	-0.033 (4.78)**	-0.032 (4.62)**	-0.033 (4.80)**	-0.031 (4.39)**	-0.031 (4.36)**	-0.033 (4.69)**
deposits	0.054 (6.96)**	0.054 (6.97)**	0.054 (6.93)**	0.054 (6.91)**	0.054 (6.89)**	0.054 (6.87)**	0.053 (6.76)**	0.053 (6.71)**	0.054 (6.83)**
roe	0.189 (28.25)**	0.189 (28.37)**	0.189 (28.13)**	0.189 (28.18)**	0.188 (27.95)**	0.189 (28.12)**	0.187 (27.61)**	0.188 (27.70)**	0.189 (28.05)**
gdp	0.000 (0.61)	0.001 (2.13)*	0.000 (0.79)	-0.000 (0.05)	-0.000 (0.26)	-0.000 (0.57)	0.001 (1.23)	0.003 (5.60)**	0.004 (6.98)**
federal_funds	-0.005 (7.87)**	-0.006 (8.44)**	-0.006 (7.86)**	-0.003 (5.77)**	-0.004 (5.80)**	-0.005 (7.01)**	-0.002 (2.84)**	-0.001 (1.36)	-0.001 (2.01)*
_cons	0.888 (42.34)**	0.887 (42.35)**	0.893 (42.07)**	0.875 (41.76)**	0.879 (41.51)**	0.894 (42.03)**	0.862 (40.74)**	0.856 (40.43)**	0.861 (41.09)**
R^2	0.23	0.23	0.23	0.23	0.22	0.23	0.21	0.21	0.22
N	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table16: medium bank during the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.015 (3.09)**								
governmentspending		-0.015 (2.83)**							
healthcare			-0.005 (1.69)						
nationalsecurity				0.021 (5.28)**					
entitlementprograms					-0.005 (1.32)				
regulation						0.008 (4.06)**			
financialregulation							0.003 (5.42)**		
tradepolicy								-0.053 (6.16)**	
sovereigndebtcurrencycri									0.022 (3.27)**
size	0.006 (3.22)**	0.006 (3.22)**	0.006 (3.19)**	0.006 (3.16)**	0.006 (3.20)**	0.006 (3.18)**	0.006 (3.16)**	0.006 (3.22)**	0.006 (3.23)**
capital	-0.060 (1.35)	-0.059 (1.33)	-0.057 (1.27)	-0.046 (1.03)	-0.059 (1.32)	-0.053 (1.18)	-0.050 (1.13)	-0.056 (1.26)	-0.062 (1.39)
loans	-0.106 (9.21)**	-0.107 (9.22)**	-0.107 (9.22)**	-0.109 (9.45)**	-0.106 (9.17)**	-0.107 (9.23)**	-0.107 (9.28)**	-0.106 (9.26)**	-0.104 (9.03)**
deposits	-0.075 (5.59)**	-0.075 (5.51)**	-0.074 (5.47)**	-0.072 (5.32)**	-0.076 (5.58)**	-0.075 (5.59)**	-0.075 (5.62)**	-0.075 (5.62)**	-0.078 (5.75)**
roe	0.038 (11.29)**	0.038 (11.27)**	0.038 (11.17)**	0.038 (11.26)**	0.038 (11.21)**	0.038 (11.27)**	0.038 (11.31)**	0.039 (11.70)**	0.038 (11.21)**
gdp	-0.002 (4.30)**	-0.001 (3.93)**	-0.001 (3.01)**	-0.000 (0.43)	-0.001 (3.25)**	-0.001 (2.32)*	-0.000 (1.10)	-0.002 (5.63)**	-0.000 (0.27)
federal_funds	0.009 (10.17)**	0.009 (9.53)**	0.010 (10.33)**	0.011 (15.45)**	0.011 (11.56)**	0.012 (15.79)**	0.011 (15.21)**	0.013 (16.58)**	0.010 (13.38)**
_cons	1.059 (33.31)**	1.053 (33.38)**	1.050 (33.11)**	1.026 (32.84)**	1.047 (33.11)**	1.027 (32.69)**	1.036 (33.28)**	1.058 (33.95)**	1.038 (33.20)**
R ²	0.31	0.31	0.31	0.32	0.31	0.31	0.32	0.32	0.31
N	1,967	1,967	1,967	1,967	1,967	1,967	1,967	1,967	1,967

