Analysis of the Relationship between Religious Participation and Economic Recessions

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Abstract

During the recession, a number of articles in the press have explored the belief that religiosity increases during times of economic hardship. In particular, an article in the New York Times by Paul Vitello who wrote “Bad times are good for evangelical churches.” (Vitello 2008) His article was based on his own journalistic research as well as an academic study by David Beckworth, an Assistant Professor at Texas State University. In his paper, “Praying for a Recession: The Business Cycle and Protestant Religiosity in the United States” Beckworth suggests a strong countercyclical component to religious participation in evangelical Protestant denomination throughout recessions from 1968-2004.

Using individual church data from over one thousand churches in the North Georgia Conference of the United Methodist Church from 1999 to 2009 this paper analyzes the relationship between religious participation and economic recessions. Participation is measured by variables such as church attendance and congregational giving. The effects of the current economic crisis are compared to the recession of 2001.
**Introduction**

The last recession was particularly severe, being dubbed the great recession. It lasted 18 months from December 2007 until June 2009. The national unemployment rate peaked at over 10 percent in October 2009. The S&P500 index fell over 56 percent between October 2007 and March 2009. The recession affected many individuals and firms adversely.

In the United States religious faith plays an important role in people’s lives. According to the CIA World Factbook, 78.46% of Americans practice some form of Christianity. Protestants are 51.3% of the population (CIA 2007). Church participation affects sense of well being, financial status, social behavior, economic behavior, and political behavior. Over 60 percent of the population is members of a church (Iannacconne, 1998). Over 40 percent of Americans report attending church weekly or almost weekly (Newport 2010). It is significant to the nation how church participation is being impacted by changes in the economy.

This paper analyses the effect of the past recession on church participation in Georgia. Using data from the North Georgia United Methodist Conference containing over one thousand churches, we analyze the effect of the business cycle on church attendance and giving. We find that the Georgia unemployment rate was negatively associated with church attendance while giving was positively associated with changes in stock indexes.

**Literature review**

Azzi and Ehrenberg (1975) made the first systematic attempt by economists to analyze the determinants of religiosity. Religiosity is an individual’s religious commitment and participation in church-related activities. They looked at how members of households allocate their time to religious involvement and how this varies with age. This is referred to as the “household life-cycle religious-participation profile”. Two data sets were used, one using
Azzi and Ehrenberg concluded that as real wages grow individuals are expected to shift to less time-intensive forms of religion. As unemployment rises, individuals are expected to shift to more time-intensive forms. This could be a motivator for people to participate when unemployment rises.

Ellison (1991) noted that religion has been shown to give participants an increased sense of well being. He explored several possible motivating factors that may be responsible for providing that sense of well being. These factors included social integration, divine interaction, stress, and the effects of age and education. He found that attendance and private devotion contributes to well being, though indirectly, and that strong faith makes life trauma easier to bear. Religion does give support for people in time of adversity. This would be consistent with there being an increase in participation when unemployment rises.

Beckworth (2009) explored how religiosity varies over the business cycle in Protestant churches. His research uses data from three sources: data from a Pew Research Center survey administered during the 2001 recession period to assess weekly attendance, annual membership data spanning 1968-2004 to see if there is a relationship to NBER business cycle dates, and quarterly data from 1950:Q1 through 2006:Q4 to determine the relationships between Seventh-day Adventist converts and macroeconomic variables. This research found that there is a difference in how the business cycle affects mainline churches versus how it affects evangelical churches. Growth for evangelical denominations was countercyclical while growth of mainline denominations had a procyclical component. Stock market booms in the latter denominations were associated with a significant increase in membership growth rates. Beckworth did not
attempt, but did suggest for future research, to see what happens to financial giving over the business cycle. That is a topic of this paper.

The differential effect on mainline and evangelical denominations may be explained by several factors. Individuals in mainline churches tend to be wealthier individuals whose income is more related to salaries as opposed to hourly wages. Whereas in an economic downturn, the hourly worker has his hours cut freeing time for religious participation, the salaried worker must maintain the same hours or perhaps work longer hours to compensate for diminished staff due to lay-offs. In an upswing in the economy, the hourly worker has the opportunity to benefit from overtime pay rates. It is to his advantage to work longer for more money. The salaried worker may find business easier to come by with less effort. This would allow the salaried worker more time to pursue religious activities.

