If you Build It:
State Unemployment Insurance Trust Solvency and Benefit Generosity

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ABSTRACT

There is little empirical research on the determinants of unemployment insurance (UI) benefit generosity, especially in the American states. However, UI benefit generosity is thought to be a function of state UI trust fund adequacy.

Adequacy, or solvency, is traditionally measured by one of three figures. The first is the reserve ratio (RR), which is the ratio of a state's year-end unemployment trust fund balance to covered wages for that year. The second is the high-cost multiple (HCM), which is a ratio with the RR in the numerator, and the highest 12-month benefit payout in the state's history as a percentage of covered wages for that period in the denominator. The third is the average high-cost multiple (AHCM), which replaces the single highest payout in the denominator with the average of the three highest benefit payouts in the last 20 years. The AHCM is designed to mitigate the impact one peculiar year may have on measures of UI trust solvency.

In this paper, we use panel estimators with data on the 50 American states for the years 1960 to 2006 to test the relationship between UI trust adequacy, as measured by the RR, and UI benefit generosity, as measured by the average weekly wage replacement rate. In our preliminary results, we find that average weekly UI benefit amounts are higher in states with larger trust funds. This is the case even after controlling for a state's GDP, population growth, and the citizens' political ideology. This finding has important policy implications for the funding of states' UI benefits systems. If state legislators perceive that higher trust funds will lead to increased benefit generosity, they may be reluctant to continue pre-funding the UI system, and may instead rely on federal loans to fund benefit payments during a recession.

Introduction

State unemployment insurance (UI) programs have been a component of the nation's social insurance safety net since the Social Security Act of 1935. Still in recovery from the 2001 recession, state UI reserves totaled approximately $32 billion as of March 30, 2008, whereas states had $54 billion in reserves prior to the onset of the 2001 recession (Cauchon 2008). As of this writing, most have reached insolvency or near-insolvency, with states relying on loans from the U.S. Treasury and the private bond market to maintain payments to record numbers of unemployed workers over an extended period (Vroman 2009, 5-6).

While there are many studies on the relationship between the size or duration of UI benefits and labor market behavior, particularly labor supply, there is little empirical research on the determinants of UI benefit generosity, and no prior study has examined this question using state-level data. Meanwhile, UI benefit generosity is thought to be a function of state UI trust fund adequacy, as "coincident with the serious financing problems experienced by UI programs in the 1980s, there have also been noticeable cutbacks in the availability of program benefits" (Vroman 1990, 7). In this paper, we use panel estimators with data on the 50 American states for the years 1960 to 2006 to test the relationship between UI trust adequacy, as measured by the reserve ratio (RR), and UI benefit generosity, as measured by the ratio of average weekly benefit amount to the average weekly wage. In our preliminary results, we find that average weekly UI benefit amounts are higher in states with larger trust funds. This is the case even after controlling for a state's GDP, population growth, and importantly the citizens' political ideology. This finding has important policy implications for the funding of states' UI benefits systems. If state legislators perceive that higher trust funds will lead to increased benefit generosity, they may be

reluctant to continue pre-funding the UI system, and may instead rely on federal loans to fund benefit payments during a recession.

The next three sections outline the primary policy issues that frame questions on UI financing and its implications: financing UI, benefit generosity, and the link between the two. The small empirical literature on these topics is reviewed as part of this discussion. Then, this study's data are described, and the multivariate analysis is presented. Finally, empirical results and conclusions are discussed.

Financing UI

Regular state UI benefits, which are typically available to eligible workers for up to 26 weeks, are financed by state-level payroll taxes that are levied on employers (Vroman 1998, 6). The Federal Unemployment Tax Act (FUTA) of 1939 instituted an additional federal tax of 0.1 percent (the effective tax rate) on total payrolls (U.S. Department of Labor 2009, 2-1), and "the proceeds of this tax were originally used to finance UI program administration and activities of state employment services" (Vroman, 7). The effective FUTA tax rate was increased in 1940 to 0.3 percent, and in the same year the federal taxable wage base was lowered to just the first $3,000 of each employee's annual earnings (U.S. Department of Labor 2009, 2-1). The newly established federal taxable wage base was the equivalent of approximately the first $46,000 of each employee's salary in 2010 dollars, adjusting for inflation using the consumer price index (CPI). The purpose of FUTA tax funds has since expanded and today includes:

1) financing 50 percent of benefits provided by the extended benefits (EB) program, which provides up to an additional 13 weeks of payments to eligible workers during periods of high unemployment; and

2) providing for a fund from which states may borrow to cover benefits if their trusts become insolvent (U.S. Department of Labor 2010).

Despite these substantial new demands on the FUTA tax, the current effective FUTA tax rate of 0.8 percent applies to a federal taxable wage base that has increased to just $7,000 between 1940 and 2010 (U.S. Department of Labor 2010); in real terms, the federal taxable wage base has declined by nearly 85 percent. The maximum FUTA tax collection is currently just $56 per employee, per year, unless a state's credit against the FUTA tax has been reduced because it has an outstanding loan used to pay UI benefits (U.S. Department of Labor 2009, 2-1).

The most critical concern in UI financing is ensuring the adequacy, or solvency, of states' trusts, as they are the source from which regular benefits are paid to eligible workers. A defining feature of state-level unemployment taxes, which are designed to both stabilize employment and ensure trust fund adequacy, is experience rating. Employers who place more eligible workers on the unemployment rolls through layoffs pay higher state tax rates. Federal law dictates that the maximum state UI tax rate must be at least 5.4 percent, but a state's rate depends on its fund balance—"in most states, low balances trigger schedules with higher rates and higher balances trigger schedules with lower rates" (2-17). Because state UI tax rates take on different ranges depending on variously defined economic and financial conditions, an overall range is not meaningful.

