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Recovery from the Great Recession: Explaining Differences Among the States

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Abstract. The recovery from the Great Recession has been slow compared to previous recoveries. However, at the state level the pace of improvement has varied considerably. This study investigates the reasons for the variation in state economic recovery from the Great Recession by identifying determinants of two performance measures: growth in state real gross domestic product (GDP) and growth in state nonfarm payroll employment. The results showed that economic structure of the state matters; in particular, states with relatively larger GDP shares in agriculture, energy, financial services, and durable manufacturing (especially for motor vehicles and parts) had faster GDP growth, while concentrations in financial services and durable manufacturing were associated with greater employment growth. States increasing individual income and corporate income taxes during the recession and recovery had slower GDP and job growth, while states increasing minor taxes and fees had a faster GDP recovery. Lastly, states receiving more funds from the American Recovery Act experienced faster recoveries in both GDP and jobs.

1. Introduction

By most measures, the pace of the economic recovery from the Great Recession has been modest. From the trough of gross domestic product (GDP) in June 2009 through the fourth quarter of 2012 – a span of fourteen quarters – real GDP increased 8.2%. This is substantially less than the average 17.2% gain for the fourteen quarters past the trough for the previous ten recessions since World War II (U.S. Bureau of Economic Analysis, 2013a).[1] Also, from the low point in employment in February 2010 through February 2013, national payroll job growth was 4.5%, again far under the three-year post-trough job growth rate of 7.7% for the other post-World War II recessions (U.S. Bureau of Labor Statistics, 2013a).[2]

Yet there has been a substantial degree of variation among the states in the pace of the economic recovery. In the recovery of state GDP through the end of 2012, the best-performing state (North Dakota) posted a gain of 37%, while the worst-performing state improvement (Nevada) was 4%. Similarly, for the three-year job recovery the highest improvement (North Dakota) was 22% compared to the lowest increase (Maine) of 1%.[3]

These differences should not be unexpected, as the rate of economic change typically differs among U.S. states during both prosperous and recessionary times. States differ by the composition of their eco-

[1] The recession beginning in 1945 IV is not included because quarterly data are not available for 1945. National recession definitions are from the National Bureau of Economic Research (2013).

[2] However, the current three-year job recovery rate is faster than after the 2001 recession and on par with the recovery from the 1990-91 recession.

[3] The recovery rates are based on the trough for each state through 2012 IV for GDP and to February 2013 for employment.

nomic sectors, their demographic makeup and change, workforce skills, and public tax and spending policies, the combination of which leads to differing economic outcomes.

However, the interest in these variations in state economic growth likely becomes more pronounced in recessionary times, as states seek ways to recover from the downturn more rapidly. The focus often turns to debates about the best state fiscal policy for accomplishing a recovery, pitting those who advocate higher taxes to support state services and employment against those who favor no tax increases – or even tax cuts – in hopes of generating more private sector activity. These debates at the state level mirror similar discussions at the national level between promoters of an austere fiscal policy (tax and spending reductions) and disciples of a traditional Keynesian expansionary policy of stimulus spending.[4] Of course, the state-level debates are constrained by requirements of balanced operating budgets in most states (National Conference of State Legislatures, 2010).

Each recession and subsequent economic recovery has unique features, and the Great Recession and its rebound have not been exceptions. Therefore, this paper examines the strength of the economic recovery among the states with a goal of identifying factors related to variation in the recovery measures. Particular attention is given to state-level policy variables that can be adjusted to address recessionary conditions. The results will be useful for state policymakers as they consider ways for coping with the next recession, which will inevitably come.

This paper is organized into several sections. Following the introduction is a review of previous work and findings relevant to the investigation of why states have differed in their recoveries from the Great Recession. Next is the presentation and discussion of the model and data used for the empirical investigation. Findings are analyzed in the fourth section, discussion of the findings is in the fifth section, and conclusions are offered in the final section.

2. Previous work

There are four sets of literature relevant for the analysis of a state's performance in economic recoveries. One is the literature on determinants of U.S. states' economic growth. This literature is extensive and attempts to apportion determinants of state growth among many factors, including economic sector composition, workforce human capital, geography (climate, density, and location), demography, and state policy inputs, such as tax types, tax rates, and size and type of public spending.[5]

The second relevant category of literature is studies focusing specifically on states' experiences during recessions and factors related to the depth of recessions in states. A state's economic structure has consistently been found to be related to the size of recessionary decline in states. States with a greater concentration of manufacturing in their economy have larger relative declines during recessions (Connaughton and Madsen, 1980; Connaughton and Madsen, 2012; Walden, 2012). The obvious reason is that buyers can more easily postpone purchasing many manufactured products, especially durable products, during economic contractions than they can service and non-durable products. In the recent Great Recession, the relative size of the decline in housing prices and the rate of household in-migration from other states have been linked to larger increases in state unemployment rates (Walden, 2012).

