Explaining the Dynamics between the Women’s Movement and the Conservative Movement in the U.S.

Abstract

In this paper we examine the causes of movement and countermovement mobilization, focusing specifically on the effect that the movements have on each other directly responding to mobilization and indirectly through their policy successes. In addition we examine the influence of political parties and gender opportunities. We use Poisson Autoregressive (PAR($\rho$)) models, which are uniquely designed to model both the time dependence and the count distributions, on quarterly time-series of feminist and anti-feminist events. Results show that movement and countermovement respond to each other and that anti-feminist movements mobilize in response to policy change as well. Changes in the political environment and gender opportunity structure also matter. The results suggest that many quantitative analyses of women’s movements may be mis-specified. The findings also suggest a need to reconsider our understanding of waves or cycles of protest.

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While social movements and the movements that oppose them have both been the subjects of careful research, scholars have tended to focus on each type of movement in isolation. Considerably attention has been given to both women’s movements1 (see for example Barakso 2004, Costain 1992, Freeman 1975, Young 2000) and the conservative opposition movements to the women’s movements (see for example Conger 2009, Moen 1996, Schreiber 2008). However, this literature pays little attention to the connection between these movements despite describing a dynamic relationship between movements and opposition movements (but see Meyer & Staggenborg 1996, Staggenborg 1991). Conservative movements, it is often argued, were mobilized in opposition to feminist mobilization and activity (Meyer & Staggenborg 1996, Staggenborg 1991, Rose 2011, Zald & Useem 1987). Furthermore, the women’s movements are thought to mobilize to oppose the demands of conservative movements and may incorporate resistance to conservative movements’ goals into their own agenda (Freeman 1983, Gamson 1975, Staggenborg 1991). The literature’s failure to examine the interconnection between movement and oppositional movement mobilization has important consequences for our understanding of citizen mobilization and policymaking. In this paper we focus on the systematic actions of movements and opposition movements as a whole to answer the following questions: to what degree do movements react to each other? And to what degree do these opposing movements respond to policy achievements?

This paper advances our understanding of the relationship between opposition movements and policy success by separating out these effects using time series analysis of feminist and anti-feminist event data.2 Research on the relationship between

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1In this paper we utilize the terms women’s movement and feminist movement interchangeably because this is the language of feminists themselves. However, we acknowledge alternative definitions which would place the activities of both movements discussed here into the same category (Beckwith 2000, Banaszak 2003, p. 2)

2While the analysis presented in the main section of the paper focuses only on the feminist movement and anti-feminist movement, we also analyzed the pro and anti activity around the specific topic of abortion. These results are reported in Appendix B.
opposing movements is largely theoretical (Lo 1982, Meyer & Staggenborg 1996) or careful qualitative assessments of movement-countermovement relations in particular cases (Dixon 2008, Jasper & Poulsen 1993, Staggenborg 1991). In the few empirical analyses, the dynamics between social movements and the movements opposing them have gone largely unexplored.\(^3\) The women’s movement and anti-feminist movement is a good case to examine the relationship between opposing movements because issues that mobilized women’s movements – the Equal Rights Amendment and abortion – were also catalysts for the rise of conservative opposition movements. Moreover the issues, activities and impact of these movements remain significant today.

The dynamic relationship between opposing movements has several important implications for our understanding of social movements. Although much of the social movement literature recognizes the importance of studying the influence of other movements on movement mobilization (Evans 1997, Klandermans 1992, Tarrow 1994) quantitative studies of movement mobilization rarely include such variables. As we show below, ignoring this relationship may complicate empirical tests of the theories of the causes of social movement mobilization. Second, understanding the dynamics of movements and the movements that oppose them may contribute to the extensive literature on movement outcomes as well. There are conflicting results regarding whether movement mobilization influences political outcomes (Amenta et al. 2010, Burstein & Linton 2002). One explanation for these conflicting results may be the lack of consideration of the dynamics between the two sets of movements.\(^4\) Weak relationships between movement mobilization and policy may be a result of the net activity of movement and opposing movement (Jasper & Poulsen 1993, Rosenfeld & Ward 1991, Soule 2004, Zald


\(^4\) Soule (2004) is one of the few quantitative studies of social movement outcomes to include countermovement mobilization as a variable.
Moreover, if as we argue below, movements also mobilize as a result of policy successes of the movements they oppose, this also raises serious endogeneity issues about previous work on social movement outcomes. Should movement mobilization be influenced by policy adoption, social movement scholars would need to revisit the vast literature on social movement outcomes which assumes that policy results from mobilization and not vice versa (see for example the recent discussion in (Amenta et al. 2010).

In addition to the theoretical and empirical contributions outlined above, we offers an additional empirical contribution to the social movement literature with the application of the Poisson Autoregressive model (PAR($\rho$)). The PAR($\rho$) represents an advancement over common methods used in the social movement literature because it takes into account both the dynamics and the event count distribution of the data (Brandt & Williams 2001, Brandt et al. 2000). In addition to correctly modeling the data generating process of the events generated by social movement activity, PAR($\rho$) provides a better theoretical fit to the assumptions that underlie social movements research.

