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## GOVERNMENT INTERVENTION IN THE FINANCIAL MARKET: DOES AN INCREASE IN SMALL BUSINESS ADMINISTRATION GUARANTEE LOANS TO SMALL BUSINESSES INCREASE GDP PER CAPITA INCOME?

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#### Abstracts

Using GDP per capita income as the indicator of economic performance of small businesses, I find a positive and significant correlation between the numbers of SBA guarantee loans and the GDP per capita income. My results suggest that as the number of SBA guarantee loans increased, so did the GDP per capita income. This finding confirms the multiplier effect of government intervention in the financial market and will go a long way in shaping the debate on what government programs need to be cut, kept or increased to sustain the economy.

### I. Introduction:

I am studying microlending to determine if the Small Business Administration (SBA) guarantee loans improve economic performance of small businesses in rural and urban America in order to understand how government interventions work in the financial market and if they should be involved in microlending business.

This paper will investigate whether greater number of firms with SBA loans as a ratio of total business in a state increases the GDP per capita in that state. I will employ a straightforward multiplier effect macro model to show whether or not greater investment in a state brought about by an increase in the number of SBA guarantee loans increases GDP per capita in that state.

This paper analyzes the relationship between economic performance and SBA lending using a state- level data panel for the 2001 to 2008 period. Data for the SBA 504 guaranteed lending program also known as the Community Development Company (CDC) loan program, a long term financial tool designed to encourage economic development within a community and the SBA 7(a) loan program which provides financial assistance for businesses that operate in rural and urban areas. The main purpose of this study is to analyze and measure the impact of SBA guarantee loans on small business activities, such as, per capita income while controlling for other determinants of state economic growth such as average corporate income tax rates, number of businesses, population and size of agricultural income in the states.

Studies have shown that small businesses have been the drivers of most developed countries' economies. For example, in the U.S, they are viewed as the backbone of the economy. They make up about 90percent of all employer firms and employ half of all private sector employees. Commercial banks play a critical role in financing small businesses in the U.S., and these loans represent a relatively large portion of the exposure to loss within the commercial banking sector (Irfan, Aleem 1990). Loans and lines of credit are important in business startups and expansion activities. Due to lack of information and no ongoing relationship to determine the risks of default on the part of small businesses; it costs the banks as much money to make small loans as it costs to make big loans to big businesses, hence, they choose to lend mostly to big businesses rather than small businesses.

The Small Business Administration (SBA) was established to provide access and guarantee loans to businesses that otherwise would not get one from the credit market. Studies have shown that credit rationing caused by information asymmetry in the credit market is greater among small businesses. Most small businesses are usually startups and are seen by lenders as risky due to lack of credit history and credit worthiness, which makes it difficult for them to get loans and costly for lenders to make such loans. The concept of a loan guarantee is not to subsidize businesses by covering some of its costs but to enable them to obtain loans when they would otherwise be unable to do so at any cost (Bradshaw, 2002). Availability of capital and access to loan helps businesses grow and in the case of small businesses, the need for assistance and access to loans cannot be over emphasized.

#### **II. Literature Review:**

Some studies have been done to provide evidence that SBA guarantee lending impacts small businesses and local markets to bring about economic growth and higher economic performance. Craig et al (2006) investigated whether financial market development helps promote economic performance by focusing on the rationale that they may increase the amount of external finance available to small businesses. They specifically examined whether a government intervention aimed at increasing small businesses' access to bank credit has a relatively greater impact in low-income areas. They used SBA loan guarantees as their government intervention method and chose small business credit market because of information asymmetry associated with it. They found that low-income markets are positively impacted by SBA guaranteed lending and that the impact for low-income markets is significantly larger than higher income markets.

Encouraging lending to small business is the primary policy objective of the Small Business Administration's (SBA) loan-guarantee program (Craig et la, 2005). Using a panel data set of SBA guaranteed loans, Craig et la (2005) assessed whether SBA guaranteed lending has an observable impact on local economic performance. They found a positive and significant (although economically small) relationship between the relative levels of SBA guaranteed lending in a local market and the future per capita income growth in that market. Cortes, Bienvenido (2010) examined the lending patterns of the SBA in the 50 states over the period of 1986 – 2008 which he used to evaluate the relationship between the supply of SBA small business credits and the local economic performance in these states. He examined the impact of SBA lending on State-level economic performance by using various indicators of small business activities such as employment rate and per capita income, while also controlling for other determinants of state economic growth. After controlling these variables, he found that SBA lending activity directly and significantly influences the growth of small businesses in states. This justifies the ramification for SBA guarantee loans to small businesses.