Several procyclical incentives for growth in mainline denominations are suggested by Beckworth (2009). Mainline denominations tend to attract higher income businessmen and professionals who may benefit from the networking opportunities that church attendance may provide when the economy is doing well. Your fellow attendees have business deals to make and opportunities they can share. When the economy is poor, there is less to be gained from networking since your fellow attendees do not have as many business deals to make or opportunities to share. Also, a church with accomplished fellow congregants may have a status conscious culture. During a downturn there could be a high social capital cost for being seen as suffering from the economy. This could reduce the incentive for attendance.

There are two effects that may be observed, the substitution effect and the income effect. If the substitution effect dominates, the potential for higher earnings will make religious participation more costly and individuals will scale back in their participation. If the income
effect dominates, the potential for higher earnings will cause religious participation to increase if religious participation is a normal good. Beckworth (2009) noted that among evangelical Protestants, the substitution effect dominates whereas mainline Protestants treat religious participation as more of a normal good.

Gruber (2004) noted that charitable giving and attendance are substitutes. He found that a 1% rise in giving is paralleled by a 1.1% decline in attendance. Another reason why the mainline churches may fail to see an increase in membership during recessions is due to the diminished emphasis on absolute truth and the personal intervention of God on behalf of His followers. During distress there is some evidence that people gravitate to more authoritarian churches. Mainline churches generally do not have much to offer in this regard.

Sales (1972) research focused on patterns of joining authoritarian and nonauthoritarian organizations using conversion rates. The findings were consistent with the prediction that individuals will be drawn to authoritarian organizations during hard times, but that they will gravitate to nonauthoritarian organizations when times are good. Authoritarian churches share similar characteristics such as the demand to absolute obedience to church leadership or to the Divine, condemnation of those who don’t agree with their beliefs, literal interpretation of Scripture, strong concern about sin, and emphasis on mysticism. In contrast, nonauthoritarian churches tend share other characteristics such as allowing parishioners more discretion in their decisions, assuming a more tolerant attitude to those who disagree, emphasizing a more intellectualized approach to scripture interpretation, and being less concerned over sin.

In building on the work of Sales, McCann (1999) examined the hypothesis that increased sense of threat is related to a stronger attraction to authoritarian churches and a weaker attraction to nonauthoritarian churches. McCann used membership data from two authoritarian and two
nonauthoritarian denominations over the years from 1928-1986 to compare annual membership changes. He also studied twenty-five authoritarian and nonauthoritarian denominations during three distinct ten year periods from 1955-1985 that differed in threat levels. McCann predicted that during threatening economic times authoritarian denominations would see their greatest gains or smallest losses and nonauthoritarian churches would see their greatest losses or smallest gains during more threatening periods. The study results confirmed the prediction.

McCann included the United Methodist Church among the nonauthoritarian denominations. According to his work, we would expect to see that the North Georgia Conference of the United Methodist Church experienced their greatest losses or smallest gains during periods of greater economic distress.

Based on the above characteristics, the United Methodist Church is nonauthoritarian. So, we expect to see the smallest membership gains or greatest losses during periods of economic distress. In fact, we find a significant negative correlation between the lagging U.S. unemployment rate and annual change in membership.

In studying Indonesian communities after the financial crisis, Chen (2008) found that that religious participation seems to be a form of ex post social insurance. So when economic distress hits, households increase their religious participation despite having working more and thus having less time for religious activities. Those who need the insurance in the form of financial assistance or services participate more and those who do not need the services continue to participate.

Overall, the theory is inconclusive about the effects of a recession on church participation; the substitution effect suggests participation should increase because of the lower opportunity cost of time while the income effect suggests that participation should decrease. The
few previous empirical studies have produced conflicting results; some suggest participation
increase in times of economic stress and others reporting a decline. The effect depends on the
denomination. This study is unique in investigating how religious participation and giving in a
regional subset of a denomination are affected by local and national economic trends. No
previous study has looked solely at the United Methodist denomination.