The paper proceeds as follows. We begin by discussing the mobilization of the U.S. women’s movement and the conservative movement that opposed it. We then put this particular movement-opposing movement relationship in a wider perspective by examining the scholarship on oppositional movements more generally. These discussions generate our hypotheses, which we test using a time series data set of contentious events related to the feminist movement and of the movement that opposed it. We also place the activities of movement and oppositional movements within the larger context by discussing how political and gender opportunities may influence the number of events. We then provide a brief overview of the measurement of our key variables in the model. In the methods section we explain the Poisson Autoregressive model, paying particular attention to the limitations of traditional event count and time series methods ability to handle the dual data generating processes of our events measures.
We then present the results of our analysis and discuss the implications of this analysis for our understanding of oppositional movements.

**Battling for Control on Issues of Gender**

Scholars of the second wave of the U.S. women’s movement differ in the way they draw the timeline of the second wave (cf. Ryan 1992, Freeman 1975, Thompson 2002), although most indicate that movement mobilization increased in the late 1960s and early 1970s. Some examples of the initial mobilization chronicled in newspapers include demonstrations against the Atlantic City Miss America Pageant where feminists protested the objectification of women by tossing high heels and bras into a trash can and staging guerrilla theater on the boardwalk (Curtis 1968, Freeman N.d., Weinman Lear 1968) and a series of pickets of Equal Employment Opportunity Commission (EEOC) protesting its ruling that separate help wanted ads were not a violation of Title VII (Banaszak 2010, among others). An overview of women’s movement mobilization is presented in Figure 1, which graphs the number of movement and countermovement events by the quarter they occurred as reported in the *New York Times.*

As Figure 1 shows the number of reported women’s movement events rose steeply starting in 1970, and peaked around 1978. Despite a drop off in the number of events in the 1980s, the movement continued to coordinate collective action events even into the 1990s at a level that exceeded the last years of the 1960s.

Women’s movement protests were often followed by opposition mobilizing against the women’s movement. Figure 1 suggests that anti-feminist events began to rise in the mid-1970s (see also Ryan 1992, Marshall 1984, Schreiber 2008), although there is

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5 We utilize the term second wave here to acknowledge the historical continuities of the women’s movement in the United States (see Rupp 1985, Rupp & Taylor 1987, Banaszak 2010, Chapter 2).

6 The data were taken from the Dynamics of Collective Action data set available at [http://www.stanford.edu/group/collectiveaction/cgi-bin/drupal/](http://www.stanford.edu/group/collectiveaction/cgi-bin/drupal/), which codes contentious events from the *New York Times* (the authors thank Doug McAdam, John McCarthy, Susan Olzak and Sarah Soule for making these data available). See Appendix A for more detail.
Figure 1: Women’s Movement and Anti-Women’s Movement Events, Quarterly 1960-1995

evidence of oppositional movement mobilization even earlier. In some cases, the opposition mobilized almost simultaneously with the events to which it was reacting. For example, the *New York Times*, reporting on the 1968 Miss America Pageant protests, noted that picketers countering the protests appeared an hour after the initial protest began (Curtis 1968). Other times, the opposition to women’s movements was slower to mobilize and more organized in nature. Ryan (1992), for example, notes that organizations supporting traditional gender roles such as Protect our Women (POW) were founded in the mid-1970s.

While the women’s movement remained diverse in its organizational forms, purposes, and ideology, the battle between women’s movement and counter movement as chronicled in the newspapers focused around two issues: the Equal Rights Amendment (ERA),\(^7\) and reproductive rights. In these cases, anti-feminist reaction encouraged the creation of anti-feminist organizations that engaged in longer term mobilization.

\(^7\)Although the battle around ERA started in the 1920s (see Banaszak 1996, Rupp & Taylor 1987), the number of women’s movement events, as recorded in the New York Times, increased in 1971, just prior to the debate in Congress, and declined in 1982, when the deadline given for states to ratify the amendment expired.
Facing the push for ratification of the ERA, Phyllis Schlafly’s Stop ERA was founded in 1972 and went on to organize anti-amendment ratification lobbies in several states including Illinois and Florida. The organization was perhaps best known for its lobbying tactics including the distribution of homemade bread and jam to legislators by women asking them to vote against ratification (Klemesrud December 15, 1975). While Stop ERA demobilized after the defeat of the Equal Rights Amendment\(^8\), many of the other national groups opposed to the women’s movement which developed later in the 1970s continue to actively mobilize. For example, Beverly LaHaye founded Concerned Women for America (CWA) in 1979 after watching an interview with Betty Friedan (Schreiber 2008, pg. 30). CWA continued to mobilize on anti-feminist issues even in the 2012 election.

Increasing decriminalization culminating in the *Roe v. Wade* decision of January 1973 served to mobilize opponents to abortion rights as well. Mobilization for the decriminalization of abortion, or greater access to abortion, began prior to the 1973 *Roe v. Wade* decision, although there were only a few of events during this period. Much of the early push for abortion decriminalization came from doctors concerned about ambiguities in existing law, or from lawyers and legal scholars seeking to rationalize state legal codes (Luker 1984, Staggenborg 1991). In 1962 the American Law Institute (ALI) opened up a new wave of reform by calling for legal reform of abortion laws. As the women’s movement mobilized, feminists increasingly took up the cause of abortion (Reagan 1997, Luker 1984, Chapter 3). Pro-Life activists responded by both staging anti-abortion events and creating proLife organizations. *Roe v. Wade* inspired annual protest events in DC and other cities. By the 1970s over 2/3’s of the anti-feminist events that appeared in the *New York Times* were anti-abortion events, with the proportion rising even more in subsequent decades.\(^9\) Local anti-abortion organizations had already begun forming in the late 1960s, with the National Right to Life Committee organizing

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\(^8\)Although the organization lives on and continues to fight attempts to revive the amendment.