Bradshaw, Ted (2002) assessed the contribution of small business loan guarantees to economic development in California and found that employment increased in firms that received loan guarantees by 40 percent and 27 percent among nonagricultural firms. He compared employment changes in small businesses statewide to those that received guaranteed loans based on industry and size of firms and found that the firms with guaranteed loan grew faster than firms of the same size that did not receive the loan. When a potential borrower goes to a bank for a loan, it is difficult to determine the risk involved in offering him/her a loan contract just from casual observation. The contract the bank offers depends crucially on its assessment of the risk of default and this risk is dependent, among other things, on the business's credit history and the characteristics of the project it wishes to invest in (Aleem Irfan, 1990). This is the case with small businesses and that's where the SBA guarantee steps in to fill this gap and difficulty. Posey and Alan (2011) in examining the role of loan guarantees in lines of credit granted to small businesses found that the presence of a loan guarantee is associated with lower interest rates and smaller lines of credit. They also found that loan guarantees and collateral are to some extent

substitutes in that loan guarantees are a close substitute for collateral but collateral does not always serve as a close substitute for loan guarantees.

My study is different from these other studies because they all looked at the amount of loans, and compared employment rates between businesses that got SBA guarantee loans and those that did not in order to see the impact of the loans. In my study, I look at the total number of SBA guarantee loans that were given out across states and not the dollar amount of the loans and investigated if an increase in the number of loans increased the GDP per capita across states.

#### **III. Economic Model:**

I will use a straight forward macroeconomic multiplier effect model to see if when the numbers of SBA guarantee loan increases, there will be an increase in GDP per capita and by how much it increases.

In this paper, I will examine if a government intervention program aimed towards increasing access to credits or bank loans to small businesses has an impact on their economic performance. The government intervention that will be used is the SBA guarantee loan program, and the measure of economic performance is GDP per capita. My model looks at SBA guarantee loans effect on economic performance, in this case GDP per capita rate to see if it is positive and how much it increases when a guarantee loan is made. Specifically, I investigate whether or not a greater number of firms with SBA loans as a ratio of total businesses in a state increase the GDP per capita in that state.

The model uses loan specific data generously provided by the SBA that includes borrower and lender information on all SBA-guaranteed loans (7(a) and 504 loans) from 2001 to 2008, the loan sizes, and number of loans under both programs. Additionally, I use data from: the Bureau of Economic Analysis to look at the GDP per capita growth from 2001 to 2008, the Economic Research Services to get the value added income from agriculture in each state, the Census Bureau to get the total number of businesses and population size in each state, and the average corporate income tax rate of each state that I gathered from the Tax Foundation. A breakdown of my data is displayed in Tables 5 to 9 of the appendix.

My null hypothesis is that SBA guaranteed loans does not increase the economic performance of small businesses, and my alternative hypothesis is that SBA guarantee loans increases the economic performance of small businesses. My alternative hypothesis is dependent on the assumptions that , small businesses do not have collateral for loans, that they face credit rationing due to information asymmetry, SBA guarantee loans help reduce credit rationing, and finally that an increase in the number of loans lead to increase in investment hence, increase in the level of GDP per capita.

### **IV. Empirical Strategy**

My econometric model would be estimating the GDP per capita per state and takes the form:

 $GI = \alpha + \beta 1 \left[ (sba/biz)*1000 \right] + \beta 2 \left[ (aginc/gdp)*100 \right] + \beta 3tax + \varepsilon$ 

Where GI is the GDP per capita income in each state, (sba/biz)\*1000 is the loan rate, (aginc/gdp)\*100 is the rate of income from agriculture as a ratio of state-level GDP and tax is the average corporate income tax rate. The model estimates whether GDP per capita income increases in a state as the number of SBA loans increases while controlling for other determinants of state economic growth, such as, average corporate income tax rates, number of businesses, population and size of agricultural income in the states. As my data shows (compare Table 7 and 8), much of the SBA lending went to states with more small businesses. In order to control for this state-level differences, I computed the SBA loans per 1000 small businesses in each state and also income from agriculture as a percentage of GDP. This also helped to control for heteroskedasticity.