With the exception of Alaska, New Jersey, and Pennsylvania, state UI taxes are levied on employers, but not workers (2-4). Forty-three states have adopted a taxable wage base greater than $7,000—the federal base—with the highest being $37,500 in Washington. States with "flexible" wage bases—those that are automatically adjusted, usually based on some percentage of the prior year's average annual wage—have substantially larger bases than others (2-4–2-6).

Nonetheless, “the inadequacy [of states’ UI trusts] is largely due to low taxable wage bases present in most states” (Vroman 2009, 9).

States also levy “solvency taxes” when “the state’s trust fund has reached such a low level that there is serious risk of insolvency” (Vroman 1998, 9). Rates, and how they are applied, vary widely. Notwithstanding variation in how state UI funds are accumulated and used, the major feature common among the states is that UI benefits are pre-funded. Trusts are designed such that funds are accumulated with economic booms, and drawn down during economic busts.

UI trust adequacy is traditionally measured by one of three figures. The first is the reserve ratio (RR), which is the ratio of a state’s year-end unemployment trust fund balance to covered wages for that year. The second is the high-cost multiple (HCM), which is a ratio with the RR in the numerator, and the highest 12-month benefit payout in the state’s history as a percentage of covered wages for that period in the denominator. The third is the average high-cost multiple (AHCM), which replaces the single highest payout in the denominator with the average of the three highest benefit payouts in the last 20 years. The AHCM is designed to mitigate the impact any one particular year may have on measures of UI trust solvency. It also helps account for the fact that “the high-cost period in the denominator is often so far in the past that it may no longer be a relevant indicator of the maximum payout risk” (11-12). Although, given the current recession, it is unlikely that the HCM measure will provide estimates that are too conservative.

UI Benefit Generosity

As in the case of UI financing, worker’s entitlement to UI benefits is governed by varying state-level laws. A common element is that benefits “are determined using wages and employment during a period of time called the base period” (U.S. Department of Labor 2009, 3-1). “Almost

all states use the first 4 of the last 5 completed calendar quarters preceding the filing of the claim as their base period," though most states have adopted an alternative base period (ABP) or extended base period (EBP) for workers who do not qualify for benefits under the regular base period (3-2). States utilize a variety of methods in determining whether a claimant has earned enough wages and has worked enough time within the base period to qualify for UI benefits (3-4–3-7).

UI is designed to provide partial wage replacement, and "for this reason, all workers do not receive the same benefit amount." "States replace, on average, 50% of workers' lost wages up to a certain limit (usually [based on] the average weekly wage in the state)" (3-8). While states utilize a variety of methods to calculate a worker's weekly benefit, the most common is the high-quarter method. By this method, "states determine the weekly benefit amount by using the base period quarter in which wages were the highest." Most states calculate the weekly benefit by dividing the worker's highest quarterly wage in the base period by 26. Essentially, the typical weekly benefit replaces 50 percent of a worker's highest weekly wage during the base period, up to a predetermined maximum. The denominator ranges between 11 and 33, as some states implement a weighted schedule (3-9). Removing Hawaii as an outlier (where the minimum weekly benefit is $5), the minimum weekly benefit ranges from $10 (Louisiana) to as a high as $147 (Michigan). Meanwhile, the maximum weekly benefit ranges from $230 (Mississippi) to as high as $660 (Rhode Island), removing Connecticut as an outlier (as high as $942) (3-9–3-12).

Because many states link the maximum weekly benefit to the average weekly wage, the benefit is automatically adjusted as wages grow, and the maximum is statutorily set such that it "is usually more than 50 percent of the average weekly wage in covered employment within the state during a recent 1-year period." In other states, the maximum is legislated and periodic

increases are phased in after the increase is passed. The minimum weekly benefit, however, is simply specified in law in most states (3-12) and is often based on the minimum earnings necessary to qualify for benefits. While states may have in place a firm lower bound on monetary benefit generosity as stipulated by current state eligibility rules, the upper bound of is not determined by eligibility and is only constrained by what state legislator think is "sensible" given the moral hazards of unemployment insurance.

States also have discretion in establishing nonmonetary eligibility through eligibility rules. For separation from employment, "the general rule is that workers must have lost their jobs through no fault of their own and must be able, available, and actively seeking work" (5-1). In the case of voluntary separations, a standard that generally applies across UI programs is that to be eligible for payments the worker must not have left his or her position without good cause. State-by-state interpretation of "good cause," however, causes wide variation even among states that share common legal provisions (5-2–5-21). Beyond the reason for separation, eligibility varies in terms of the number of weeks within the base period the claimant must have worked to receive benefits, and in how much the claimant must have earned in order to be eligible for benefits. In establishing these discretionary eligibility requirements, states determine the proportion of claimants who are eligible for UI benefits—this proportion is known as the recipiency rate. "States with low recipiency have requirements in the areas of monetary eligibility and nonmonetary eligibility that, on average, are more difficult to satisfy than are the requirements in states with high recipiency" (Vroman 2001, 1).

Determinants of UI Benefit Generosity

There is little empirical research on the determinants of UI benefit generosity, and no prior study has examined this question using state-level data. In a study of OECD nations for the years 1971 to 1989, Di Tella and MacCulloch (2002) find that lagged unemployment rate is the primary determinant of benefit levels (422). The effect is particularly pronounced when the average benefit paid in the first year of unemployment serves as the dependent variable. They control for unemployment and interest rates, in addition to a measure of political conservatism, with all explanatory variables measured both contemporaneously with the dependent variable and with a one-year lag. Also in the context of the OECD, Vroman (2007) finds that maximum weekly benefit has a "strong and significant" effect on replacement rate (18), with replacement rate measured as the ratio of periodic (weekly or monthly) benefit payments to average earnings for the same time period (1). The replacement rate has its own important implications, as a study by Blank and Card (1991) of the 50 states over the period 1977-1987 finds that higher replacement rates are associated with higher take-up rates (1188). This finding is further supported by McCall (1995), whose study of individuals over the years 1984, 1986, 1988, 1990, and 1992 concludes that the effect is smaller at higher replacements rates (189).

