# WORKING PAPER SERIES\* DEPARTMENT OF ECONOMICS ALFRED LERNER COLLEGE OF BUSINESS & ECONOMICS UNIVERSITY OF DELAWARE

# WORKING PAPER NO. 2007-11

# **Deregulation for Development:** A Tale of Two States

Burton A. Abrams and James L. Butkiewicz

<sup>\*</sup>http://lerner.udel.edu/economics/workingpaper.htm .© 2007 by author(s). All rights reserved.

**Deregulation for Development: A Tale of Two States** 

Burton A. Abrams abramsb@lerner.udel.edu

and

James L. Butkiewicz butkiewj@lerner.udel.edu

Department of Economics University of Delaware Newark, Delaware 19716

July 30, 2007

# Abstract

Economic stress led South Dakota and Delaware in the early 1980's to eliminate their usury laws and enact other enabling legislation in an effort to attract a new industry and new jobs to their states. Sufficient time has now elapsed to assess the success of the policies adopted by these two states. Evidence suggests that both states benefited from their deregulatory actions but in different ways. These successful deregulations provide an important lesson for state-level authorities responsible for determining the regulatory environment.

JEL Codes: R110; H730; O200

Key Words: Regional Development; Deregulation; State Government Public Policy

#### 1. Introduction.

Economic stress is a major factor triggering institutional and regulatory change for nations and states. Perhaps the most dramatic examples come from the recent experiences in China and the former Soviet Union. Less dramatic, but still notable, is the transformation of Ireland. An underperforming Ireland adopted lower corporate taxation, opened itself to trade, and invested in human capital to become the Irish Celtic Tiger (Dorgan 2006). In the United States economic stress has also spawned regulatory reforms. When inflation and high nominal interest rates in the 1970's led savers to shift funds away from traditional banks subject to interest rate regulations into money market mutual funds, federal interest-rate regulations on bank deposits that had dated back to the 1930's were eliminated or eased.

Within the United States, economic stress has triggered state-level regulatory changes as well. By 1980, high rates of inflation had raised nominal interest rates to levels above, often far above, the rates credit card issuers were legally allowed under state usury laws to charge on outstanding balances, rendering credit card lending unprofitable.<sup>1</sup> In 1977, credit card issuers earned an aggregate 4% profit on outstanding balances; in 1980 and 1981 the return was approximately -1% (Ellis 1998).

An important 1978 Supreme Court ruling radically changed the applicability of state-level usury laws (Ausubel 1991, Ellis). Prior to this decision, state law applied to interest rates charged to any resident of the state. In the case of "Marquette National Bank of Minneapolis v. First Omaha Service Corp." ("Marquette") the Court ruled that a bank could "export" the highest rate allowed by its home state to its customers in any state in the country. While the ruling applied to all consumer loans, the greatest impact

<sup>&</sup>lt;sup>1</sup> At the end of the 1970's 37 states had usury laws (Ellis 1998).

was on credit cards, where customers were impersonally solicited through mass mailings, rather than through an in-person application process.

While almost all leading banking states had deregulated interest rates by 1982 (Ellis), two states, South Dakota in 1980 and Delaware in 1981, aggressively targeted bank credit card subsidiaries for favorable regulatory treatment. These two small states were willing to eliminate their usury laws and enact other enabling legislation in an effort to attract a new industry and new jobs to their states.<sup>2</sup>

Sufficient time has now elapsed to assess the success of the policies adopted by these two states. Is there evidence of permanent improvement in either economy that can be attributed to their regulatory changes? If so, what exactly has been the nature of the improvement? Also, can this success be replicated?

The next section of this paper discusses the problems of the South Dakota and Delaware economies that resulted in their efforts to stimulate growth. In the following section empirical evidence on the success of their efforts is examined. The fourth section discusses the difficulty encountered when further deregulation was attempted. The final section concludes.