In investigating whether the number of firms with SBA loans as a ratio of total businesses increase the GDP per capita income, my null hypothesis (Ho) is that the number of SBA loans as a ratio of total number of businesses does not increase the GDP per capita income. This will be tested against my alternative hypothesis (H1), that the number of SBA loans as a ratio of businesses increases the GDP per capita income. To test my hypothesis I will perform a regression analysis using the fixed effect estimator to determine the change in GDP per capita as it relates to the increase in SBA guarantee loans. The preset threshold for this p-value is 0.05 (5 percent). Therefore, if the p-value is lower than 0.05, the null hypothesis will be rejected and the alternative hypothesis will be accepted. If it is equal to or greater than 0.05, the null hypothesis will be accepted and the alternative hypothesis will be rejected. Next, I will examine if  $\beta$ 1 is positive and determine the level of significance. This will help explain if an increase in the number of loans will increase GDP per capita and by how much. The coefficient  $\beta$ 2 will explain if the income from agriculture helps or hurts small businesses, and  $\beta$ 3 will explain if corporate tax rate matters and whether it affects small businesses.

#### **Empirical Results**

Table 1 is the descriptive statistics of the four variables used that shows mean, standard deviation, and minimum and maximum values of the 50 states from 2001 to 2008.

Table 2 is the Fixed Effects Regression Estimation of the Econometric Model. It shows the output for the regression analysis and therefore is the main results used for this study.

The model indicates a positive and significant coefficient, which implies that the number of SBA loans impact the GDP per capita income. This confirms my initial prediction that it does. The results predict that GDP per capita income increases by 153.7773 when the loanrate increases by one. The GDP per capita income increases by 896.1735 when agrate goes up by one. It decreases by 3.121654 when tax goes up by one, and is predicted to be 36856.48 when the three independent variables are zero. The findings show a P value of 0. This is below the preset threshold of 0.05 which makes me reject the null hypothesis and accept the alternative hypothesis which states that an increase in SBA guarantee loans leads to an increase in GDP per capita income. Looking at the descriptive statistics in Table 3 of loanrate and gdpc side by side, we see that as the average loanrate increased, so did gdpc. An interesting observation that also confirms the effect of SBA guarantee loans on GDP per capita income is as shown in Table 3. We can see that from 2001 to 2005 as the loanrate increased, gdpc also increased. However, from 2006 to 2007 when the loanrate slightly decreased gdpc continued to increase, until 2008 when both loanrate and gdpc decreased. This could be a result of the downturn in the economy.

#### V. Conclusion

Promoting small businesses is one of the main objectives of government intervention programs such as the SBA guarantee loan program. This objective is based on the assumption that the commercial lending market is not efficient due to information asymmetry that results in small businesses being credit rationed. If SBA guarantee loans provide access to credit and loans for small businesses, then there should be a relationship between SBA guarantee loans and economic performance in this case GDP per capita income. I find evidence that supports this relationship in my study. There is a positive and significant correlation between the annual level of GDP per capita income and the number of SBA guarantee loans. I also find the effect of the value added income from agriculture to be a big contributor to the GDP per capita income.

My findings however did not control for other factors like interest rates on small business lending and how that determines the number of loans small business are able to take. I also did not observe if the number of default rate affects the number of small business loans that the SBA is able to guarantee. Further research will determine if these variables play a significant role in the number of SBA guarantee loans that are made available to small businesses.

Variables	Ν	Mean	Standard Deviation	Min	Max
gdpc	400	40559.89	7423.27	26612	65476
loanrate	400	13.41594	7.267866	3.059469	50.65454
agrate	400	1.429991	1.887655	.0260609	12.96731
tax	356	6.664803	1.825846	1	10

gdpc is the GDP per capita over a sample period of 2001 to 2008 in all states. loanrate is the total number of SBA loans per 1000 businesses in all states. agrate is the percentage of income from agriculture that makes up the overall GDP measured in thousands of dollars. tax is a measure of the average income tax rates (number of observation, N, is less than the overall observation 400 because some states do not have corporate income taxes).