\(^9\)Although (Barakso & Schaffner 2006) show that these numbers are partially inflated by the news media’s emphasis on the issue of reproductive rights.
soon thereafter in 1971 (Luker 1984, Staggenborg 1991, pg. 35). Over time additional anti-abortion organizations were founded, like Operation Rescue, which appeared in the 1980s. While violent events such as clinic bombings and arson attempts peaked in the 1980s and early 1990s (National Abortion Federation N.d., Staggenborg 1991, pg.132-133), the picketing of abortion providers has remained fairly constant since the mid-1990s (National Abortion Federation N.d.).

This brief description of the U.S. women’s movement and the anti-feminist movements that opposed it helps to illustrate the way that movements and opposition movements are intertwined, reacting both to events and to policy achievements. It also shows that extensive interaction between the two movements occurred– sometimes resulting in almost simultaneous actions but other times inspiring increasing mobilization over a longer period. Before we explore the interrelationship in a statistical analysis of these two movements, we turn to the literature on how oppositional movements develop and the mechanisms that explain the interaction between movements and opposing movements.

Understanding the Mobilization of Opposing Movements

In the section below we divide the factors that influence the mobilization of movements and opposition movements into two types of factors. First we discuss how movements influence the movements that oppose them and vice versa; we then focus on factors that affect both women’s movements and anti-feminist movements, specifically the political opportunities and gender opportunities available to the two movements. While much of the quantitative social movement literature focuses on the latter set of factors, the existing literature on the interactive claims or framing of opposing movements has largely remained qualitative. Here we integrate both literatures by examining the
mobilization of public events as our variable.

**Dynamics between Opposing Movements**

Many scholars have traditionally used the term countermovement to speak about movements that oppose a social movement, assuming that it arose in opposition to the movement that preceded it. Here we make no assumption that anti-feminist activity arose solely to counter feminist activity, choosing instead to talk about movements in opposition. Nonetheless we follow the theoretical literature on countermovements by focuses on the simultaneous influence opposing movements have on each other (Zald & Useem 1987, Inclan 2012, Meyer & Staggenborg 1996, Lo 1982). The dynamic relationship between two opposing movements is traditionally viewed as taking one of two forms: 1) each movement can react to the actions of the other or 2) each may react to the success of the other. Several scholars argue that movement events, particularly visible events, create the impetus for oppositional movements to mobilize (Andrews 2002, Inclan 2012, Lo 1982, Zald & Useem 1987, p247-248). In this view, the visibility of the original movements provide the impetus for the initial mobilization of oppositional movements by creating grievances as an existing population begins to realize that what they had considered widely accepted positions and practices are being challenged. As movements begin to focus on specific issues they also make it easier for the movements that oppose them to mobilize around the same specific set of goals or issues. Moreover, the actions of movements demonstrate concretely that collective action can have an effect, if not specifically on policy then at least in capturing the public eye, triggering those who oppose the movement to mobilize as well (Inclan 2012, pg 462).

While the paragraph above focuses on the effect of movements on movements opposing other movements, the literature on movement-countermovement relationships also notes that when oppositional movements mobilize they have strong effects on
the movements that spawn them. In particular, highly visible events by oppositional movements are also likely to mobilize the movements they oppose, as the positions and policy successes of these movements are being challenged. Once both movements have passed the barrier of the initial mobilization, there are several ways that movements and the movements that oppose them influence each other. For example, (Meyer & Staggenborg 1996) note that both movements will shift venues and adjust their tactics in response to each other continually raising new opportunities for mobilization, and simultaneously raising new threats against which the other side must mobilize. Hence we expect that:

- H1: An increase in movement events causes an increase in events by the movement that opposes them.

We also expect that oppositional movements will create new or revitalize existing grievances in the movements which mobilized first, leading to increased mobilization (Fetner 2001):

- H2: An increase in the number of events by a movement opposing another movement will lead to an increase in the number of events by original movement.

Alternatively, movements that mobilize in opposition to an existing movement may react less to movement events than to a movement’s ability to create changes in policy (Meyer & Staggenborg 1996, Zald & Useem 1987).10 In this case, the grievances of the oppositional movement are not inspired by shifts in the discourse about or support for the original movement that arose through mobilization but instead reflects concern about shifts in policy. This suggests it is not mobilization of the movement but actual policy change that creates grievances even as it suggests that there are opportunities to

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10 McCammon et al. (2001) places movement policy successes, like the passage of suffrage, into the category of gender opportunities. While we agree that movements do affect both political and gender opportunities, we find it more useful to separate out those opportunities directly and immediately influenced by the movement from those that are more removed from movement influence in time and are less directly an outcome of movement.
mobilize for policy change. While there might be several places one might mark final policy success (e.g. passage of legislation; when bills are signed into law; when final regulations are issued), we focus on bills signed into law to capture significant policy success. We recognize that such a focus provides a limited view (Andrews 2002). We reasonably anticipate that legislation is more likely to mobilize oppositional movements, because it reflects significant change but still may be repealed or modified. Thus we expect that,

- H3: The more feminist legislation signed into law, the more anti-feminist groups will mobilize.

Another expectation deriving from existing social movement theory is that success breeds demobilization. This idea, made explicit in Zald and Ash’s seminal (1966) piece on organizational growth and decay, argues that when movement organizations are successful they must either take on new goals or demobilize.\(^\text{11}\) Zald and Ash then suggest that:

- H4: The adoption of movement legislation leads to a decrease in movement events.