The third literature category providing background for the current inquiry is studies concentrating on finding structural and policy explanations for the variability in state performance in economic recoveries. Perhaps surprisingly, such studies have been very limited. Indeed, there has been only one study where this topic has been the focus of attention (Connaughton and Madsen, 2010). Connaughton and Madsen looked for linkages to state performance in the economic recoveries from the 1990-91 and 2001 recessions. Their results confirmed the importance of economic sector composition, human capital, and geographic factors in influencing an economic recovery. States with a higher relative manufacturing share of the economy, with greater educational attainment (a lower percentage of high school dropouts), and with a greater population density had faster relative recoveries from the recessions. While important, the results are limited due to the sparsity of variables used and the lack of state public policy factors tested.

The final literature category providing guidance for the research is the macroeconomic policy debate between stimulus measures and austerity actions for hastening recovery from a recession. Proponents of

[4] Perhaps the most noted contemporary promoter of the traditional Keynesian approach is Paul Krugman (Krugman, 2012), while John Taylor has made theoretical and empirical arguments for the austere approach (Taylor, 2009).

[5] An excellent bibliography and review of analysis and findings on state economic growth is in Bartik (2012).

stimulus policies follow the Keynesian recommendation of additional government spending to fill the output gap during recessions. They claim the resulting increased economic activity will eventually bolster business and consumer confidence and lead to renewed private spending (Krugman, 2012). Austerity advocates argue that rational economic agents understand government stimulus spending almost always implies increased government borrowing that eventually must be repaid through higher future taxes. Therefore, farsighted households will increase saving today in anticipation of the additional future taxes, thereby reducing spending and counteracting the government's stimulus spending (Taylor, 2009).

While this macroeconomic policy debate is waged at the national level, it does have implications for state policies during recessions. Do states receiving a greater amount of enacted federal stimulus spending recover at a faster rate, or do state taxpayers react to the stimulus by increasing saving and reducing spending, thus rendering the policy ineffective? Also, do states that enact their own stimulus policy by increasing taxes and increasing state spending add to an economic recovery? Or does such a policy simply displace private spending with no overall impact, or, even worse, does less efficient public spending replace more efficient private spending and lead to a slower economic recovery?

3. Model and data

This section presents the model and data used in the empirical analysis. The form of the model is:

$$\text{RECOVERYRT} = (\text{SECTORCOMP}, \text{LABORCHAR}, \text{FISCALPOL}), \quad (1)$$

where RECOVERYRT represents measures of the relative rate of economic recovery in the state, SECTORCOMP represents the economic sector composition of the state, LABORCHAR represents characteristics of the state labor force, and FISCALPOL represents state fiscal policy.

Two alternative measures of relative economic recovery (RECOVERYRT) are used. One is the growth rate in real state gross domestic product (*GDP*) between the trough of the recession as measured by GDP (which varies for each state) and the fourth quarter of 2012 (the latest state GDP data at the time of the analysis). The second is the growth rate in non-farm payroll employment (*JOBGRWRT*) between the trough of the recession as measured by non-farm employment (which also varies for each state) and March 2013 (the latest available employment data at the time of the analysis).[6]

Sector composition (SECTORCOMP) is measured by the percentage of state total real GDP in 2009 of ten key sectors: agriculture (*AGRI*); construction (*CONST*); education and health (*EDUC/HLTH*); energy (*ENERGY*); financial services (*FINANCE*); information, communications, and technology (*ICT*); leisure and hospitality (*LEISHOSP*); motor vehicle and parts manufacturing (*MOTOR*); other durable manufacturing (*OTHDUR*); and real estate (*REALEST*). Sectors may recover from recessions at different rates; for example, motor vehicle and parts manufacturing has typically had a faster recovery rate as consumers exercise their pent-up demand in the recovery. Also, some sectors may experience either higher or lower growth rates in response to technological changes and world economic conditions. The definitions developed by the U.S. Bureau of Economic Analysis (2012) are used for each sector.