In terms of nonmonetary generosity, operationalizing recipiency as the number of initial claims relative to new spells of unemployment over a 13-year period, Vroman (2001) finds in a 50-state study that the misconduct determination rate—"the rate at which UI agencies make determinations on the issue of misconduct" (ii)—has a substantial effect on initial claims. Specifically, he finds that "higher determination rates reduce UI applications" (103). Using the initial claims and other measures of "inflows into UI benefits," he identifies the misconduct

determination rate as "uniquely important in exerting large, significant and negative effects on … inflow variables" (157-158).

Data and Descriptive Analysis

Throughout our analysis we use data from the US Department of Labor's Employment and Training Administration (ETA). These data are available from the ETA and are published as the *Unemployment Insurance Financial Data Handbook* [1]. The handbook data are the standard data that unemployment insurance agencies use in projecting unemployment insurance benefits costs and in the analysis of various aspects of benefit financing. The data are available for all 50 states including Washington DC, Puerto Rico and US Virgin Islands. In our analysis, we focus on the 50 states and exclude the other entities. While these data are available from 1950 onward, our analysis focuses on the years 1963 to 2006 so that we can supplement the ETA financial data with other measures of state economic performance and political ideology.

The data were compiled from statistical and accounting reports submitted by the State Workforce Agencies to the DOL-ETA. In our analysis we focus on two variables of interest: benefit generosity and trust fund adequacy (solvency). There are potentially many measures that capture a state's benefit generosity. Measures discussed in the literature and collected by the ETA include maximum weekly benefit amount, number of weeks of benefits available, and average weekly benefit amount. We use the most common measure of benefit generosity, the average replacement rate. The average replacement rate is calculated as the ratio of a state's average weekly benefit amount to the average weekly total wage in that state.

[1] ET Financial Data Handbook 394 available at http://workforcesecurity.doleta.gov/unemploy/hb394.asp. Our description of the data closely follows the description and glossary available at the HB394 website.

Our independent variable of interest is the reserve ratio. UI benefit reserves are the funds on deposit in states' accounts, as reported by the U.S. Treasury. This is measured annually on December 31. The money in these accounts is used to pay for regular UI benefits. However, when a state exhausts its trust fund, the reserves for all states are adjusted to account for the amounts loaned from the Federal Unemployment Account. These advances, which can be used only for the payment of unemployment benefits, must be repaid. Here, we use net reserves, which are the reserves as of the end of the year minus the balance of federal loans to state reserve funds.

In addition to the trust fund financial data, we also employ a number of state-level measures to capture economic and political trends and conditions. Measures include state GDP, population, and political ideology. GDP and population data were obtained from the web site of the Bureau of Economic Analysis (BEA). The political ideology scores are from Berry et al. (1998) and have been updated through 2007.[2]

Table 1 shows the distribution of our dependent variable, the average replacement rate, over the entire time period 1963-2006, along with the minimum and maximum values by state and region. Interestingly, there is very nearly as much within state variation (variation over time) as between state variation. The overall mean replacement rate for the United States over this period is 35.7 percent. Individual states such as Hawaii and North Dakota represent the highest average replacement rates, while Alaska and California represent the lowest. From a regional perspective, the Northeast (New England and Middle Atlantic) does not have the highest average replacement rate. In fact, the West North Central region that includes Minnesota, Iowa, Missouri, the Dakotas, Nebraska and Kansas has the highest average replacement rate. Unsurprisingly, the East South Central region that includes Kentucky, Tennessee, Alabama, and Mississippi has the

[2] These measures are available at http://www.uky.edu/~rford/stateideology.html.

lowest replacement rate. In general, this value implies that, on average, unemployment insurance benefits are likely to replace slightly more than a third of the average worker's lost wages. However, care must be taken when interpreting this since the population of wage earners is likely to have higher wages on average than the population of the unemployed. As we discuss later, this is particularly problematic for our analysis since the composition of the unemployed skews toward higher wage workers during a recession. Consequently, as UI trust funds start to decline (payments increase relative to revenues), average UI benefits are likely to increase. This spurious negative correlation between trust funds and benefit generosity will be the focus of our multivariate analysis.

[Table 1 about here]

Figure 1 shows the variation in overall benefit generosity over time. We calculate this measure as the average of state averages; the measure is not population weighted. Since we are using states as the unit of analysis—because that is where policy decisions are made—we are interested in the extent to which trust fund balances lead policy makers to alter benefit generosity. Figure 1 illustrates that benefit generosity generally increased in the United States from 1963 to approximately 1989, albeit at a declining rate. The shaded regions indicate NBER recessions. Because our data are annual and NBER uses quarterly recession dates, we code a year as recessionary if any part of the year was in recession. Generally, benefit generosity increases during recessions.

[Figure 1 about here]

Figure 2, meanwhile, plots each state's highest average replace rate by the year it was achieved. The maxima are clustered in 4 periods, with the majority of states hitting the maximum in 1971-1972, 1975-1976, 1982-1983, or 2002-2003. These time periods correspond with the two years following an NBER recessionary year, or the two years following the last year in a multi-year recessionary period.