If we accept the previous three hypotheses as true however, these create a serious contradiction with H4. If movement success breeds both oppositional movements and movement demobilization, then we are less likely to find that movements mobilize in reaction to the rise of oppositional movements. Staggenborg (1991) addresses this dilemma directly in her analysis of the abortion rights movement, arguing that feminist abortion rights activists were well aware of the rising anti-abortion movement and that therefore Roe v. Wade did not create the same incentives to demobilize as it might otherwise.\(^\text{12}\)

\(^{11}\)Indeed, Zald and Ash (1966, pg 333-334) hypothesize that movement organizations that are a result of coalitions of different groups, and those which aim at changing society are more likely to dissipate after success.

\(^{12}\)Additionally our theory suggests that movements might mobilize in response to the policy success of conservative movements. We do not include this in our expectations or analysis because we lack an equivalent measure of anti-feminist policy success.
Alternative Influences on Opposing Movements

While we have concentrated above on the dynamics between opposing movements, an alternative theory suggests that both movements may be mobilizing in reaction to the opportunities available in the wider political system. We examine two types of time-varying political context variables: the political opportunities each type of movement has through the political parties in power and the gender opportunities that influence specifically women’s movements (and anti-feminist movement’s) ability to mobilize.

Political Opportunities

Political opportunities are the openings in the political context observed by movements (see for example Cress & Snow 2000, Tarrow 1994). When movements observe changes in the political system that might afford them access to the political system, they alter their activities to strategically utilize these openings. Within the U.S. context, sympathetic political parties in government have been found to be an important factor explaining whether movements have policy success (Amenta & Zylan 1991, Meyer 2004). Research on the relationship between the women’s movement and political parties also finds a growing affinity between the Democratic Party and women’s movements developed in the late 1960s and early 1970s (Freeman 1987, Wolbrecht 2000, Young 2000) but see (Sanbonmatsu 2002). There has been less quantitative empirical research on the political opportunities affecting conservative movements (but see Andrews 2002), although the mobilization of these movements is also likely affected by having political allies in government. Indeed, the growing affinity between the Democratic Party and the women’s movement was matched by an increasing kinship between the Republican Party and conservative movements of all types, including anti-feminist movements. One might therefore expect that anti-feminist movements mobilize more when Republicans are in power, and feminist movements mobilize when Democrats are in power.

However, the American political system provides multiple arenas where such allies
can be found. Scholars have argued that in multi-level governments, there are multiple locations where movements (either feminist or anti-feminist movements) may find political allies who foster mobilization (Banaszak 2003, Meyer & Staggenborg 1996). Political allies in state governments, for example, may provide support in periods when political elites on the national scene oppose a particular movement. Hence, even if a movement’s ally is out of power in the national government we expect that a greater numbers of allies in state governments may provide opportunities for either movement to mobilize. Moreover, the effect of having allied political parties in state governments may be stronger for the anti-feminist movements than for the women’s movements, because such allies can often prevent movements which have acquired policy successes from permanently closing the window to changing policy (Meyer & Staggenborg 1996, Haussman 2005). For example, conservative allies in state governments have provided opportunities for the anti-abortion movement to continue to mobilize against abortion in the United States. Because both opposing movements are reacting to the same set of political opportunities, it is necessary to control for the effect of political parties in power at the national and state level in order to understand the reciprocal influences of opposing movements on each other.

**Gender Opportunities**

Equally important for movements focused on gender are opportunities related specifically to the gendered nature of the political system (McCammon et al. 2001). Gender opportunities for the women’s movement change as women increasingly enter spheres, which have traditionally been dominated by men like the workplace and politics. Many of the same gender opportunities that increase women’s movement activism in the form of events will also inspire the activism of opposition movements as well. In particular, anti-feminist movements may be reacting less to the activity of women’s movements or to their ability to alter concrete policies than to the changing relationships between the
sexes more generally, which increases the grievances that mobilize the movement. As a result, it is important to control for gender opportunities to understand the dynamic relationship between the women’s movement and anti-feminist movements.

In this paper we focus on three specific factors designed to capture the changing gender opportunity structure. First and foremost, an important gender opportunity is the changing social norms and beliefs that underlie the general public. Women’s movements may mobilize to capitalize on and as a result of changing attitudes toward women. Hence, we expect women’s movement mobilization to be influenced by public opinion. However, movements opposed to the women’s movement may also react to public opinion, mobilizing to oppose the status changes that come with changing attitudes (Lo 1982). Rising feminist values may lead women in traditional positions to experience a loss of status as the values that supported homemaking as women’s calling disappear (see also Klatch 1987, Luker 1984). Therefore, we control for public opinion about gender roles in examining the mobilization of these two movements.

Even if attitudes are slow to change, the movement of women into arenas traditionally controlled by men may also prove to provide gender opportunities that influence the women’s movement. As women enter the workforce and politics, they have more opportunities to change the political agenda, and may simultaneously experience increased grievances regarding women’s status. In addition, women’s presence in business and politics may increase the willingness of male political elites to consider feminist demands, providing opportunities for access to the women’s movement. Women in political offices may also act as insiders within the political system pushing change from within or as political allies who provide access to the political system (Banaszak 2010, Santoro & McGuire 1997). We expect movements opposing the women’s movement to benefit from traditional social arrangements since these not only reinforce the importance of traditional roles among political elites but also increase the pool of traditional women who can be mobilized (Klatch 1987, Schreiber 2008). Hence, anti-feminist movements are likely to find gender opportunities when there are less
women in the workforce or politics.