#### 2. Economic Difficulties in 1980.

South Dakota was heavily dependent on agriculture in 1980. Using SIC data, 13% of South Dakota's Gross State Product was from agriculture compared to 2.29% for the United States average.<sup>3</sup> For the 1980/81 season, agricultural income was seriously constrained. The real (inflation adjusted) price of wheat, a major agricultural crop for

<sup>&</sup>lt;sup>2</sup> Ausubel (1991) notes that these two states became attractive homes for banks' credit card operstions. <sup>3</sup> All SIC ratios are computed from current dollar values of Gross Domestic or Gross State Product and are from the Bureau of Economic Analysis web site for SIC GDP /GSP data: http://www.bea.gov/regional/gsp/default.cfm?series=SIC

South Dakota, was 40% below its 1974/75 peak.<sup>4</sup> Figure 1 graphs the growth rate of personal income in South Dakota compared to the U.S. average.<sup>5</sup> Personal income growth in South Dakota was extremely volatile and became negative during the middle two quarters of 1980. Thus, in 1980 South Dakota was experiencing serious economic stress and this stress provided the catalyst for regulatory change.

The reason for Delaware's economic decline differed. During the early post-WW II period, Delaware was heavily dependent on traditional manufacturing, especially automobile assembly and chemicals. Figure 2 displays the percentages of manufacturing GSP for Delaware and the nation (GDP) computed from SIC data. The decline of manufacturing in Delaware was much faster than the national secular decline. The result, displayed in Figure 3, was that Delaware's unemployment rate, which was consistently below the national rate during the 1960's, rose to levels consistently above the national rate by the mid 1970's.<sup>6</sup>

Both South Dakota and Delaware sought economic diversification. Saddled with an unprofitable credit card operation, Citibank chairman Walter Wriston convinced South Dakota Governor William Janklow to pass legislation that would eliminate his state's usury law and invite Citibank to bring its credit card operations and jobs to South

<sup>&</sup>lt;sup>4</sup> The average 74/75 price per metric ton was \$150, while it was \$139 for 79/80 and \$144 for 80/81. Data are from: <u>http://www.ers.usda.gov/Data/Wheat/Yearbook/WheatYearbookTable20-full.htm</u>. Calculations are by the authors. All CPI data are from the Bureau of Labor Statistics: <u>http://www.bls.gov/cpi/home.htm#data</u>

<sup>&</sup>lt;sup>5</sup> Growth rates for 1941:1 - 2006:3 are computed from corresponding quarters to smooth the data. All personal income data are from the Bureau of Economic Analysis: <u>http://www.bea.gov/regional/sqpi/drill.cfm</u>.

<sup>&</sup>lt;sup>6</sup> National unemployment rates and state rates from 1976 to the present are from the Bureau of Labor Statistics: <u>http://data.bls.gov/cgi-bin/surveymost?la</u>. The BLS cautions that due to changes in methodology, state data prior to 1976 may not be directly comparable to later data. However, in order to construct a longer time series, earlier state data were obtained from the following sources: 1958-62, *Manpower\_Report of the President* (1970) p. 279; 1963-73, *Manpower\_Report of the President* (1974) p. 330; 1973-76, *Employment and Training Report of the President* (1978) p. 282.

Dakota.<sup>7</sup> The enabling legislation was enacted in South Dakota in 1980. Delaware quickly followed with similar legislation in 1981.

### **3.** Empirical Analysis

Deregulation clearly led to rapid growth of the banking sectors in both states. Figure 4 displays the percentage of Gross State Product (GSP is GDP by state) from the banking sector in both states using SIC data (available only through 1997).<sup>8</sup> However, the relative growth of the banking sector in South Dakota leveled off after five years, while the growth of Delaware's banking sector continued at a rapid pace.

The success of South Dakota's financial deregulation is first assessed through examination of a possible effect on the state's rate of unemployment. Table 1 reports the results of regressions of South Dakota's annual unemployment rate on the national unemployment rate and a shift dummy (SD Deregulation) beginning for the effective year of financial deregulation, 1981, to test for a structural change resulting from deregulation.

The regressions are estimated for two sample periods, 1958-2005 and 1976-2005. As noted above, the BLS advises that state unemployment data before 1976 are not comparable to post-1976 data due to methodological changes in computing the data. However, the time between 1976 and financial deregulation in either state is very short, making it difficult to estimate whether a structural change has occurred. Thus, the regressions are estimated for both sample periods. The longer sample estimate includes a shift dummy (1976 data shift) with a value of 1 beginning in 1976 to allow for changes in the data computations. The shift dummy is very small in magnitude and statistically

<sup>&</sup>lt;sup>7</sup> Details of this agreement are from Stein (2004).