Three variables are chosen to measure labor force characteristics: the percentage of adults in the state with a bachelor's degree or above in 2009 (*ADVDG*); the state's unionization rate in 2009 *(UNIONRT)*; and the growth in the state's population between 2009 and 2012 (*POPGROW*). Higher education has been a defining feature of the 21st century economy, so including a variable capturing the level of educational attainment in the state is important to the analysis. Similarly, the unionization rate varies considerably among states. Union workers may simply imply higher costs, and thus may be negatively related to economic growth, or they may be associated with higher labor productivity rates, in which case there may be no relationship to growth or the relationship could be positive. Growth in the state's population should be directly related to growth in aggregate state production and state employment.

Seven measures capture state fiscal policy (FISCALPOL). The first is the state's state-level and local-level tax revenue as a percentage of state person-

[6] The national trough for real GDP occurred in the second quarter of 2009, and the national trough for non-farm payroll employment happened in February 2010. The earliest real GDP trough was in the first quarter of 2009 for Alaska, Maine, and Vermont, and the latest real GDP trough occurred in the fourth quarter of 2009 for Delaware, Nevada, Oklahoma, and Utah. The earliest employment trough was in April 2009 in North Dakota, and the latest employment trough happened in September 2010 in Nevada and New Mexico.

al income in 2009 (*TAX*), a variable used in many previous studies. The measure captures the relative size of state and local taxes in the state. It is important to include state-level and local-level taxes together because state-funded and locally-funded functions often differ between states. Because all but one state requires a balanced operating budget, the measure also simultaneously captures the relative size of state- and locally-funded spending.

Table 1. Variables and descriptive statistics.

Factor and Variable	Definition	Source	Mean	Std. Dev.	Min.	Max.
RECOVERYRT						
GDPGRWRT	Growth rate in real GDP, trough to 2012 IV	BEA	9.58%	4.63%	4.39%	36.85%
JOBGRWRT	Growth rate in payroll jobs, trough to Feb. 2013	BLS	4.66%	2.94%	0.96%	21.61%
SECTORCOMP	*as a % of total real GDP, 2009:*					
AGRI	Agricultural	BEA	1.84%	2.30%	0.17%	10.36%
CONST	Construction	BEA	3.85%	0.83%	2.51%	6.58%
EDUC/HLTH	Education and health	BEA	8.72%	1.94%	4.07%	12.91%
ENERGY	Energy	BEA	2.92%	6.56%	0.01%	32.30%
FINANCE	Financial	BEA	8.45%	5.57%	2.61%	38.22%
ICT	Information, communications, and technology	BEA	4.64%	4.12%	0.53%	27.36%
LEISHOSP	Leisure and hospitality	BEA	3.77%	1.87%	2.29%	14.95%
MOTOR	Motor vehicle and parts manufacturing	BEA	0.20%	0.36%	0.00%	2.02%
OTHDUR	Other durable manufacturing	BEA	6.45%	4.11%	0.43%	28.00%
REALEST	Real estate	BEA	11.29%	2.54%	7.07%	17.36%
HUMANCAP						
ADVDEG	% of adults with higher than B.A. degree, 2009	CENSUS	9.79%	2.48%	6.10%	16.40%
UNIONRT	% of employed persons represented by unions, 2009	BLS	12.78%	5.77%	4.40%	27.20%
POPGROW	Population growth rate, 2009-2012	CENSUS	2.45%	1.91%	-0.87%	8.16%
FISCALPOL						
TAX	State and local taxes as a % of state personal income, 2009	TF	9.34%	1.14%	6.40%	11.80%
SALETXCHG	Sales tax changes 2008-2012 as a % of real GDP, 2009	NGA	0.03%	0.14%	-0.02%	0.75%
INCTXCHG	Individual income tax changes 2008-2012 as a % of real GDP, 2009	NGA	0.02%	0.19%	-0.83%	0.50%
CORPTXCHG	Corporate income tax changes 2008-2012 as a % of real GDP, 2009	NGA	0.01%	0.05%	-0.11%	0.22%
GASTXCHG	Gasoline tax changes 2008-2012 as a % of real GDP, 2009	NGA	0.004%	0.02%	-0.04%	0.13%
OTHTXCHG	Other tax and fee changes 2008-2012 as a % of real GDP, 2009	NGA	0.08%	0.15%	-0.46%	0.53%
FEDSTIM	American Recovery Act funds received, 2009-2012, $ billions	ACA	$3.98	$4.09	$0.55	$24.4

Notes: ACA: American Recovery Act; BEA: U.S. Bureau of Economic Analysis (2013b); BLS: U.S. Bureau of Labor Statistics (2013b); CENSUS: U.S. Bureau of the Census; TF: The Tax Foundation; NGA: National Governors Association.