[Figure 2 about here]

In Table 2, we provide a state-by-state summary of the mean reserve ratio for the pre-1980 and post-1980 periods. The most outstanding feature of this table is the wholesale decline in the reserve ratio from the early to the late period. Only seven states (Alaska, Delaware, Hawaii, New Jersey, Oklahoma, Oregon and Vermont) saw an increase in average reserve ratio from the early period to the later period. On average, the reserve ratio decline by .8; this implies that after 1980, states had trust funds balances that were 33 percent smaller than the balances held prior to 1980. In fact, UI trust funds held an amount equal to 80 percent of total wages paid in covered employment.

[Table 2 about here]

Finally, Figure 3 plots the variation in and relationship between average state UI trust reserves (the yearly average of the state averages) and benefit payments over the years 1963 to 2006. Benefit payments are given in nominal millions of dollars, as they rise with real wages. A

quadratic curve depicts the trend in benefit payments for the sample period. Again, we see here that benefit payments rise sharply during recessions, while year-end reserves sharply decline.

[Figure 3 about here]

Multivariate Analysis

It seems intuitively clear based on the descriptive statistics presented above that benefit generosity increased during the pre-1980 period, when UI trust fund balances were higher, and benefit generosity declined post-1980, when UI trust fund balances were declining. However, there are two difficulties in trying to ascribe a causal story to this. First, as we alluded to earlier: As the unemployment rate increases, the composition of the unemployed changes—shifting toward higher wage workers. Secondly, inference form a regression on benefit generosity and trust funds is likely to be both problematic since the time series is unlikely to be stationary over such a long period of time and the regression errors are likely to be autocorrelated. To deal with issues of stationarity and autocorrelation, we difference both the dependent and independent variables. Second, we use a series of time indicators to render the series stationary. We report linear and quadratic trends, though we also include a cubic trend. In addition, we include a set of dummy variables indicating when the national economy experiences a recession (based on NBER recession dates).

Our final concern is a spurious relationship caused by an omitted variable. To control for this type of bias, we include a lagged endogenous variable in some of our specifications. We use multiple lags and lag interactions as instruments for the endogenous variable. These results are presented as the Arellano-Bond GMM estimates in column 4 of Tables 3 and 4.

[Table 3 about here]

[Table 4 about here]

Empirical Results

In general, our results support our main hypothesis: increases in UI trust funds result in higher benefit generosity. Our estimates from the fixed effects models indicate that a one point increase in the reserve ratio results in a .2 percent increase in replacement rate. We note that this is the lagged change. Consequently, increases in last year's trust fund lead to increases in this year's benefit generosity. This provides us with much more confidence about the causal mechanism. Secondly, all of the control variables are also measured as lagged differences. In particular, we find no effect of the change in last year's state GDP on benefit generosity. However, we do find a large effect from population growth; states that experience population growth see significant increases in their benefit generosity. Other variables in the model offer less insightful results. In no specification, for instance, do we find that citizen ideology has any impact on benefit generosity. Despite this lack of finding, we believe that this is an important control variable. Many states, and the country as a whole, saw a shift in domestic safety net policies throughout the eighties and nineties toward less generous policy. If these changes were ideologically driven (rather than driven by changes in trust fund balances), then our ideology measure should have captured this distinction. We find that a "starve the beast" attitude toward UI programs funding effectively reduced UI benefit generosity—even after controlling for political ideology.

The final set of results presented in Table 3 are from the Arellano-Bond estimator. As discussed briefly before, this model includes a lagged dependent variable as an independent variable to control for unobserved heterogeneity. In this case, it is the lagged change in the

replacement rate. By including this model, we hope to eliminate much of the omitted variable bias caused by the spurious correlation between benefit generosity and trust funds. We find that the lagged variable is not statistically significant; however, including it in the model raises the effect of the reserve ratio variable from .0023 in the fixed effects models with recession controls (column 3) to .0033 with the same controls (column 4). This represents a 50 percent increase in the estimated parameter size. Overall, we find this to be compelling evidence of the effect of trust fund reserve ratios on benefit generosity.

Robustness

The models we present in Table 3 are parsimonious, and we believe that the differences specification, time control, lagged dependent variable and estimation strategy provide ample evidence of robustness. However, in Table 4 we provide a few more tests of the specification. In particular, we focus on whether the data indicate that the relationship between benefit generosity and trust fund reserves is different across time periods. We examine the effects of the most recent time period (post-1980). In general, we find even larger effects for this time period, with the Arellano-Bond estimator generating the largest point estimates. For the most recent time period, a one point increase in the reserve ratio is associated with a .6 percent increase in the replacement rate. This estimate is nearly double our previous estimate for the entire sample period.

Finally, we include a series of additional state GDP controls to better account for both the cyclicality of the state's economy and the sectoral changes that occur. We include a measure of the state GDP that is in agriculture, manufacturing, and finance, insurance and real estate (FIRE). Both agriculture and FIRE are statistically significant. The size of the manufacturing sector,

surprisingly, appears to have no effect on the changes in benefit generosity. In general, we view these results as quite robust and compelling. In the conclusion, we discuss the policy implications of our findings.

Conclusion

We find that the ratio of average weekly UI benefit amounts to average weekly wages (also known as the average replacement rate) are higher in states and in time periods with larger trust funds. This is the case even after controlling for a state's GDP, population growth, and the citizens' political ideology, and employing a dynamic panel estimator to mitigate endogeneity. This finding has important policy implications for the funding of states' UI benefits systems. First, if state legislators perceive that higher trust funds will lead to greater benefit generosity, they may be reluctant to continue pre-funding the UI system and those states that no longer pre-fund the program may be encouraged to continue using this strategy to keep downward pressure of benefit generosity. These state may continue to rely on federal loans to fund benefit payments during recessions. This is especially probable given that unfunded pension and other post employment benefit (OPEB) obligations loom large over already cash-strapped states. Alternatively, the relationship between the size of UI trusts and benefit generosity may inspire legislators to take a strategic approach, with labor-oriented policymakers willing raise UI taxes to finance future benefits and non-labor-oriented policymakers resisting UI tax increases or even proposing UI tax cuts to reduce benefits. One option would be for more states to adopt automatic provisions for raising the maximum weekly benefit amount. This policy strikes a balance between politically driven benefit growth and by systemic reductions in benefits due to erosion by inflation.