Table 2 Fixed Effects Regression Estimation of Econometric Model

gdpc	Coefficients	t	P> t
loanrate	153.7773	8.38	0.000
agrate	896.1735	5.92	0.000
C			
tax	-3.121654	-0.02	0.981
α	36856.48	39.46	0.000

# Table 3 Descriptive Statistics of loanrate and gdpc

Mean

Year

loanrate

gdpc

2001	8.9084025	38520.76
2002	9.964862	38891.26
2003	12.496243	39508.74
2004	14.665152	40492.42
2005	16.430871	41117.18
2006	16.189804	41807.02
2007	16.046804	42244.36
2008	12.625351	41897.42



Table 4 Scatter Plot with Line of Fitness

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# Appendix

	2001	2002	2003	2004	2005	2006	2007	2008
Alabama	29955	30584	31079	32452	33064	33240	33349	32995
Alaska	56322	57692	55949	57955	56713	59044	59909	59057
Arizona	35267	35282	36315	36725	38186	39643	39708	38305
Arkansas	29058	29674	30360	31194	31724	32107	32014	31701
California	42702	43066	43936	45594	47225	48522	48789	48259
Colorado	45590	45525	45298	45778	46938	47261	47599	47659
Connecticut	54370	53094	53055	55659	56190	58048	59613	58874
Delaware	61663	59318	61751	63568	64780	64319	65476	61460
Florida	34414	34912	35848	36805	38128	38895	38875	37237
Georgia	39875	39705	39793	40229	40685	40428	40505	39503
Hawaii	39385	39966	41139	42542	43992	44992	45348	45163
Idaho	29768	30028	30267	32138	34080	33680	34224	33553
Illinois	43145	43171	43941	44906	45166	46105	46593	45970
Indiana	35610	36441	37549	38305	38157	38252	39024	38082
lowa	35186	36151	37420	40037	40567	40698	42439	41451
Kansas	36717	36908	37734	37645	38307	39390	40958	41059
Kentucky	31580	32239	32412	32777	33312	33777	33419	33293
Louisiana	38315	38625	40154	41887	43080	44823	42364	41197
Maine	33072	33618	33802	34847	34567	34876	34909	34618
Maryland	40674	41426	41991	43240	44371	44858	45463	45635
Massachusetts	48236	48140	48804	49861	50490	51194	51972	52488
Michigan	36265	37235	37610	37165	37335	36647	36828	35435
Minnesota	42707	43377	44537	46061	46560	46274	46025	46310
Mississippi	26612	26814	27591	27842	28046	28598	29718	29945
Missouri	36236	36648	37112	37377	37413	37161	37304	37595
Montana	29395	29508	30515	31378	32005	32417	33379	32718
Nebraska	38327	38450	40308	40623	41161	42006	43209	43241
Nevada	42393	41928	42721	44699	47189	47375	47688	45176
New Hampshire	38781	39427	40140	40955	41319	41619	41784	41646
New Jersey	47331	47633	48284	49070	49698	50863	51240	51142
New Mexico	32842	33198	33705	35560	35076	35297	35033	34405
New York	46957	46637	46621	48032	50278	52447	53239	52817
North Carolina	39049	38932	38910	39283	40776	41528	41694	40342
North Dakota	33707	35455	37456	37245	38186	38889	40491	43513
Ohio	36917	37671	37952	38623	38795	38385	38486	37837
Oklahoma	33077	33064	33259	34006	34003	35227	35699	36367
Oregon	34569	35789	36426	39110	39674	42962	43721	44991
Pennsylvania	36882	37592	38143	38617	38741	39130	39699	39604
Rhode Island	37625	38851	40255	41283	41360	42289	42107	41350
South Carolina	32498	32692	33342	33053	33237	33057	33384	32375
South Dakota	36387	39093	39754	40207	40801	40590	41716	44144
Tennessee	34821	35625	36082	37151	37476	37867	37376	36988
Texas	41998	42251	41670	43242	42628	43558	45009	44050
Utah	35498	35194	35290	35738	36924	38318	39144	38541
Vermont	33458	34103	34987	36249	36659	36988	36685	36798
Virginia	43228	43281	44298	45498	47096	47398	47351	47471
Washington	42656	42564	42882	43072	44653	45647	47355	47116
West Virginia	27723	28013	27919	28363	28544	28838	28559	28454
Wisconsin	37113	37548	38176	39011	39473	39937	40019	39374
Wyoming	50082	50425	50895	51964	51031	54887	55726	57567