The other six FISCALPOL variables allow an empirical investigation at the state level of the national debate over the relative impacts of tax and public spending changes on the speed of economic recovery. Five variables measure the state's legislatively enacted tax changes during the period 2008 to 2012, all measured in 2009 dollars and taken as a percentage of 2009 real GDP in the state. They are enacted changes in state sales tax (*SALETAXCHG*), individual income tax (*INCTXCHG*), corporate income tax (*CORPTXCHG*), gasoline tax (*GASTXCHG*), and all other taxes and fees (*OTHTXCHG*). The sixth measure is the real (2009 dollars) amount of American Recovery Act (federal "stimulus") funds provided to the state during the 2009 to 2012 time period (*FEDSTIM*). The use of the tax change and federal stimulus variables in an analysis of state economic growth is unique to this study. Table 1 provides information on the specific variable measures, their source, and descriptive statistics.

4. Findings

The regression results are in Table 2. Collectively, the explanatory variables for the state real GDP growth rate account for 86% of the variation in the growth rate, or 76% after accounting for the number of explanatory variables.

Looking first at the determinants of the state GDP real growth rate (*GDPGRWRT*), states with a larger relative share of their economy in agriculture, energy, financial services, motor vehicle and parts manufacturing, and other durable goods manufacturing experienced faster economic recoveries between 2009 and 2012. The results for agriculture and energy are likely based on recent technological and world conditions. World economic growth, particularly among growing middle income classes in developing countries, is changing dietary preferences and resulting in increases in both agricultural output and real prices (President's Council of Economic Advisers, 2013). Similarly, technological advances in energy recovery methods have significantly grown the domestic energy production industry.

In contrast to agriculture and energy, the contributions of the financial services, motor vehicle and parts, and other durable goods industries are largely based on cyclical factors. The downturn in the financial services sector was at the core of the 2007-2009 recession, and its rebound to more normal levels in the post-recessionary years has been a positive force in the economic recovery. Similarly, the strong rebound in vehicle sales and production, prompted in part by the record age of the vehicle fleet during the recession, helped those states with higher concentrations of this industry (Kelly Blue Book, 2012). States with a relatively high share of other durable goods industries benefited by the pent-up demand for these products from households and firms during the recovery (Connaughton and Madsen, 2012).

Table 2. Regression results.

	Dependent Variable	
	GDPGRWRT	*JOBGRWRT*
Intercept	-17.15*	-12.97*
AGRI	1.00***	0.24
CONST	-0.01	0.52
EDUC/HLTH	0.08	-0.15
ENERGY	0.43***	0.17
FINANCE	0.28**	0.26***
ICT	-0.20	-0.06
LEISHOSP	-0.18	-0.14
MOTOR	3.34**	3.37***
OTHDUR	0.40*	0.25
REALEST	0.44	0.28
ADVDEG	0.41	0.25
UNIONRT	-0.06	-0.02
POPGROW	0.97***	0.58**
TAX	0.68	0.43
SALETXCHG	-2.35	-1.16
INCTXCHG	-12.05***	-10.25***
CORPTXCHG	-29.54**	-25.42**
GASTXCHG	-5.04	3.64
OTHTXCHG	5.83*	3.69
FEDSTIM	0.53***	0.40***
R^2	0.86***	0.73***
Adj. R^2	0.76***	0.55***

Note: *** statistically significant at the 0.01 level, one-tail test;
** statistically significant at the 0.05 level, one-tail test;
* statistically significant at the 0.10 level, one-tail test.

Two of the human capital variables, *ADVDG* and *UNIONRT* , are unrelated to the recovery in state GDP.[7] However, every percentage point increase in state population between 2009 and 2012 (*POPGROW*) is associated with almost a one percentage point increase in real GDP growth over the same time period.