More broadly, it is not clear that the “if you build it scenario” is sustainable over the long term. It is clear that the trust funds operate as a “stock” and “flow” measure, and some optimal conditions should exist to determine what the optimal UI trust fund balance is. Of course, part of the solution is the role that the federal government is willing to take. If the federal government is willing to serve a “re-insurance” role or as a backstop then the optimal savings amount will much lower. We will undertake the long-term sustainability of the stock and flow of state UI reserves as a separate research question.

References

Berry, William D., Evan J. Ringquist, Richard C. Fording, and Russell L. Hanson. 1998. Measuring citizen and government ideology in the American states, 1960-93. *American Journal of Political Science* 42(1): 327-348.

Blank, Rebecca M., and David E. Card. 1991. Recent trends in insured and uninsured unemployment: Is there an explanation? *The Quarterly Journal of Economics* 106(4): 1157-1189.

Cauchon, Dennis. "States running out of money in jobless funds." *USA Today*, September 9, 2008. Accessed April 7, 2010. http://www.usatoday.com/money/economy/employment/2008-09-08-unemployment_N.htm.

Di Tella, Rafael, and Robert J. MacCulloch. 2002. The determination of unemployment benefits. *Journal of Labor Economics* 20(2): 404-434.

McCall, Brian P. 1995. The impact of unemployment insurance benefit levels on recipiency. *Journal of Business & Economic Statistics* 13(2): 189-198.

U.S. Department of Labor. 2009. Comparison of state unemployment laws. http://workforcesecurity.doleta.gov/unemploy/comparison2009.asp.

Vroman, Wayne. 1990. *Unemployment insurance trust fund adequacy in the 1990s*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

———. 1998. *Topics in unemployment insurance financing*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

———. 2001. Low benefit recipiency in state unemployment insurance programs. Washington, DC: The Urban Institute.

———. 2007. Replacement rates and UC benefit generosity. Washington, DC: The Urban Institute.

———. 2009. Unemployment insurance: Current situation and potential reforms. Washington, DC: The Urban Institute.

Table 1: Ratio of Average Weekly Benefit Amounts to Average Weekly Wages by State 1963-2006

New England				*East South Central*		
Maine	37.7%	27.5%	41.7%	Kentucky	36.6%	31.4%	41.7%
New Hampshire	34.4%	28.6%	39.7%	Tennessee	31.4%	27.7%	35.1%
Vermont	39.0%	35.6%	44.6%	Alabama	30.8%	27.0%	37.0%
Massachusetts	38.7%	34.4%	43.8%	Mississippi	32.4%	28.2%	34.5%
Rhode Island	41.3%	34.2%	46.5%		**32.8%**	**28.6%**	**37.1%**
Connecticut	34.6%	27.2%	42.2%	*West South Central*		
	37.6%	**31.3%**	**43.1%**	Arkansas	38.5%	33.4%	44.9%
Middle Atlantic				Louisiana	34.1%	26.0%	47.8%
New York	31.0%	26.0%	35.1%	Oklahoma	36.4%	26.3%	43.5%
New Jersey	36.2%	32.0%	39.7%	Texas	34.4%	27.2%	42.6%
Pennsylvania	39.8%	30.6%	46.8%		**35.9%**	**28.2%**	**44.7%**
	35.7%	**29.5%**	**40.5%**	*Mountain*		
East North Central				Montana	38.6%	29.8%	45.2%
Ohio	37.2%	30.7%	43.9%	Idaho	40.8%	38.8%	43.4%
Indiana	31.6%	25.8%	41.3%	Wyoming	40.0%	34.0%	46.7%
Illinois	35.5%	31.1%	42.5%	Colorado	40.5%	36.0%	47.0%
Michigan	35.7%	29.0%	42.8%	New Mexico	34.9%	30.6%	37.7%
Wisconsin	40.5%	36.0%	45.6%	Arizona	31.5%	25.4%	38.4%
	36.1%	**30.5%**	**43.2%**	Utah	41.3%	35.4%	47.7%
West North Central				Nevada	36.3%	32.1%	45.5%
Minnesota	40.1%	27.8%	45.2%		**38.0%**	**32.8%**	**44.0%**
Iowa	42.8%	31.1%	49.4%	*Pacific*		
Missouri	32.1%	27.7%	37.4%	Washington	36.7%	24.2%	45.1%
North Dakota	42.9%	37.0%	50.0%	Oregon	36.5%	31.3%	43.1%
South Dakota	39.6%	35.2%	46.6%	California	29.9%	20.3%	37.6%
Nebraska	36.5%	33.8%	40.7%	Alaska	25.2%	16.9%	29.6%
Kansas	42.1%	37.8%	47.1%	Hawaii	46.1%	40.0%	52.8%
	39.4%	**32.9%**	**45.2%**		**34.9%**	**26.5%**	**41.6%**
South Atlantic							
Delaware	33.8%	27.5%	40.3%				
Maryland	35.6%	31.2%	40.4%				
Virginia	35.0%	30.1%	44.6%				
West Virginia	34.2%	22.0%	43.3%				
North Carolina	36.1%	28.1%	41.5%				
South Carolina	35.3%	31.7%	40.1%				
Georgia	33.2%	29.2%	37.8%				
Florida	34.0%	27.5%	41.7%				
	34.7%	**28.4%**	**41.2%**				

Regional averages are not weighted by population.