## Table 5 GDP per capita per State (chained by 2005 dollars)

Source: Bureau of Economic Analysis

http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=1

	2001	2002	2003	2004	2005	2006	2007	2008
Alabama	5	5	5	6.5	6.5	6.5	6.5	6.5
Alaska	5	6	5	5	5	5	5	5
Arizona	7.968	6.968	6.97	6.97	6.97	6.968	6.968	6.968
Arkansas	6.5	6	6	6	6	6	6	6
California	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84
Colorado	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63
Connecticut	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Delaware	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
Florida	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Georgia	6	6	6	6	6	6	6	6
Hawaii	4.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Idaho	8	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Illinois	4.8	4.8	4.8	7.3	7.3	7.3	7.3	7.3
Indiana	3.4	8	3.4	8.5	8.5	8.5	8.5	8.5
Iowa	6	8	8	8	8	8	8	8
Kansas	4	4	4	4	4	4	4	4
Kentucky	4	6	5	5	5	5	5	5
Louisiana	4	5	5	5	5	5	5	5
Maine	3.5	7.93	7.93	7.93	7.93	7.93	7.93	7.93
Maryland	7	7	7	7	7	7	7	7
, Massachusetts	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Michigan	2.1	2	1.9	1.9	1.9	1.9	1.9	4.95
Minnesota	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Mississippi	3	5	5	5	5	5	5	5
Missouri	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Montana	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75
Nebraska	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58
Nevada								
New Hampshire	8	8.5	8.5	8.5	8.5	8.5	8.5	8.5
New Jersev	9	8.5	9	9	6.5	6.5	6.5	6.5
New Mexico	4.8	4.8	4.48	4.48	4.48	4.48	4.48	4.48
New York	8	7.5	7.5	7.5	7.5	7.5	7.5	7.1
North Carolina	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
North Dakota	9	9	9	9	7	7	7	6.5
Ohio	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Oklahoma	6	6	6	6	6	6	6	6
Oregon	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Pennsylvania	9,99	10	9,99	9,99	9,99	9,99	9,99	9,99
Rhode Island	9	9	9	9	9	9	9	9
South Carolina	5	5	5	5	5	5	5	5
South Dakota								
Tennessee	6							
Texas						4.5	4.5	1
Utah	5	5	5	5	5	5	5	5
Vermont	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
Virginia	6	6	6	6	6	6	6	6
Washington		U						
West Virginia	9	9	9	9	9	9	9	8.75
Wisconsin	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
Wyoming								

## Table 6 Average Corporate Income Tax Rates

Source: Tax Foundation (Blank spaces represents no corporate income taxes)