There are also several other explanatory variables that could be included in our analysis that we choose to omit because they are theoretically not relevant for the study of movements at the macro level. Some of the literature on social movements focuses on the amount of resources different organizations have to carry out their agenda (Minkoff 1995, McCarthy & Zald 1977, Rohrschneider & Dalton 2002). While it is reasonable to expect that resources would impact an organization’s ability to carry out an event, our analysis focuses on the macro behavior of a movement and not a specific organization. As a result the influence of the resources may be obscured by the level of aggregation at which we explore the process. Moreover, because our analysis is of movements and not specific actors within the movements compiling good, reliable measures for the resources of the entire movement would be extremely difficult.

Measurement

The theory offered above focuses on the macro-level activity of movements and opposition movements. As a result, we need macro-level indicators of women’s movement activity and of the activity of the movement that opposes it. We construct measures of movement and opposition movement mobilization using the number of events held each quarter as reported in the *New York Times*. The initial set of 1331 feminist or antifeminist events coded here are taken from the Dynamics of Collective Action data set (see [http://www.stanford.edu/group/collectiveaction/cgi-bin/drupal/](http://www.stanford.edu/group/collectiveaction/cgi-bin/drupal/)). For information about how these events were identified and coded as well as a more comprehensive discussion of the validity of the measure see the Data Appendix. We note that there is bias in newspapers determination of newsworthy events, and so the data are not a comprehensive list of all movement and oppositional movement activity. However, since movements and countermovements are hypothesized to react to highly visible mobilization, we feel our measure is an appropriate indicator and will allow us
to better understand this movement level strategic interaction.

Our second key independent variable is movement success. This measure is a quarterly count of the number of feminist bills that became law. We also include two measures of political opportunities: the number of state legislatures controlled by the Democratic Party and the party control of the White House. Our three measures of gender opportunities are 1) a public opinion measure of gender attitudes, 2) the percent of women in the paid labor force, and 3) the percent women in the U.S. Congress. Greater detail can be found in the Data Appendix.

Our analysis is conducted on a quarterly basis. Selecting the appropriate frequency to construct our measures and carry out the analysis can be tricky. With larger time periods, such as yearly or bi-yearly data, the analysis could miss the dynamics we wish to study. Smaller frequencies such as daily or weekly are infeasible because of the lack of variation in dependent and independent variables. We believe the quarterly analysis allows us to best capture the dynamic behavior we wish to examine. We expect that movement and counter-movements respond reasonably quickly to each other’s actions, and, as a result, we selected a frequency for our analysis that would best capture this process. We do acknowledge that this frequency may miss responses that are occurring at a faster rate, thus we can view our results as a conservative estimate of the dynamic relationship between movement and oppositional movements. Additionally, we believe that the quarterly analysis best allows us to capture the relationship between mobilization and our other independent variables. For example, when a movement is successful we expect the countermovement to mobilize quickly to try to reverse that success, we don’t expect them to wait until the next legislative session (a two year time period) to respond. If the opposition movement responds to success we can isolate this behavior more easily with quarterly data.

The Dynamics of Collective Action data set ranges from 1960 to 1995 although our measure of movement success – the adoption of feminist legislation – ends in 1992. Lagging several variables further reduces the number of time points in our analysis. To
enhance the number of data points we have to work with we take a two-step approach to our analysis. Our first set of models exclude our measure of bill passage. In this set of analysis the range for the data is as follows: women’s movement (1960q2-1995q1) and conservative movement in opposition (1960q2-1994q4) In the next step, we add the measure of policy change (bill passage). In the analyses with our bill passage measure our data ranges are the same for both movements (1960q2-1991q1).

**Time Series Event Counts: Poisson Autoregressive Model**

Our dependent variables are times series of event counts, which implies two different underlying data generating processes. The count distribution underlying our data suggests using the set of models developed for this type of distribution (e.g., Poisson, Negative Binomial). These models assume that events are independent, an assumption that we feel is false. Instead we feel there is a dynamic and dependent relationships within and between movements and oppositional movements. Time dependent relationships, such as this, are often modeled using time series analysis. However, the distribution of count data is a poor match with the Gaussian distributions underlying traditional time series methods. To account for both features of the data generating process, we use a Poisson Autoregressive model (PAR($\rho$)). Drawing heavily on the work of Brandt and colleagues (Brandt et al. 2000, Brandt & Williams 2001), we provide a brief overview of the problems with more common approaches to modeling event count time series and then describe the alternative method of the Poisson Autoregressive model.

Event count models, such as the Poisson, assume that events are independent, with the mean and variance equal to each other. While other event count models, such as the Generalized Event Count or Negative Binomial, deal with cases of over dispersion, when
the variance is larger than the mean, these models do not address dynamic relationships between time periods (King 1989b). However, we expect that the events we observe in one time period are often related to previous events. When a social movement mobilizes the behavior does not occur in a single quarter; rather, mobilization in one quarter will influence mobilization in future quarters. Omitting dynamic aspects from these models may lead to model mis-specification (Brandt & Williams 2001). Commonly, scholars add a lagged dependent variables to these models to address time dependence; however, in a count models this is not equivalent to adding a lagged dependent variable in the standard time-series case (Brandt et al. 2000). In the Gaussian time series framework a lagged dependent variables represents the autocorrelation function (the exponential decay rate at which a series returns back to equilibrium). In an event count model a lagged dependent variables is an exponential growth rate (Brandt et al. 2000). Thus, unless the event count series contains an exponential deterministic trend or no dynamics the traditional count models are inappropriate and may result in biased and inefficient estimates.