<sup>&</sup>lt;sup>8</sup> The data are ratios of depository institution to total GSP.

insignificant. There does not appear to be a problem linking South Dakota's unemployment rates in the pre-and-post 1976 periods.

The insignificant coefficients for the deregulation dummy variable in all the models indicate that financial deregulation had no significant impact on the rate of unemployment in South Dakota. This is not surprising; South Dakota, like most agricultural states, typically has a low reported rate of unemployment. Throughout the entire sample from 1958 through 2005 the average annual rate of unemployment in South Dakota exceeds 4% only during the 1980-1988 period, a time of very high unemployment nationally. Even in this period, South Dakota's rate peaked at 5.5% in 1982, approximately half the national rate that year. Also, as evident from Figure 4, the rapid development of banking in South Dakota occurred from 1981 through 1987, a period of high unemployment in the state and nation.

An alternative method of analysis of the effect of deregulation is to examine the growth rate and volatility of income. A complicating factor is that the "Great Moderation" that significantly reduced national income volatility began at approximately the same time (McConnell and Perez-Quiros 2000). Thus, the growth and volatility of income in South Dakota will be compared to its two closest neighbors, North Dakota and Nebraska, as well as to the United States and Delaware.

The mean growth rates and standard deviations of nominal personal income are reported in Table 2 for the nation, Delaware, Nebraska, North Dakota and South Dakota from 1949-1980 and 1981-2006:3. The growth rates are computed for corresponding quarters to smooth the data. Standard deviations are for the smoothed growth rates. Several results are readily apparent. In the first period, mean income growth for the three Great Plains states fell short of the national average by 1% or more. For the later sample, South Dakota's growth rate exceeds the national average, while that of its neighbor's remains marginally below the national average.

Income volatility as measured by the standard deviation of income growth declined for the nation and all four states examined, consistent with the "Great Moderation." Nationally, volatility in the later sample is approximately 67% of the earlier sample. For Delaware volatility in the later sample is approximately 60% of the earlier period. For North Dakota and Nebraska, volatility is the second period is approximately 50% of the earlier period, while for South Dakota the ratio is 35%. Both the relative increase in mean income growth and the relatively larger decline in income volatility suggest that South Dakota has benefited from its efforts to attract banking firms.

Estimates of the impact of financial deregulation on the unemployment rate in Delaware are reported in Table 3. As is the case for South Dakota, the Delaware rate is regressed on the national rate and several shift variables. Again, the 1976 shift dummy is insignificant, indicating that the longer sample can be used. For the two specifications in columns 1 and 4 of the table, the estimated effect of deregulation (Del. Deregulation) has been to reduce the rate of unemployment between 1% and 1.45%.

To investigate the impact of the manufacturing decline in Delaware, the unemployment rate model is estimated including a manufacturing shift dummy (Manufacturing Shift) beginning in 1970. Due to the similarity of the dummies, the 1976 data shift dummy is dropped. The results are reported in the column 2 of Table 3. The estimated effect of national unemployment remains unchanged. Now the effect of the manufacturing decline is to raise unemployment by 1%, which is more than offset by the 1.63% reduction due to deregulation.

It is possible that the impact of deregulation has diminished over time.<sup>9</sup> To allow for this possibility, another dummy beginning in 1991(Diminishing Returns) is included in the estimates reported in column 3 of Table 3. While not statistically significant, the result does suggest a larger initial impact followed by diminishing returns. The estimated deregulation effect is 1.92%. With a decrease of 0.52% after the first decade, the net impact is a reduction of unemployment of 1.4%. It is also apparent in Figure 3 that Delaware's unemployment rate is lower relative to the national rate during the 1980's than in later years.