The pre-recovery fiscal status of the state, represented by the relative size of the combined state and local public sector (*TAX*), has no connection to the

[7] The substitution of the percentage of adults with a bachelor's degree for the percentage of adults with an advanced degree does not change the results for this measure.

economic recovery.[8] Changes in both state and federal fiscal policies, however, are found to have strong impacts on the rate of state real GDP recovery. States which increased individual income taxes and corporate income taxes relative to GDP have a significantly lower GDP growth rate. There is no effect from changing state sales taxes or state gasoline taxes. In contrast, states increasing other taxes and fees relative to GDP have a higher GDP growth rate. Funds from outside the state economy, specifically from the federal government (*FEDSTIM*), are associated with faster real GDP growth.[9]

The results for the job growth rate (*JOBGRWRT*) are somewhat different. The percentage of variation explained is lower at 73% (55% after adjusting for the number of explanatory variables). Among the economic sectors, only the financial services and motor vehicle sectors are significantly related to job growth. Population growth is related to job growth over the period, at the rate of approximately one-half job for every additional person. Positive legislatively-enacted changes in individual income and corporate income taxes are associated with slower job growth. Also, as with the GDP growth rate, states receiving more federal stimulus funds had higher job growth rates.

Several other forms of the equations were tested, with alternative or additional explanatory variables used. Instead of *UNIONRT*, a dichotomous categorical variable indicating a "right-to-work" state (1 if right-to-work, 0 if not) was included.[10] The results are substantively the same, especially for the key variables of interest. Like *UNIONRT*, right-to-work (*RTW*) is not statistically significant in either equation. The only major changes are that *OTHDUR* and *OTHTXCHG* are no longer statistically significant in the state GDP real growth rate equation, but *ENERGY* is statistically significant in the job growth rate equation. The full results are in the Appendix. Also, rather than state and local taxes as a percent of state personal income (*TAX*), the top marginal income tax rate was used. Consistent with the results for *TAX*, this measure also had a statistically insignificant relationship to both growth measures.[11] Last, there is a literature suggesting measures of economic freedom may be related to economic growth (Cebula, Clark, and Mixon, 2013; Dawson, 2003; De Haan, Lundstrom, and Sturm, 2006; Knack and Keeler, 1995). Hence, a measure of economic freedom for states was included in the regressions, but no statistically significant results were found for the variable.[12] Perhaps this is due to the shortness of the time period analyzed.

5. Discussion

The findings have implications for both forecasters and policy-makers. The result that much of a state's economic recovery – especially in GDP – is "baked in" by the sectoral composition of its economy suggests only long-run policies or forces beyond a state's control can influence much of a state's recovery path. Changing the economic structure of a state takes time, certainly more time than one business cycle. Additionally, there is vast uncertainty about what the "super-growth" sectors will be in the future. While world conditions and technological changes may have made agriculture and energy "hot" sectors today, they can easily lose that designation in years ahead. Also, sectors such as agriculture and energy may generate output growth that does not result in employment growth due to their high capital/labor ratios.

The findings did re-confirm the long-held result that states with a greater concentration of durable goods manufacturing have stronger recoveries. The tenet was supported by the findings for motor vehicle and parts manufacturing as well as other durable goods manufacturing. Of course, it is important to remember that durable goods manufacturing states also tend to have deeper recessions (Connaughton and Madsen, 2010; Walden, 2012). Other sectors associated with a stronger cyclical recovery may be unique to each recession, as evidenced by the finding for the financial services sector in this study.

The lack of a statistically significant impact from two key human capital measures, the percentage of workers with an advanced degree and the unionization rate, in the current recovery is interesting. It may be that these factors serve as structural forces

[8] When *TAX* is replaced by three variables, the relative sizes of the individual income tax, the corporate income tax, and the sales tax in the state, the finding does not change. None of these three variables was statistically significant.

[9] When *FEDSTIM* is measured as a percent of state real GDP, there is no statistically significant relationship with either dependent variable. Nakamura and Steinsson (2011) find a positive relationship between military spending (real dollars) in a state and various state economic growth measures.

[10] Data for the right-to-work classification of a state are from U.S. Bureau of Labor Statistics (2013c).

[11] The results were the same if the top marginal income tax rate was used in place of *TAX*, in addition to *TAX*, or if change in the top marginal rate was the explanatory variable. The source of the data for the top marginal income tax rate is the Tax Foundation.

[12] The measure was for 2009 and is from the Fraser Institute (2011).

influencing economic growth over longer periods of time, rather than exerting an effect during the business cycle. In contrast, population growth is associated with both GDP and employment growth.