Using traditional time series methods and ignoring the event count distribution of the data is equally problematic. Even if we ignore the basic distributional nature of the data, only with very large event counts will the event count distributed data approximate the Gaussian distribution (Brandt & Williams 2001). Moreover, if the mean of the number of events is small then predictions may not be greater than zero. This does not make sense for modeling counts of events which require strictly positive predictions (Brandt & Williams 2001). As a result, modeling event count data in the traditional Gaussian time series framework results in both biased and inefficient estimates (King 1989a). Additional problems exist if a series is non-stationary. In Gaussian time series we commonly take the first difference of a non-stationary series to get a stationary series. However, the distribution of the first difference of an event count with time dependence is poorly defined (Brandt et al. 2000).

Thus, our data require estimators that allow us to address both of the data gener-
ating processes present in the data. Brandt and colleagues (Brandt et al. 2000, Brandt & Williams 2001) have introduced two options to political science: the Poisson Autoregressive model (PAR($\rho$)), designed for mean reverting count data, and the Poisson Exponential Weighted Moving Average model (PEWMA), designed for highly persistent time series count data. The auto-correlation function (ACF) and partial auto-correlation function (PACF) for each of the dependent variables are used to select between these two models (Brandt & Williams 2001), and these suggest that the Poisson Autoregressive model is the best option for our data.\(^{13}\)

The Poisson Autoregressive model uses a state-space model framework to estimate the parameters. Here we provide a brief overview of the PAR($\rho$); however, see Brandt and Williams (2001) for a more technical and detailed discussion of the estimator. With a state space specification we define a measurement equation and a transition or state equation. Essentially, these two equations represent the two different data generating processes of our data. The measurement equation is a standard Poisson, which describes how the number of events arise as a function of the mean events.\(^{14}\)

The state or transition equation describes the importance of past events on current levels of events and is defined as a linear auto-regressive process.\(^{15}\)

The information from these two equations are then combined. First, based on observed data we construct a prior distribution by finding the conditional mean and

\[ Pr(y_t|m_t) = \frac{m_t^y e^{-m_t}}{y_t!} \quad (1) \]

\[ E[y_t|Y_{t-1}] = \Sigma_{i=1}^{p} p_i Y_{t-i} + (1 - \Sigma_{i=1}^{p} p_i) \quad (2) \]

\(^{13}\)All the series show moderate correlations in the ACF that decay over time. The decay rates are not steady, suggesting a higher order AR process. The PACF also indicates a higher order AR process, with between 2 or 3 significant spikes, depending on the series. Based on the ACF and PACF we specified a variety of AR processes. The AIC information criteria indicates AR(3) best fits the data.

\(^{14}\)We start with the with the assumption that the observed counts at time $t$ are generated from a Poisson distribution with a mean of $m_t$. Suppose that the observed event counts, $y_t$ for $t = 1, 2, ..., T$, are drawn from a Poisson distribution conditional on $m_t$:

\(^{15}\)The state equation is represented as:
variance of the data at time $t$ based on the previous $t-1$ observations.\textsuperscript{16} We can then use a Kalman filter defined by time-dependent series of recursions for the conditional mean $E[u_t|Y_{t-1}]$, to obtain the forecast density for the one-step ahead predictive distribution.

The predictive distribution that results from this process represents the combined information in the measurement density and the transition equation. Moreover, the predictive distribution is a negative binomial which we can easily use to construct a log-likelihood and estimate the parameters of the PAR($\rho$) using maximum likelihood. Importantly, given that the resulting distribution is a negative binomial this model works for event data with over dispersion.

To understand the total influence of an explanatory variable we need to calculate the short-run and long-run effects in addition to examining the direction and significance of the initial coefficients. This is because the dynamic components of the model carry the effects of a change in the explanatory variables over time. The short-run effect, also called the impact multiplier, provides the instantaneous effect of a change in $X_t$ on the mean (Brandt & Williams 2001).\textsuperscript{17} The short-run effects can then be converted to the total effect, or the long-run effect, of a shock to $X_t$.\textsuperscript{18} The results tables below present estimated coefficients, significance, short-run effects, and the long-run effects for all the covariates.

\textsuperscript{16}The prior distribution is a gamma distribution with a mean $m_{t-1}$ and variance $m_{t-1}/\sigma_{t-1}$.

$$Pr(m_t|Y_{t-1}) = \Gamma(\sigma_{t-1}m_{t-1}, \sigma_{t-1}), m_{t-1} > 0, \sigma_{t-1} > 0$$

(3)

with $m_{t-1} = E[y_t|Yt-1]$ and $\sigma_{t-1} = Var[y_t|Y_{t-1}]$.