Using the estimates in column 3, an equilibrium unemployment rate relative to the national rate can be calculated for Delaware. The insignificant constant term is omitted from this computation. Assuming a national rate of 5%, the rate for Delaware is 4.03%.<sup>10</sup>

The differing employment effects in the two states are consistent with other reported data. In 1980, the civilian labor forces were 338 thousand in South Dakota and 280 thousand in Delaware (U.S. Bureau of the Census 1981, p. 382). Janklow (1985) reports that Citi Corp had 2500 employees in Sioux Falls by 1985. Butkiewicz and Latham (1991, p.962) report a direct employment effect in Delaware of 12,000 by 1989. Relative to the initial labor forces, the employment increase in Delaware was much larger. South Dakota Governor Janklow lamented that South Dakota would have 20,000 more jobs if Delaware had delayed its legislation for another year (Stein 2004).

<sup>&</sup>lt;sup>9</sup> For an analysis of the first decade following deregulation, see Butkiewicz and Latham (1991).

<sup>&</sup>lt;sup>10</sup> All three dummies have a value of 1 in this calculation.

Both states appear to have benefited from financial deregulation. However, Delaware, enjoying the benefits of geographic proximity, comparable climate and convenient transportation alternatives to New York City, has a much larger financial sector that South Dakota. The relative shares of banking and total financial services as a percent of GDP are displayed in Figure 4 for Delaware, South Dakota, and the U.S. average.<sup>11</sup> For 2004, the last year for which a complete data set is available, banking constitutes 4% of U.S. GDP, while all finance and insurance account for 8% of U.S. GDP. The percentages for South Dakota are 14.6% in banking and 16.7% for total financial services. For Delaware the percentages are 23.4% and 31.5%.

#### 4. Encores can be difficult

Both states attempted further deregulation by enacting legislation to allow banks to operate in all lines of insurance. The states' objective was to replicate its success in credit card and other banking services in the insurance industry. Janklow (1985) notes that strong lobbying efforts by the insurance industry effectively halted banks' expansion into insurance in South Dakota.

In 1990 the Delaware legislature enacted the Insurance Powers Act, also attempting to allow banks to expand into insurance.<sup>12</sup> Again, independent insurance agents and most large insurance companies opposed the Delaware law.

The Federal Reserve System, applying its bank holding company regulatory powers, issued a cease and desist order that stopped efforts by a Delaware bank to sell

 <sup>&</sup>lt;sup>11</sup> The data are from the NAICS (North American Industry Classification System) which begin in 1997 and cannot be linked to the SIC data which end in that year. The data are from: <a href="http://www.bea.gov/bea/regional/gsp/">http://www.bea.gov/bea/regional/gsp/</a>.
<sup>12</sup> The authors thank Attorney David Swayze of Parkowski, Guerke & Swayze for a helpful discussion of

<sup>&</sup>lt;sup>12</sup> The authors thank Attorney David Swayze of Parkowski, Guerke & Swayze for a helpful discussion of Delaware's insurance legislation and subsequent events that stifled this attempted deregulation.

insurance.<sup>13</sup> This order was overturned by the Second Circuit Court. The FDIC then stipulated that banks must limit their activities to a particular line of insurance, thereby making it unattractive for banks to take advantage of the Delaware law.

The issue churned in courts and pending legislation throughout the decade until, in 1999, the Gramm-Leach-Bliley Act overturned Glass-Steagall, thus deregulating financial services nationwide. South Dakota's and Delaware's attempt to gain additional competitive advantage through deregulation was stifled by federal regulatory agencies and powerful lobbies.<sup>14</sup>

## 5. Conclusion

In an effort to remedy economic difficulties, legislation was passed in South Dakota in 1980 and in Delaware in 1981 to deregulate certain aspects of the financial services industry. Both states attracted credit card subsidiaries of major banks. Delaware also attracted other types of banking services.

The evidence indicates that both states have benefited from their efforts to improve their economies through financial deregulation. For South Dakota, income growth, which had lagged the national average, now exceeds it. Income volatility has been reduced relatively more that the national average or neighboring states, indicating that more is at work than just the "Great Moderation" which occurred at approximately the same time.

<sup>&</sup>lt;sup>13</sup> According to Swayze, Citi Bank had written six policies through its Delaware subsidiary when the Fed's order was issued.

<sup>&</sup>lt;sup>14</sup> In a similar vein, Ireland's lower corporate tax rate is often criticized by other EU nations (*The Economist*, May 5, 2007. pp. 90-92)

Delaware, which suffered higher than average unemployment prior to deregulation, now enjoys unemployment 1% to 1.4% below what would otherwise obtain, even allowing that this benefit has declined over time.