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 17: medium bank after the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.013 (16.39)**								
governmentspending		-0.011 (15.95)**							
healthcare			-0.012 (16.98)**						
nationalsecurity				-0.032 (12.52)**					
entitlementprograms					-0.008 (13.28)**				
regulation						-0.023 (19.26)**			
financialregulation							-0.011 (13.66)**		
tradepolicy								-0.019 (8.42)**	
sovereigndebtcurrencycri									-0.005 (15.10)**
size	0.014 (12.86)**	0.014 (12.87)**	0.014 (12.73)**	0.015 (13.01)**	0.015 (12.92)**	0.014 (12.84)**	0.014 (12.80)**	0.015 (13.10)**	0.014 (12.92)**
capital	0.117 (3.98)**	0.125 (4.25)**	0.106 (3.61)**	0.124 (4.19)**	0.125 (4.22)**	0.088 (3.02)**	0.106 (3.56)**	0.125 (4.16)**	0.126 (4.27)**
loans	-0.037 (5.48)**	-0.037 (5.50)**	-0.039 (5.70)**	-0.032 (4.64)**	-0.035 (5.09)**	-0.037 (5.50)**	-0.032 (4.73)**	-0.026 (3.78)**	-0.035 (5.12)**
deposits	-0.029 (2.92)**	-0.026 (2.65)**	-0.031 (3.21)**	-0.028 (2.83)**	-0.027 (2.67)**	-0.039 (3.97)**	-0.034 (3.42)**	-0.029 (2.91)**	-0.029 (2.92)**
roe	0.054 (14.58)**	0.056 (15.24)**	0.053 (14.28)**	0.056 (14.88)**	0.056 (15.04)**	0.049 (13.22)**	0.053 (13.99)**	0.057 (15.16)**	0.056 (15.03)**
gdp	-0.001 (1.60)	-0.001 (2.69)**	-0.000 (0.88)	-0.000 (0.84)	-0.000 (0.18)	-0.001 (1.98)*	0.001 (1.38)	-0.002 (3.54)**	0.000 (1.14)
federal_funds	0.014 (0.83)	-0.031 (1.82)	-0.029 (1.70)	-0.049 (2.86)**	-0.032 (1.88)	-0.003 (0.15)	0.050 (2.78)**	-0.073 (4.09)**	-0.024 (1.41)
_cons	0.853 (42.66)**	0.853 (42.59)**	0.869 (43.32)**	0.853 (41.97)**	0.846 (41.91)**	0.882 (44.23)**	0.844 (41.90)**	0.841 (40.99)**	0.843 (42.08)**
R ²	0.19	0.19	0.19	0.17	0.17	0.21	0.17	0.15	0.18
N	4,429	4,429	4,429	4,429	4,429	4,429	4,429	4,429	4,429

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 18: small bank before the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.016 (9.37)**								
government spending		-0.022 (10.68)**							
healthcare			-0.019 (8.91)**						
national security				-0.005 (8.75)**					
entitlement programs					-0.013 (9.18)**				
regulation						-0.029 (11.50)**			
financial regulation							-0.007 (7.32)**		
trade policy								-0.006 (1.63)	
sovereign debt/currency crisis									-0.050 (10.00)**
size	0.013 (7.62)**	0.013 (7.63)**	0.013 (7.61)**	0.013 (7.54)**	0.012 (7.41)**	0.013 (7.62)**	0.013 (7.47)**	0.013 (7.43)**	0.013 (7.53)**
capital	0.241 (7.73)**	0.241 (7.75)**	0.242 (7.75)**	0.241 (7.71)**	0.240 (7.69)**	0.238 (7.65)**	0.238 (7.59)**	0.240 (7.62)**	0.240 (7.71)**
loans	0.013 (2.19)*	0.013 (2.16)*	0.013 (2.21)*	0.013 (2.19)*	0.013 (2.26)*	0.013 (2.25)*	0.014 (2.35)*	0.014 (2.29)*	0.013 (2.19)*
deposits	0.142 (18.56)**	0.142 (18.66)**	0.141 (18.47)**	0.141 (18.45)**	0.141 (18.44)**	0.142 (18.60)**	0.140 (18.28)**	0.140 (18.16)**	0.141 (18.44)**
roe	0.130 (21.85)**	0.131 (22.04)**	0.130 (21.78)**	0.130 (21.85)**	0.130 (21.80)**	0.131 (22.12)**	0.129 (21.53)**	0.128 (21.32)**	0.131 (21.99)**
gdp	0.002 (4.06)**	0.002 (5.05)**	0.002 (4.12)**	0.002 (3.36)**	0.001 (1.37)	0.001 (1.57)	0.002 (2.75)**	0.004 (8.03)**	0.005 (10.53)**
federal_funds	-0.002 (2.83)**	-0.003 (4.05)**	-0.003 (3.56)**	-0.001 (1.17)	-0.002 (2.75)**	-0.003 (4.54)**	-0.000 (0.15)	0.002 (3.05)**	0.001 (1.43)
_cons	0.748 (31.18)**	0.749 (31.36)**	0.754 (31.29)**	0.741 (30.95)**	0.755 (31.35)**	0.766 (31.91)**	0.741 (30.81)**	0.726 (30.12)**	0.735 (30.82)**
R^2	0.22	0.22	0.22	0.22	0.22	0.23	0.21	0.20	0.22
N	4,187	4,187	4,187	4,187	4,187	4,187	4,187	4,187	4,187