Data, Methodology and Results

The North Georgia Conference of the United Methodist Church includes over one
thousand individual churches. Data on church membership, attendance, and giving by religious
participants is collected from statistical tables published by the conference. The data is
aggregated across all churches for the past twelve years.

One problem with the dataset is the reliability of the membership records. According to
these records membership never had a net decrease over the entire 12 year period. This seems
unusual. Church membership records are known to be sloppy sometimes including both the
living and the dead as active members (Schmucker 2010). Churches are reluctant to wipe
members off the roll even when they know they are no longer active members.

Besides membership, church participation is therefore measured using two other
variables: attendance at the main Sunday service and giving. Giving is the sum of pledges, giving
by identified givers, and giving by unidentified givers. Pledges are made by members at the
beginning of the year to help the individual church budget for upcoming operations. Pledges can
be fulfilled throughout the year. Giving by identified givers is donations and offerings by persons
who are named. Giving by unidentified givers is offerings and donations made in cash or
anonymously. Unfortunately, we only have giving data for five years (2005-2009). Our measures
of the business cycle are the US unemployment rate, the Georgia unemployment rate, the Dow Jones Industrial Average and the S&P500 index, and the yield spread.

Our regression equation we estimate is therefore

(1) \( \text{religiosity} = \text{intercept} + \beta \text{economy} + \text{year dummies} \)

Where the religiosity variable is either membership, attendance or giving, and the economy variable is one of the aforementioned measures. The results are presented in Table 1.

The only economic variable that affects attendance is the Georgia unemployment rate. A one percentage point increase in the unemployment rate is associated with a decline in attendance of 1,523. Over the twelve years in the study, attendance for the entire conference range from a high of 136,148 in 2006 to a low of 126,708 in 1998. So a decline of 1,523 would be a loss of 1.1% from the high attendance. Higher wages, as measured by household income, had no effect on participation. These results are contrary to what would be expected by Ehrenberg and Azzi (1975). However, it does support Sales (1972) research that nonauthoritarian churches see declines in participation during times of economic stress. This supports the notion that Methodist churches are little more than social clubs without providing social insurance.

Giving is positively associated with changes in stock indexes (column 4 of Table 1): A 100 point gain in the DJIA in any year is associated with an increase in giving of just over $1 million. A 100 point gain the S&P500 is associated with an increase in giving of just less than $1 million. These results, however, should be interpreted with some caution as there are only five years worth of data included in the regression. The high R-squared reflects this limited data.

We also estimate equation 1 by looking at the change in attendance from year to year and the change in membership and how those variables are affected by the business cycle. The results
are presented in columns 2 and 3 of Table 1. A one percentage point increase in the US unemployment rate reduces differential membership by 557.

Conclusion

The last recession was particularly severe affecting many individuals and organizations. One understudied organization is the church and church participation even though religious life is important to many people in the US. We found that attendance at UMC worship services declined during periods of high unemployment over the last decade or so. One suggestion for this relationship is that Methodist churches act more as a social club than a religious organization. Attendance is high during good times as it provides a good opportunity to network and build business contacts. More research needs to be done to investigate this hypothesis.

We also find, though with much lower confidence, that total giving to UMC churches is closely associated with movements in stock prices. These results suggest that the churches in this study tend to have participants who have significant personal wealth invested in the financial market. Such persons tend to be middle to upper income. An interesting avenue for future research is to see how individual, local church participation and giving are impacted by the national and local economy over the business cycle.
References


Table 1: Effect of business cycle on participation and giving

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<thead>
<tr>
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<th>Attendance Differential Attendance</th>
<th>Differential Membership</th>
<th>Total giving</th>
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<td>-1522.9**</td>
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<td></td>
<td>(2.32)</td>
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<td></td>
<td>R^2 = .45</td>
<td>R^2 = .43</td>
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<td>GA unemployment rate</td>
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<td>(lagged one year)</td>
<td>(0.64)</td>
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<td>(.32)</td>
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<td>R^2 = .06</td>
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<td>DJIA</td>
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<td>(.46)</td>
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<td>Georgia household median</td>
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<td>--------</td>
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<tr>
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<td>$R^2 = 0.83$</td>
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Note: * p<0.1; ** p<0.5; *** p<0.01. Absolute t-stats in parentheses.