The evidence presented here substantiates that state-level regulation matters. The cases examined here involve the elimination of bad regulations, usury laws and other restrictions on the provision of credit. Two states with moribund economies were able to significantly improve economic performance and promote economic development through deregulation. These successful deregulations provide an important lesson for state-level authorities responsible for determining the regulatory environment.

# References

Ausubel, Lawrence M. 1991. "The Failure of Competition in the Credit Card Market." *American Economic Review*. 81, pp.50-81.

Butkiewicz, James L. and Latham, William R. 1991. "Banking Deregulation as an Economic Development Policy Tool." *Southern Economic Journal*. 57, pp. 961-974.

Dorgan, Sean 2006. "How Ireland Became the Celtic Tiger." *The Heritage Foundation*. http://www.heritage.org/Research/WorldwideFreedom/bg1945.cfm.

Ellis, Diane 1998. "The Effect of Consumer Interest Rate Deregulation on Credit Card Volumes, Charge-Offs, and the Personal Bankruptcy Rate." Federal Deposit Insurance Company, *Bank Trends*, 98-05.

Janklow, William J. 1985. "South Dakota and Financial Deregulation." *The Bankers Magazine*. 168, #5, pp. 32-4.

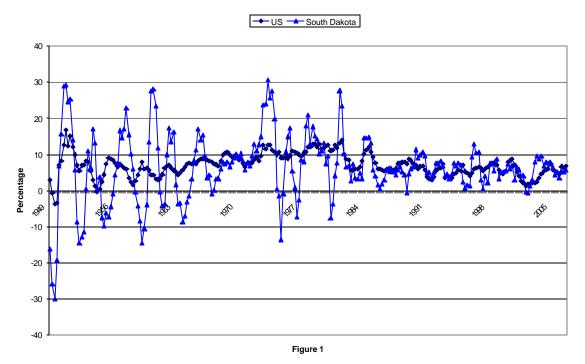
McConnell, Margaret M. and Perez-Quiros, Gabriel 2000. "Output Fluctuations in the United States: What Has Changed Since the Early 1980's?" *The American Economic Review*. 90, pp. 1464-1476.

Stein, Robin 2004. "The Ascendancy of the Credit Card Industry," http://www.pbs.org/wgbh/pages/frontline/shows/credit/more/rise/html.

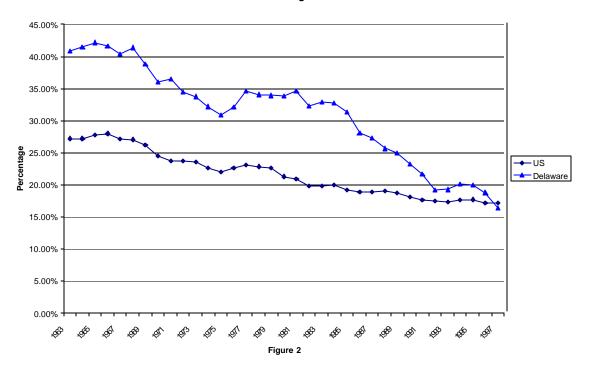
*The Economist.* "Harmony and Discord: A Common EU Tax Base." May 5, 2007. pp. 90-92.

U.S. Bureau of the Census, 1981. *Statistical Abstract of the United States: 198.* Washington, D.C.