Figure 1: 50-State Average UI Replacement Rate, 1963-2006
(Shaded Area Represents NBER Recession)

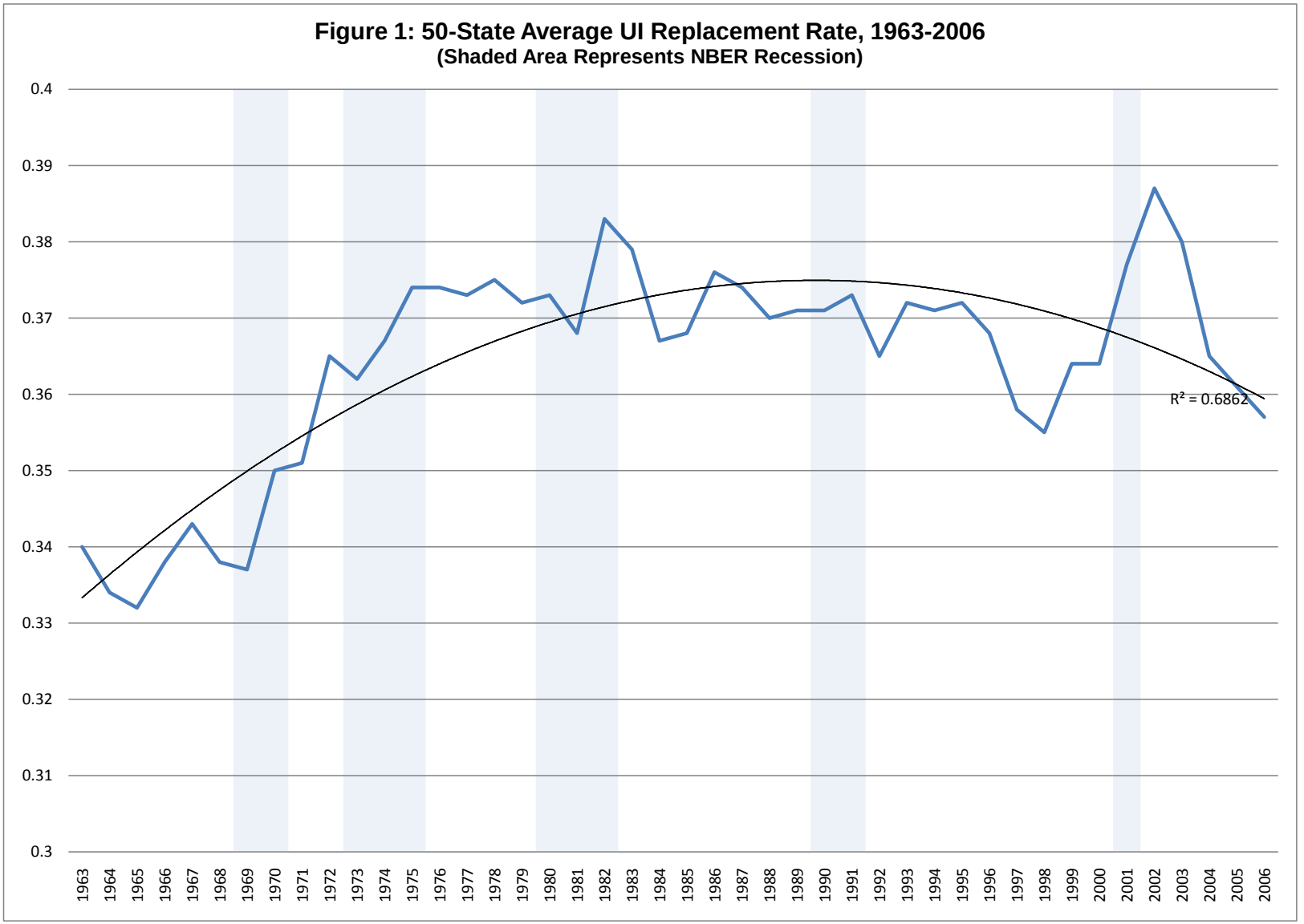

Figure 2: Highest Average Replacement Rate by State and Year

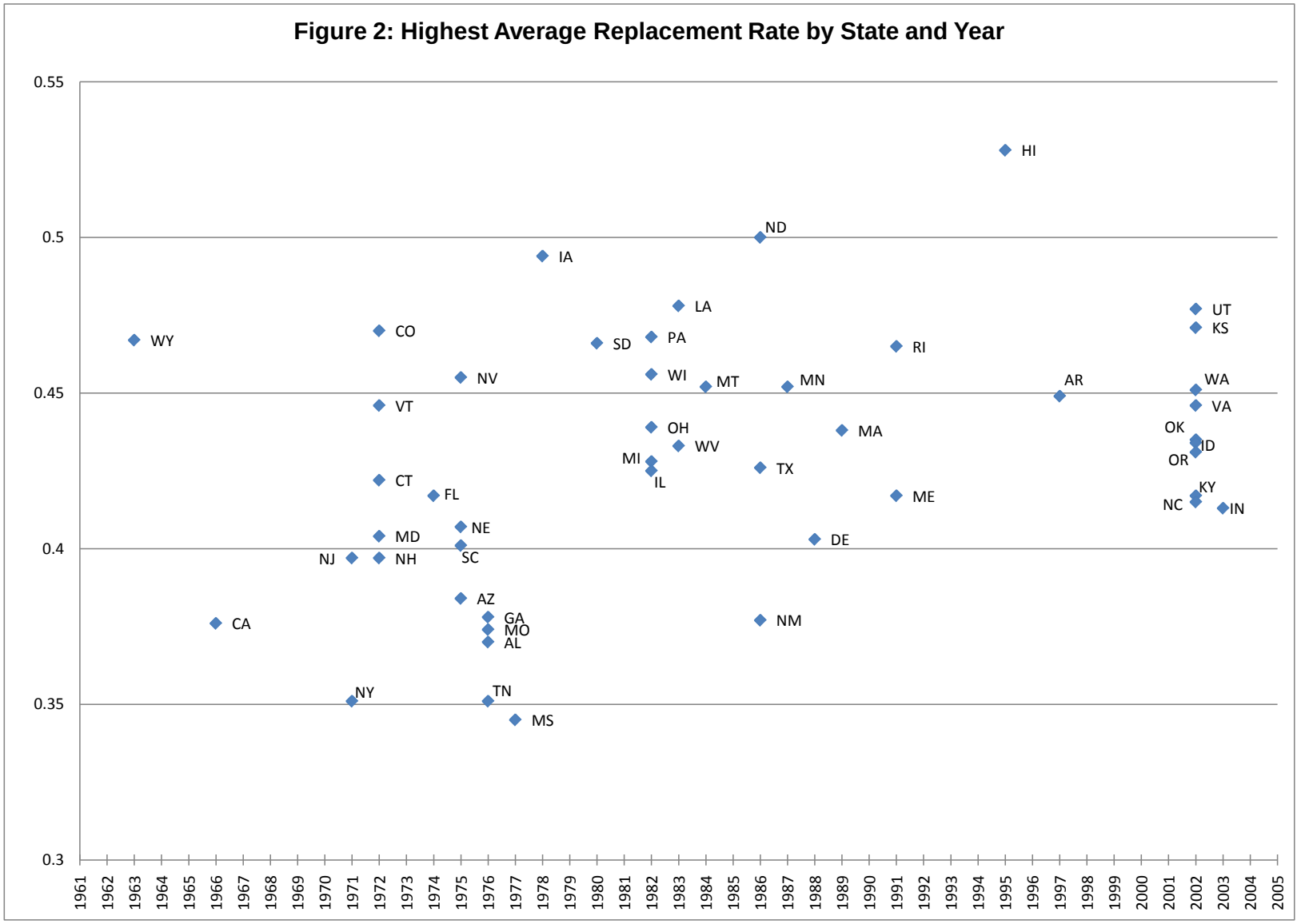

Table 2: Average State Reserve Ratio by Time Period					
	1963-1980	1981-2006		1963-1980	1981-2006
Alabama	1.94	1.40	Montana	2.20	1.70
Alaska	2.91	3.38	Nebraska	2.38	1.15
Arizona	3.22	1.61	Nevada	2.44	2.08
Arkansas	1.57	0.73	New Hampshire	3.30	1.80
California	2.23	1.22	New Jersey	1.57	1.78
Colorado	1.97	0.74	New Mexico	2.99	2.85
Connecticut	1.87	0.56	New York	2.52	0.63
Delaware	1.40	2.17	North Carolina	4.08	1.78
Florida	2.18	1.60	North Dakota	1.97	0.96
Georgia	3.69	1.64	Ohio	1.89	0.75
Hawaii	1.96	2.93	Oklahoma	1.52	1.55
Idaho	4.31	2.43	Oregon	2.81	3.19
Illinois	1.37	0.62	Pennsylvania	1.30	1.01
Indiana	2.29	1.49	Rhode Island	2.43	1.83
Iowa	2.67	2.13	South Carolina	3.44	1.34
Kansas	2.96	2.00	South Dakota	2.88	0.99
Kentucky	3.31	1.14	Tennessee	2.71	1.28
Louisiana	2.50	2.12	Texas	1.53	0.28
Maine	1.90	1.82	Utah	2.65	2.16
Maryland	2.47	1.23	Vermont	1.58	3.45
Massachusetts	1.73	1.09	Virginia	2.44	0.97
Michigan	0.87	0.74	Washington	2.64	2.44
Minnesota	0.80	0.52	West Virginia	2.71	1.13
Mississippi	3.58	3.05	Wisconsin	3.04	1.86
Missouri	2.47	0.41	Wyoming	3.43	2.94

The reserve ratio is the ratio of net reserves as of December 31 divided by total wages paid in covered employment.
Ratios are not computed for states with negative net reserves.

Figure 3: Average State UI Trust Reserves and Benefit Payments, 1963-2006
(millions of dollars)