\textsuperscript{17}The impact multiplier for the effect of a change in $X_t$ on the mean number of counts at time $t$ is determined by calculating the value of the first derivative of the mean function for this change.

$$\frac{\partial m_t}{\partial X_t} = \frac{\partial(\sum_{i=1}^p Y_i - i)}{\partial X_t} = \frac{(1 - \sum_{i=1}^p p_i)exp(X_t\delta)}{(1 - \sum_{i=1}^p p_i)} \ast \delta$$

(4)

\textsuperscript{18}The equation for the long-run effect is

$$\frac{\partial m_t}{\partial X_t} = \frac{(1 - \sum_{i=1}^p p_i)exp(X_t\delta)}{(1 - \sum_{i=1}^p p_i)} = exp(X_t\delta) \ast \delta$$

(5)
Estimation of the PAR($\rho$) is relatively straight forward and was conducted in R.\(^{19}\) Both the order of the AR process and the lag lengths of the variables were determined by which model produced a significantly lower AIC information criteria. While we have theoretical expectations that there is a dynamic relationship underlying the activities of the women’s movement and anti-feminist movement, as well as our covariates, our theory is not sufficiently refined enough to be able to state exactly the dynamic aspects of this relationship. Instead we depend on a variety of statistical tests to assess the best model specification in terms of the AR process and the lag lengths for the covariates.

Results

We begin by examining the relationship between the feminist movement and the anti-feminist movement. Our discussion of the results will focus on the specific measures to test our hypotheses and only briefly touch on the controls for political and gender opportunities. Table 1 reports the results for the feminist movement and the anti-feminist movement without our control for feminist movement success. In these models, we find support for hypotheses 1 and 2 that the women’s movement and the opposition movement are responding to each other.\(^{20}\) An increase in feminist movement events is positively and significantly related to the number of anti-feminist events in a quarter.

Moreover, the number of anti-feminist events is positive and significantly related to

\(^{19}\)Code can for estimating the PAR($\rho$) can be found at [http://www.utdallas.edu/~pbrandt/pbrandt/Code_%26_Software.htm](http://www.utdallas.edu/~pbrandt/pbrandt/Code_%26_Software.htm)

\(^{20}\)In the Gaussian time series framework the Granger Causality test is commonly employed to determine if there is an endogenous relationship between two variables (Freeman 1983, Granger & Newbold 1974). As discussed above it is inappropriate to use this method on an event count time-series because of the distributional mismatch. However, as a robustness check we transformed the events counts into the z-score of the event count series to obtain a continuous distribution and then ran Granger Causality tests. The null for the Granger Causality tests is that one variable does not Granger cause the other variable. Failing to reject one of the null hypotheses indicates a lack of an endogenous relationship. In this case we fail to reject both the null that the feminist movement events do not Granger cause anti-feminist movement events and anti-feminist movement events do not Granger cause feminist events. Granger Causality has two limitations. First, it cannot test if two series are contemporaneously correlated. Second, it may not detect endogeneity between two variables if the two variables react to one another at a faster rate than we observe the data. Nonetheless, the results of the Granger Causality tests reinforce the findings in Table 1.
Table 1: Women’s Movement and Opposition Movement – Without Bill Passage

<table>
<thead>
<tr>
<th></th>
<th>Movement</th>
<th>Opposition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short-Run</td>
<td>Long-Run</td>
</tr>
<tr>
<td><strong>β (s.e.)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anti-Feminist Events$_t$</td>
<td>0.08**</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td></td>
</tr>
<tr>
<td>Pro-Feminist Events$_t$</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic President$_t$</td>
<td>-0.15</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.14)</td>
</tr>
<tr>
<td>Democratic State Legislatures$_t$</td>
<td>0.06**</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Women’s Movement Opinion$_{t-2}$</td>
<td>-0.22*</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>(0.13)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Women’s Movement Opinion$_{t-3}$</td>
<td>-0.15</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>∆ Women’s Workforce$_{t-3}$</td>
<td>0.14</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(0.18)</td>
<td></td>
</tr>
<tr>
<td>∆ Women’s Workforce$_{t-4}$</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>—</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>∆ Women in Congress$_{t-1}$</td>
<td>-0.05**</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.02)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.27</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>(0.81)</td>
<td>(0.38)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ρ</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ρ1</td>
<td>0.06</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>—</td>
</tr>
<tr>
<td>ρ2</td>
<td>0.22**</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>—</td>
</tr>
<tr>
<td>ρ3</td>
<td>0.31**</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>—</td>
</tr>
</tbody>
</table>

Wald Statistic: 40.26  pr > Wald: 0.001
Log-Likelihood: -292.41
AC: 628.83
Degrees of Freedom: 129

Temporal Domain: 1960-1995
Two-tailed Significance Tests: †: p ≤ 0.1; * : p ≤ 0.05; ** : p ≤ 0.01
Standard errors in parentheses.

the number of feminist events in a quarter. The magnitude of these effects are best seen by looking at the long-run and short-run effects, which are also reported in Table 1. The long-run effects indicate that movement activity has a much larger impact on the mobilization of the oppositional movement, than the oppositional movement.
has on women’s movement mobilization. The long-run effect of anti-feminist events in
the feminist movement model suggests that for every event held by the anti-feminist
movement the feminist movement responds with 0.05 events. On the other hand, for
every feminist event the anti-feminist movement responds with 0.49, or approximately
half, of an event.\footnote{We might expect variation across different types of events. Previous research (McAdam & Su 2002,
Walker, Martin & McCarthy 2008) have shown both that police violence reduces mobilization and that very
large (and therefore publicly visible) protest events might increase opposition movement mobilization. As
a robustness check, we also tested these possibilities although both are very rare events when looking at
women’s movement/countermovement mobilization. The results reported in this paper remain robust to
the inclusion of a measure of the number of events each quarter with 10,000 or more participants and two
measures of police action – the number of events where the police used physical tactics in that quarter and
the events where the police used violence against protestors in that quarter. We omit these controls from
our analysis to keep the models as parsimonious as possible given our limited number of time points, and
because the measures have some limitations which make them less accurate than we would like. For example,
the measures of violence are event counts of police violence but they do not indicate who was the target of
the attack – only whether violence was used.}