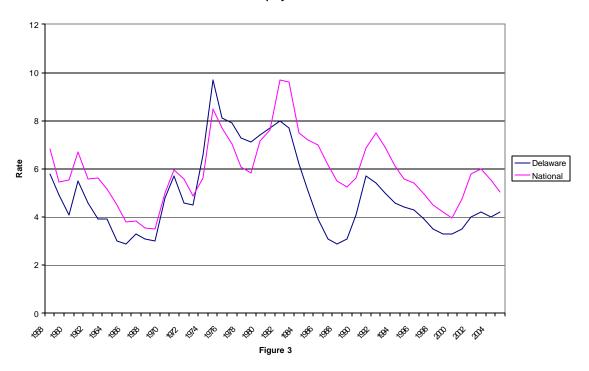
Personal Income Growth Rates



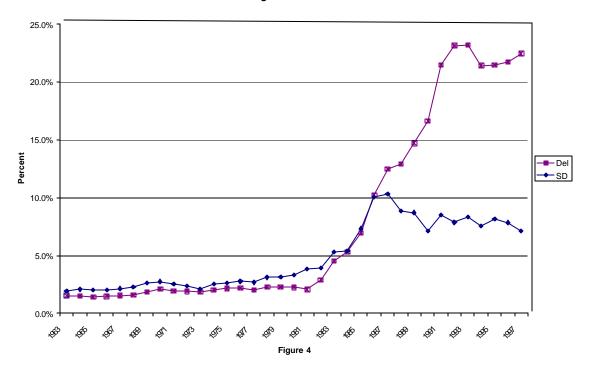
Manufacturing Product



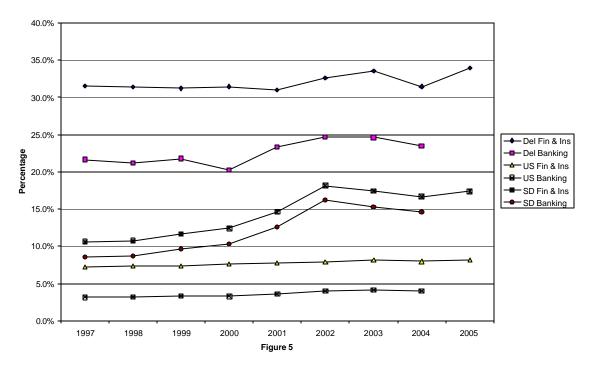
**Unemployment Rates** 



**Banking Contribution GSP** 



**Delaware and National GDP** 



Sample	1958 – 2005	1976 - 2005	
Variable			
Constant	1.86	1.81	
	(4.44)	(2.64)	
National	0.30	0.34	
Unemployment Rate	(4.97)	(4.07)	
SD Deregulation	0.18	-0.02	
	(0.54)	(0.04)	
1976 Data	-0.02		
Shift	(0.05)		
AR 1	0.70	0.70	
	(6.07)	(4.56)	
DW	1.96	2.04	
R <sup>2</sup>	0.76	0.78	

Table 1
South Dakota Unemployment Rate

Absolute values of t-statistics in parentheses

For all estimates, one observation is lost due to autocorrelation correction DW is the Durbin-Watson statistic

Sample	1949:1 - 1980:4	1981:1 - 2006:3
<b>_</b>		
United States		
Mean	7.85	6.19
Std. Dev.	3.52	2.36
Delaware		
Mean	8.22	6.60
Std. Dev	4.12	2.52
South Dakota		
Mean	6.48	6.30
Std. Dev	11.74	4.21
North Dakota		
Mean	6.78	5.79
Std. Dev	14.67	7.93
Nebraska		
Mean	6.69	5.78
Std. Dev	6.88	3.17

Table 2Personal Income Growth Rates

Delaware Unemployment Rate							
Sample	195	58 - 2005		1976 – 2005			
<u>Column</u> Variable	(1)	(2)	(3)	(4)			
Constant	1.34 (1.16)	-0.07 (0.12)	-0.25 (0.42)	1.53 (2.11)			
National Unemployment Rate	0.87 (9.30)	0.87 (9.27)	0.89 (9.36)	0.65 (5.26)			
Del. Deregulation	-1.45 (2.67)	-1.63 (4.11)	-1.92 (4.60)	-1.03 (1.85)			
1976 Data Shift	-0.75 (1.27)						
Manufacturing Shift		0.95 (2.05)	0.97 (2.22)				
Diminishing Returns			0.52 (1.29)				
AR 1	0.88 (10.25)	0.69 (5.63)	0.63 (4.70)	0.79 (8.60)			
DW	1.66	1.65	1.62	1.26			
<b>R</b> <sup>2</sup>	0.92	0.92	0.93	0.95			

Table 3	
<b>Delaware Unemployment Rate</b>	

Absolute values of t-statistics in parentheses

For all estimates, one observation is lost due to autocorrelation correction DW is the Durbin-Watson statistic