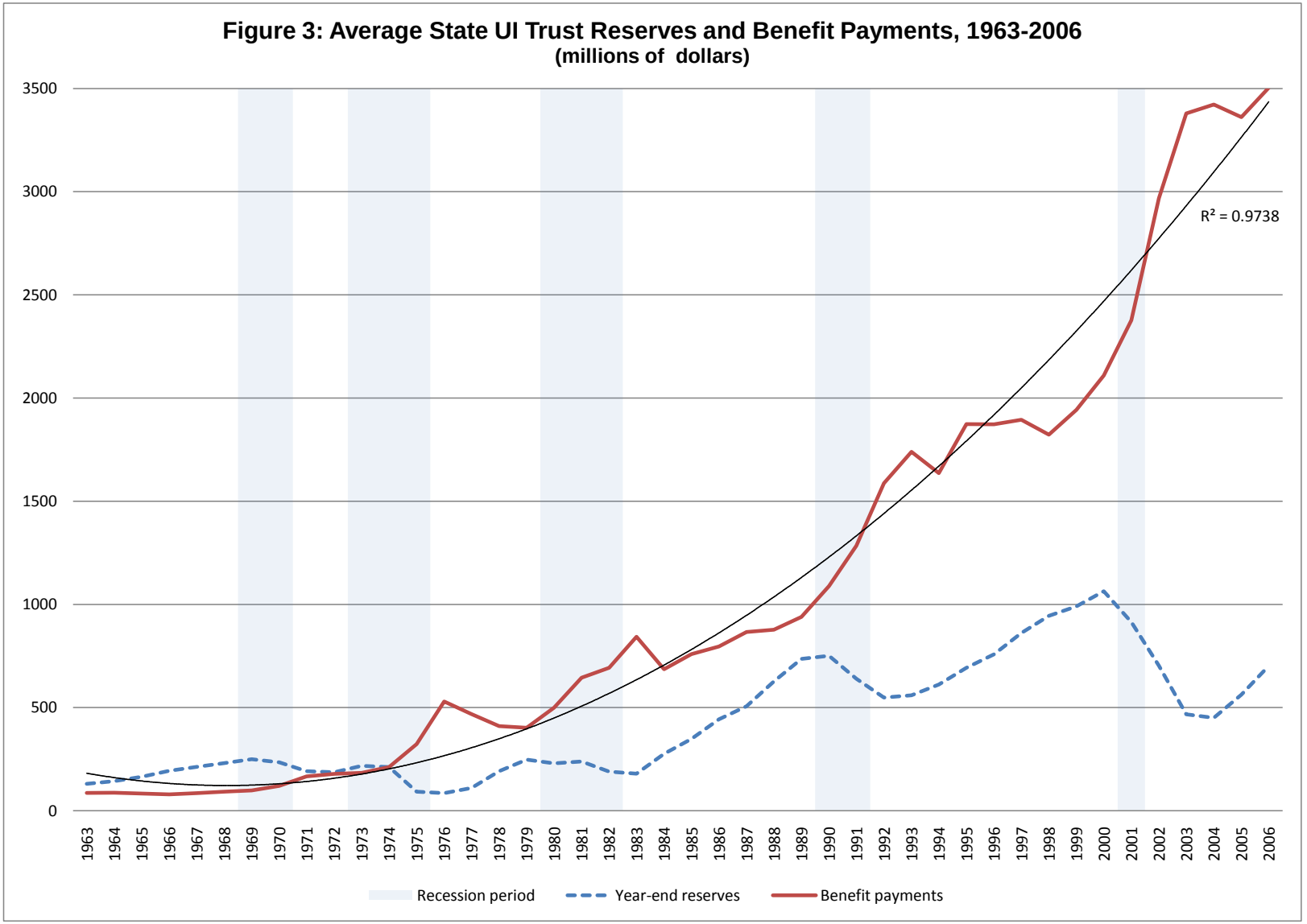

Table 3: Fixed Effects and Arellano-Bond Estimates The Effect of a State's Reserve Ratio on Benefit Generosity, 1963-2006				
	-1-	-2-	-3-	-4-
	FE	FE	FE	Arellano-Bond
LD. Reserve Ratio	0.0022	0.0022	0.0023	0.0033
	[0.0009]*	[0.0009]*	[0.0009]*	[0.0010]**
LD. Ln(State GDP)	0.0195	0.0201	0.01	0.0201
	[0.0101]	[0.0101]*	[0.0103]	[0.0110]
LD. Ln(State Population)	0.2377	0.2381	0.2614	0.2788
	[0.0474]**	[0.0474]**	[0.0473]**	[0.0542]**
LD. Citizen Ideology	0	0	0	0
	[0.0001]	[0.0001]	[0.0001]	[0.0001]
Year	-0.0001	-0.0002	-0.0002	-0.0002
	[0.0000]**	[0.0001]	[0.0001]	[0.0001]
Year-squared		0	0	0
		[0.0000]	[0.0000]	[0.0000]
Any part of year was recessionary (NBER)			0.0046	0.0044
			[0.0009]**	[0.0009]**
LD.Replacement Rate				0.0056
				[0.0229]
Constant	-0.0013	-0.0009	-0.0016	-0.0026
	[0.0013]	[0.0015]	[0.0015]	[0.0017]
Observations	2100	2100	2100	2050
Number of States	50	50	50	50
R-squared	0.03	0.03	0.04	

LD stands for Lagged Difference
Standard errors in brackets
* significant at 5%; ** significant at 1%

Table 4: Fixed Effects and Arellano-Bond Estimates
The Effect of a State's Reserve Ratio on Benefit Generosity, 1981-2006

	-1- FE	-2- Arellano-Bond	-3- Arellano-Bond
LD. Reserve Ratio	0.0052	0.0054	0.0061
	[0.0015]**	[0.0015]**	[0.0014]**
LD. Ln(State GDP)	0.0389	0.0442	
	[0.0133]**	[0.0137]**	
LD. Ln(State GDP in Agriculture)			0.0047
			[0.0021]*
LD. Ln(State GDP in Manufacturing)			0.0001
			[0.0053]
LD. Ln(State GDP in Finance, Insurance, Real Estate)			0.0405
			[0.0123]**
LD. Ln(State Population)	0.2695	0.2189	0.1742
	[0.0667]**	[0.0666]**	[0.0704]*
LD. Citizen Ideology	0.0001	0.0002	0.0001
	[0.0001]*	[0.0001]*	[0.0001]
Year	0.0015	0.0021	0.0022
	[0.0006]*	[0.0005]**	[0.0005]**
Year-squared	0	0	0
	[0.0000]*	[0.0000]**	[0.0000]**
Any part of year was recessionary (NBER)	0.0085	0.0081	0.0078
	[0.0013]**	[0.0012]**	[0.0012]**
LD.Replacement Rate		0.0518	0.0425
		[0.0281]	[0.0279]
Constant	-0.0309	-0.0396	-0.0404
	[0.0090]**	[0.0083]**	[0.0084]**
Observations	1300	1300	1300
Number of States	50	50	50
R-squared	0.08		

LD stands for Lagged Difference
Standard errors in brackets
* significant at 5%; ** significant at 1%