Perhaps the most meaningful findings come from the fiscal variables. Consistent with earlier research, the relative size of the public sector in the state, as measured by state and local taxes as a percentage of personal income, had no influence on economic growth during the recovery. However, the results imply that marginal changes in fiscal measures can have an impact on recovery growth rates. Specifically, the findings indicate that states should avoid increasing income taxes – both individual and corporate – during an economic recession and its initial recovery. Increases in each are strongly related to both slower GDP and job growth. A one-standard deviation increase in the individual income tax rate is associated with a 2.3 percentage point decline in the GDP growth rate and a 2.0 percentage point decline in the employment growth rate. Similarly, a one-standard deviation increase in the corporate income tax rate prompts a 1.5 percentage point drop in the GDP growth rate and a 1.3 percentage point reduction in the employment growth rate. If states are motivated to increase taxes during the recovery, the results suggest increasing other taxes (other than sales, individual income, corporate income, and gasoline) and fees can generate faster GDP growth but not job growth.

The results are quite clear on federal fiscal stimulus funds – they significantly help both state GDP and job growth. This makes sense on a logical basis. Federal stimulus spending is new money spent in the state from an outside source, here the federal government. While at the national level economic agents may focus on how the spending will ultimately be funded, with agents therefore engaging in tax discounting that counters the spending impact (Taylor, 2009), this study suggests any such considerations are muted at the state level.

6. Conclusion

The study focused on determinants of the rate of economic recovery in states from the Great Recession. Economic recovery was measured by two variables, the total growth rate in real GDP from the trough of real GDP in the state to the end of 2012 and the total growth rate in payroll employment from the trough of payroll employment in the state to early (February) 2013. Measures of the economic sector composition of the state, human capital characteristics, and fiscal policy characteristics were used as explanatory variables in the analysis.

The statistical analysis resulted in several strong results. Economic sector composition matters, particularly for GDP growth. States with relatively larger presences of agriculture, energy, financial services, motor vehicle manufacturing and parts, and other durable manufacturing experienced significantly stronger GDP growth, and job growth was greater in states with a larger concentration of financial services and motor vehicle manufacturing and parts. States grew faster in both GDP and jobs if population growth was faster. And, of particular importance for federal and state policy-makers, the level of federal stimulus funds was associated with both faster GDP and employment growth, while increases in state individual income or corporate income taxes led to both slower GDP and job growth. However, increases in other state taxes and fees were associated with faster GDP growth. Of course, these results are dependent on the time period analyzed, which roughly spans mid-2009 through late 2012. As the recovery from the Great Recession proceeds, relationships may be altered, and future research should track such possible changes.

With no sign of the business cycle ending, implying that recessions and recoveries will continue to occur, the results in this paper provide guidance for state policy-makers to consider in enhancing economic recoveries. Specifically, moving state economies toward durable goods production and specialization in sectors experiencing rapid growth (agriculture and energy in the current cycle) can improve recoveries. However, the downside of this strategy is that durable goods manufacturing often contributes to deeper recessions, while long-run growing sectors may be difficult to predict and fleeting in their economic strength.

The paper's findings were very strong in their implications for state fiscal policy. First, attracting a greater amount of federal stimulus funds does help recoveries. Second, lowering income taxes (both individual and corporate) and increasing other (non-income, sales, and gasoline) taxes and fees can speed economic recovery, especially in GDP.

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Appendix

Table A1. Regression results using the right-to-work (*RTW*) variable.

	Dependent Variable	
	GDPGRWRT	*JOBGRWRT*
Intercept	-18.32**	-13.35*
AGRI	0.92***	0.22
CONST	0.01	0.52
EDUC/HLTH	0.19	-0.12
ENERGY	0.43***	0.17*
FINANCE	0.30**	0.27***
ICT	-0.15	-0.04
LEISHOSP	-0.25	-0.16
MOTOR	3.64**	3.46***
OTHDUR	0.36	0.24
REALEST	0.42	0.28
ADVDEG	0.43	0.26
RTW	1.21	0.36
POPGROW	0.99***	0.59*
TAX	0.60	0.40
SALETXCHG	-2.69	-1.27
INCTXCHG	-11.55***	-10.09***
CORPTXCHG	-31.91**	-26.14**
GASTXCHG	4.40	6.46
OTHTXCHG	5.44	3.57
FEDSTIM	0.49***	0.38***
R^2	0.86***	0.73***
Adj. R^2	0.77***	0.55***

Note: *** statistically significant at the 0.01 level, one-tail test;
** statistically significant at the 0.05 level, one-tail test;
* statistically significant at the 0.10 level, one-tail test.