http://www.taxfoundation.org/taxdata/show/230.html

	2001	2002	2002	2004	2005	2006	2007	2009
Alahama	1 03/ 018	1 464 002	1 000 446	2 526 458	2 385 605	1 520 700	1 370 437	1 652 777
Alaska	28 636	27 584	10 210	2,320,430	2,303,093	1,320,799	1,379,437	10 931
Arizona	1 178 879	1 164 266	1 182 /83	1 781 030	1 603 521	1 230 268	1 524 487	1 188 640
Arkansas	2 923 582	2 046 665	3 272 639	3 781 633	2 779 833	2 387 852	2 949 501	3 812 056
California	12 001 002	12 709 052	14 568 465	18 135 867	17 157 738	15 066 502	18 471 987	15 900 519
Colorado	1 992 900	1 380 347	1 522 010	1 979 273	2 148 291	1 675 361	2 076 616	1 950 270
Connecticut	301 115	263 662	284,386	315 572	313 289	275 288	315 831	299.379
Delaware	311.264	159,135	279.897	404,442	447,680	334.050	345.258	259,506
Florida	3.932.648	3.894.038	3.537.800	3.990.938	4.552.229	4,116,084	3.655.195	3.250.323
Georgia	3.156.253	2,489,371	3.044.444	3.359.933	3,602,440	2,668,803	3.010.332	3.876.413
Hawaii	330,261	347.612	366.376	367.125	381,101	368.367	354.234	393.065
Idaho	1,900,625	1.806.516	1.545.833	2.301.811	2.057.335	1.840.166	2.538.670	2,785,893
Illinois	3.955.636	2,744,089	3.671.055	6.293.446	3.877.639	4.107.293	5.509.333	8.542.973
Indiana	2,542,454	1,633,633	2,426,829	3,742,511	2,884,550	2,660,029	3,110,900	4,629,548
Iowa	5,055,751	4,533,588	4,400,949	8,156,212	6,877,611	5,819,458	7,194,548	10,066,610
Kansas	2,707,946	1,606,613	3,388,315	3,428,352	3,708,080	2,592,919	3,263,939	5,007,547
Kentucky	1,949,803	1,402,590	1,532,197	2,158,194	2,635,462	2,190,019	1,742,510	2,191,580
Louisiana	1,140,725	827,586	1,253,671	1,266,460	1,101,674	1,063,049	1,230,013	1,297,605
Maine	284,163	232,926	252,657	278,546	282,120	274,664	298,634	286,408
Maryland	692,099	440,615	587,807	804,805	759,145	618,522	602,392	603,281
Massachusetts	185,986	209,796	220,692	247,036	235,182	237,217	238,110	298,955
Michigan	1,213,204	1,221,815	1,479,956	1,994,503	2,024,192	2,107,220	2,216,473	2,948,114
Minnesota	2,715,025	2,503,326	3,423,793	4,604,544	5,228,800	4,654,679	4,897,589	7,809,852
Mississippi	2,255,125	1,169,960	1,764,808	2,508,793	2,451,745	1,442,847	1,838,320	1,934,898
Missouri	2,182,672	1,558,200	2,289,906	3,856,880	2,888,014	2,865,269	3,033,499	4,325,633
Montana	915,326	653,628	891,854	1,200,301	1,399,113	768,180	1,161,208	1,285,319
Nebraska	3,694,023	2,494,979	4,362,090	5,265,547	4,782,951	3,791,064	4,855,296	6,205,428
Nevada	195,227	158,060	165,560	218,818	239,488	229,664	187,873	250,587
New Hampshire	67,361	66,420	81,236	93,835	85,431	78,757	82,371	74,652
New Jersey	398,975	406,459	459,389	499,572	527,229	601,164	599,847	588,954
New Mexico	1,106,166	800,450	834,139	1,221,129	1,248,563	900,918	1,225,310	1,166,650
New York	1,425,112	1,110,652	1,358,739	1,619,017	1,681,362	1,458,477	1,925,529	2,055,496
North Carolina	4,506,935	2,419,912	2,575,203	3,718,697	4,578,961	3,863,591	3,585,638	3,652,735
North Dakota	1,630,298	1,290,718	2,229,729	1,641,540	2,021,861	1,503,169	2,511,993	3,795,072
Ohio	2,274,123	1,518,190	1,831,101	2,566,833	2,340,908	2,137,016	2,471,762	2,890,433
Oklahoma	1,711,354	1,872,317	1,898,776	2,251,868	2,342,348	1,567,448	1,615,792	1,870,875
Oregon	1,460,172	1,449,097	2,046,712	2,352,210	2,264,180	2,385,745	2,273,630	2,104,946
Pennsylvania	1,596,994	1,168,614	1,922,650	2,279,236	2,220,481	1,863,011	2,143,825	2,062,703
Rhode Island	29,558	35,058	38,455	43,331	43,069	41,285	45,268	32,902
South Carolina	986,708	461,859	850,590	1,017,235	1,019,897	811,753	640,652	895,273
South Dakota	2,031,248	1,170,737	2,330,261	2,775,747	2,598,921	1,432,031	2,786,251	4,136,708
Tennessee	1,129,806	694,805	828,655	1,065,843	1,306,801	1,017,055	561,334	975,953
lexas	7,081,021	6,966,563	8,368,522	9,383,063	8,885,417	6,527,015	7,569,844	6,170,644
Utah	578,067	423,854	464,562	611,237	626,068	377,072	439,921	466,538
vermont	222,838	179,033	227,677	275,887	295,854	198,573	323,495	267,792
virginia	1,017,068	858,316	848,297	1,162,718	1,319,043	904,829	835,125	941,395
vvasnington	2,390,847	2,481,686	3,180,003	3,379,242	2,672,291	2,746,898	3,475,831	3,691,484
west virginia	130,380	52,518	83,036	153,666	145,088	94,229	03,555	72,092
Wisconsing	2,409,465	2,209,492	3,034,093	3,320,819	3,215,379	2,910,141	3,001,525	3,092,926
vvyoning	405,148	213,029	JYJ,850	393,900	491,905	304,987	206,496	346,∠30