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 19: small bank during the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.013 (2.19)*								
governmentspending		-0.018 (2.75)**							
healthcare			-0.010 (2.64)**						
nationalsecurity				0.003 (0.73)					
entitlementprograms					-0.011 (2.23)*				
regulation						-0.001 (0.36)			
financialregulation							0.000 (0.33)		
tradepolicy								-0.011 (1.02)	
sovereigndebtcurrencycri									0.015 (1.86)
size	0.011 (2.28)*	0.011 (2.25)*	0.011 (2.24)*	0.011 (2.27)*	0.011 (2.27)*	0.011 (2.29)*	0.011 (2.28)*	0.011 (2.28)*	0.011 (2.26)*
capital	-0.180 (3.10)**	-0.177 (3.05)**	-0.175 (3.01)**	-0.178 (3.05)**	-0.179 (3.08)**	-0.180 (3.09)**	-0.179 (3.08)**	-0.179 (3.07)**	-0.179 (3.07)**
loans	-0.086 (6.39)**	-0.087 (6.47)**	-0.088 (6.54)**	-0.086 (6.38)**	-0.087 (6.44)**	-0.086 (6.35)**	-0.086 (6.35)**	-0.086 (6.36)**	-0.085 (6.33)**
deposits	0.029 (1.98)*	0.030 (2.07)*	0.031 (2.12)*	0.029 (1.97)*	0.029 (2.03)*	0.028 (1.93)	0.028 (1.94)	0.028 (1.95)	0.028 (1.94)
roe	0.036 (7.58)**	0.036 (7.53)**	0.036 (7.48)**	0.036 (7.56)**	0.036 (7.54)**	0.036 (7.53)**	0.036 (7.56)**	0.037 (7.61)**	0.036 (7.52)**
gdp	-0.001 (2.36)*	-0.001 (2.31)*	-0.001 (1.28)	-0.000 (0.77)	-0.001 (1.82)	-0.001 (1.25)	-0.000 (1.03)	-0.001 (1.55)	0.000 (0.21)
federal_funds	0.011 (10.15)**	0.011 (9.14)**	0.011 (9.37)**	0.013 (14.64)**	0.012 (10.55)**	0.013 (13.64)**	0.013 (14.60)**	0.013 (14.21)**	0.012 (13.16)**
_cons	0.900 (13.13)**	0.901 (13.18)**	0.903 (13.19)**	0.882 (12.91)**	0.896 (13.11)**	0.885 (12.94)**	0.883 (12.93)**	0.887 (12.98)**	0.883 (12.95)**
R^2	0.29	0.30	0.30	0.29	0.29	0.29	0.29	0.29	0.29
N	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$

Table 20: small bank after the crisis

	q	q	q	q	q	q	q	q	q
taxes	-0.009 (8.50)**								
governmentspending		-0.007 (7.88)**							
healthcare			-0.009 (8.77)**						
nationalsecurity				-0.021 (6.73)**					
entitlementprograms					-0.005 (6.53)**				
regulation						-0.016 (10.63)**			
financialregulation							-0.007 (6.30)**		
tradepolicy								-0.010 (3.66)**	
sovereigndebtcurrencycri									-0.003 (8.38)**
size	0.002 (0.71)	0.003 (0.75)	0.002 (0.63)	0.003 (0.87)	0.003 (0.79)	0.002 (0.65)	0.003 (0.78)	0.004 (1.00)	0.003 (0.81)
capital	0.070 (2.11)*	0.074 (2.24)*	0.057 (1.72)	0.064 (1.91)	0.076 (2.28)*	0.028 (0.85)	0.056 (1.67)	0.067 (1.98)*	0.069 (2.07)*
loans	0.001 (0.08)	-0.000 (0.01)	0.001 (0.08)	0.002 (0.21)	0.001 (0.07)	0.004 (0.44)	0.003 (0.36)	0.003 (0.38)	0.000 (0.05)
deposits	0.040 (3.15)**	0.042 (3.36)**	0.036 (2.87)**	0.039 (3.07)**	0.043 (3.40)**	0.024 (1.90)	0.036 (2.84)**	0.041 (3.19)**	0.039 (3.11)**
Roe	0.029 (6.64)**	0.030 (6.98)**	0.030 (6.93)**	0.030 (6.96)**	0.030 (6.81)**	0.027 (6.23)**	0.031 (7.02)**	0.031 (6.92)**	0.030 (6.91)**
gdp	-0.000 (0.89)	-0.001 (1.42)	-0.000 (0.57)	-0.000 (0.20)	0.000 (0.03)	-0.001 (1.39)	0.000 (0.82)	-0.001 (1.42)	0.000 (0.90)
federal_funds	0.024 (1.05)	-0.020 (0.89)	-0.003 (0.12)	-0.048 (2.15)*	-0.024 (1.10)	0.018 (0.80)	0.053 (1.98)*	-0.060 (2.59)**	-0.022 (1.00)
_cons	0.920 (18.64)**	0.919 (18.56)**	0.936 (18.93)**	0.921 (18.49)**	0.914 (18.35)**	0.951 (19.41)**	0.911 (18.28)**	0.906 (18.02)**	0.914 (18.52)**
R ²	0.09	0.09	0.10	0.08	0.08	0.11	0.07	0.06	0.09
N	1,642	1,642	1,642	1,642	1,642	1,642	1,642	1,642	1,642

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$