Table 7 Value Added Income from Agriculture (\$000)

## Source: Economic Research Services

http://www.ers.usda.gov/data/farmincome/50State/50STMENUXIs.HTM

## Table 8 Total Number of Businesses

	2001	2002	2003	2004	2005	2006	2007	2008
Alabama	78,797	78,710	78,645	79,426	80,163	80,656	81,565	79,812
Alaska	15,956	15,986	16,315	16,513	16,817	16,713	16,786	16,529
Arizona	93,947	95,908	97,758	101,196	106,113	110,401	113,298	109,823
Arkansas	51,600	52,094	52,347	53,235	53,614	53,491	53,697	52,699
California	668,068	674,635	682,937	696,301	712,688	723,880	730,789	717,133
Colorado	117,449	119,568	121,346	124,279	127,611	129,861	131,894	130,297
Connecticut	77,855	77,256	77,071	77,996	78,526	77,637	77,128	75,842
Delaware	20,305	20,208	20,540	20,979	21,069	21,140	20,743	20,364
Florida	358,413	370,789	381,651	404,061	421,880	430,429	432,275	414,799
Georgia	161,508	164,252	167,483	172,434	177,555	181,300	184,687	179,576
Hawaii	24,619	24,912	25,382	25,815	26,290	26,723	26,889	26,360
Idaho	32,364	33,214	34,203	35,613	37,556	39,664	40,749	39,368
Illinois	252,908	253,720	255,813	259,734	262,326	262,870	264,289	260,225
Indiana	115,326	116,030	116,481	117,672	117,942	118,159	118,218	115,466
Iowa	64,884	65,136	65,366	65,784	66,241	65,829	65,859	65,015
Kansas	61,039	60,949	61,089	61,838	62,081	61,902	62,092	60,989
Kentucky	71,846	71,874	71,980	72,910	73,089	72,992	72,848	71,510
Louisiana	81,295	81,684	82,308	83,068	82,663	81,421	83,159	82,301
Maine	34,193	34,421	34,807	35,385	35,927	35,687	35,776	34,942
Maryland	106,687	107,995	109,783	112,268	114,366	115,149	115,301	112,392
Massachusetts	149,029	146,080	149,266	146,331	145,391	144,873	144,767	141,843
Michigan	192,712	192,284	192,310	193,690	193,318	190,411	188,485	182,606
Minnesota	117,023	118,667	120,777	123,203	124,600	124,237	123,736	120,950
Mississippi	47,556	47,979	47,902	48,426	48,212	48,011	48,675	47,489
Missouri	116,814	119,561	122,383	125,481	125,287	124,120	122,573	120,145
Montana	28,363	28,812	29,651	30,528	31,509	32,251	33,036	32,570
Nebraska	41347	41487	41638	42184	42594	42649	42791	42302
Nevada	40744	42502	44281	46482	48834	50657	51342	49956
New Hampshire	31931	32279	32652	33089	33282	33228	33001	32334
New Jersey	202240	203467	204211	207431	209240	208465	208002	202600
New Mexico	35333	35597	36049	36615	37246	37871	38291	37549
New York	426489	428425	433868	441188	445941	444728	446021	443992
North Carolina	163553	165020	166070	170016	173854	176815	179773	176196
North Dakota	17141	17151	17224	17572	17755	17872	17881	17922
Ohio	211163	211017	210756	211445	210623	207768	205494	199647
Oklahoma	70023	70334	70429	71531	72378	72863	73564	73310
Oregon	85029	85134	86333	88513	91383	92695	94264	92335
Pennsylvania	236843	237397	238365	241215	242651	240636	240573	237055
Rhode Island	25221	25469	26019	26539	26809	26691	26417	25818
South Carolina	77996	78608	79493	81081	82938	83945	85056	83427
South Dakota	20743	20877	21047	21330	21750	21925	22043	21797
Tennessee	100867	100720	100620	101983	102758	103559	104746	102398
Texas	369330	373059	375922	381627	385915	391527	397684	396412
Utah	47679	49259	50933	53225	55856	58463	60989	60271
Vermont	18948	19039	19217	19503	19591	19558	19503	19282
Virginia	140462	142593	145624	150365	154188	156240	157501	154808
Washington	137713	138256	139984	143691	147436	150604	153567	150991
West Virginia	32917	32669	32547	32917	32736	32334	31923	30873
Wisconsin	115520	115980	116198	117647	118475	117917	117426	115003
Wyoming	16254	16465	16650	17007	17330	17749	18114	18104
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## Source: United States Census Bureau

 $http://www.ces.census.gov/index.php/bds/bds\_database\_list$ 

## Table 9 Total Number of SBA Loans

	2001	2002	2003	2004	2005	2006	2007	2008
Alabama	395	292	297	428	801	773	727	641
Alaska	81	61	96	127	145	155	172	142
Arizona	318	306	381	514	573	569	508	336
Arkansas	318	306	381	514	573	569	508	336
California	7046	9313	12233	14181	13826	14908	16877	10555
Colorado	1025	1346	1477	1871	2264	2608	2732	2183
Connecticut	1068	1020	1262	1295	1617	1442	1196	805
Delaware	96	155	190	288	315	315	247	159
Florida	2155	2751	4381	5642	5720	6235	6644	4069
Georgia	1168	1248	1642	2205	2623	3011	3111	2220
Hawaii	163	184	300	449	341	327	336	468
Idaho	352	459	612	826	1002	1019	1278	983
Illinois	1262	1468	1902	2399	3958	4384	4652	3157
Indiana	748	819	1044	1175	1870	2284	2107	1462
Iowa	486	524	628	822	913	787	822	742
Kansas	406	543	627	806	986	819	836	680
Kentucky	417	437	449	689	813	932	1012	606
Louisiana	491	432	473	701	1226	828	1011	891
Maine	315	389	448	404	534	612	553	433
Maryland	672	744	1253	1624	1654	1693	1715	1105
Massachusetts	1890	2340	2747	3224	3148	2809	2213	1543
Michigan	817	1073	1717	2051	3137	3700	3312	2179
Minnesota	1352	1441	1757	2077	2504	2563	2651	2128
Mississippi	489	529	516	507	678	709	621	479
Missouri	867	1008	1353	1614	1942	1928	2101	1487
Montana	367	407	498	440	497	462	423	360
Nebraska	295	365	494	536	610	536	576	475
Nevada	371	502	751	810	883	1110	1198	757
New Hampshire	951	1180	1441	1499	1235	1025	819	644
New Jersey	1965	2307	2286	2735	3521	3373	3442	2272
New Mexico	241	344	500	487	561	510	502	405
New York	3187	3348	3884	4919	8160	8179	8146	5433
North Carolina	724	744	973	1383	1767	1816	1869	1460
North Dakota	273	276	245	363	442	376	258	272
Ohio	1501	1645	2030	2533	4897	4362	4235	3224
Oklahoma	505	569	693	953	938	900	1013	666
Oregon	569	662	903	1017	1063	1215	1555	1088
Pennsylvania	1882	3351	4741	4861	5406	4144	3534	2223
Rhode Island	976	940	1089	1120	892	799	526	367
South Carolina	320	377	559	580	754	674	727	597
South Dakota	199	200	223	294	241	244	274	300
Tennessee	461	457	592	724	1030	1221	1171	884
Texas	3508	4060	5522	6896	7073	7465	8103	5595
Utah	769	779	1171	1817	2001	2145	2972	3053
Vermont	157	163	279	343	446	429	360	277
Virginia	697	766	996	1445	1547	1804	1845	1285
Washington	1009	1208	1846	2163	2328	2632	2677	2129
West Virginia	162	151	213	213	261	276	323	216
Wisconsin	997	1190	1414	1812	2193	2129	2166	1990
Wyoming	149	138	184	191	163	161	180	138

Source: Provided to me by the Office of Capital Access of The Small Business Administration