Movement and oppositional movements also pay attention to changes in political
and gender opportunities and adjust their behavior accordingly. Higher numbers of
state legislatures controlled by the Democratic Party increase the amount of femi-
nist movement activity and decrease the amount of anti-feminist activity. We cannot
conclude that having the Democratic Party as an ally resulted in the adoption and
implementation of the feminist movement agenda; but our results do suggest that the
women’s movement mobilizes in response to the increased opportunities offered by
democratically controlled state legislatures. Along the same lines, when the prospects
of achieving their goals are restricted at the state level the anti-feminist movement
appears to demobilize. Having a Democrat in control of the White House is not a
significant predictor of feminist or anti-feminist movement events.

As public opinion moves toward supporting greater gender equality, women’s move-
ment activity decreases and anti-feminist activity increases. Transforming public at-
titudes about the role women should play in society is a fundamental goal of the
feminist movement. The negative relationship between the feminist movement and
public opinion suggests demobilization of the movement occurs as it accomplishes
one of their goals. More progressive attitudes about gender have the opposite effect on the anti-feminist movement; they appear to create new grievances, causing them to mobilize in hopes of reversing attitudes. The number of women serving the United States Congress is also negatively related to the number of events in the feminist movement and positively related to the number of events in the anti-feminist movement. It is likely that this variable affects movement mobilization in the same way as public opinion, since a substantial amount of research has documented that women serving in Congress are strong supporters for women's rights legislation (Swers & Larson 2005, Swers 2002, Dodson et al. 1995). With strong advocates in Congress the women's movement demobilizes, but such advocacy for women's rights likely creates a set of new grievances for the anti-feminist movement, causing them to mobilize. Looking at the long-run effects of these variables, again they are much larger on the movement opposing the women’s movement than on the feminist movement. The only gender opportunity measure not significant in the analysis is women’s workforce participation.

The central reason for using the PAR(\(\rho\)) is our theoretical expectation of a dynamic relationship between events within a movement. These dynamics are captured by the inclusion of a linear autoregressive component in the model (\(\rho\)), which is reported in Table 1 below the coefficients for the independent variables. The coefficients on \(\rho\) indicate the impact of an event in one time period being carried out into the future. Furthermore, as we discussed above, the ACF and PACF suggest that an 3\textsuperscript{rd} order autoregressive process bests describes these series, thus the effects of events are not only felt one quarter later, but may have have an impact for multiple quarters.\(^{22}\) While not all the coefficients for the \(\rho\)'s reported in Table 1 reach traditional levels of significance there is considerable evidence of a dynamic relationship at work. Time dependence is further tested for using a Wald test. The null for this test is no temporal dependence

\(^{22}\)Conceptually we can think about \(\rho\) like a lagged dependent variable. In our model specification \(\rho_1\) represents a lag of one quarter, \(\rho_2\) represents a lag of two quarters, and \(\rho_3\) represents a lag of three quarters.
exists between events. If we fail to reject the null then we can use traditional event count estimators to model the data. On the other hand, if we reject the null it is inappropriate to use event count models that fail to address issues of temporal dependence. The results of the Wald test, reported at the bottom of Table 1, indicate that in both models the null hypothesis that there is no temporal dependence between event counts is rejected, indicating that the Poisson Autoregressive model is the appropriate method for these data.

We assess Hypotheses 3 and 4 by adding the passage of feminist bills to our models of movement and oppositional movement events. These results are reported in Table 2. We expected to find that women’s movement policy success would result in a mobilization of the anti-feminist movement because new grievances for the opposition are created when the movement is successful (H3). We also expected a demobilization of the movement once they accomplished the goals represented by passing legislation (H4). We find strong support for hypothesis 3. The passage of feminist legislation is positively and significantly related to mobilization of the anti-feminist movement.\(^{23}\) The long-run effect for bill passage suggests that for every bill passed the opposition movement mobilizes a half of an event. As for the impact of success on the activities of the women’s movement, the passage of feminist legislation is negatively related to events as expected in hypothesis 4, but the relationship fails to reach traditional levels of statistical significance. Thus we find little support for the idea that demobilization occurs as a result of success in the feminist movements. Our lack of clear support for this hypothesis could be a result of timing. If the women’s movement demobilizes due to success, but then remobilizes in response to the increase mobilization of the anti-feminist movement all within the same quarter, this might cancel out the effects of demobilization. Unfortunately, our unit of time is too large to allow us to determine if this process is occurring. Additionally, we could fail to find strong evidence of demo-

\(^{23}\)This variable is significant at p=.1 in a two-tailed test. Because our original hypothesis was one-tailed, the hypothesis is confirmed at the generally accepted level of statistical significance.
Table 2: Women’s Movement and Opposition Movement – Full Model

<table>
<thead>
<tr>
<th></th>
<th>Movement</th>
<th>Opposition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β (s.e.)</td>
<td>Short-Run</td>
</tr>
<tr>
<td>Anti-Feminist Events$_t$</td>
<td>0.13** (0.03)</td>
<td>0.002</td>
</tr>
<tr>
<td>Feminist Events$_t$</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Democratic President$_t$</td>
<td>-0.27 (0.47)</td>
<td>-0.003</td>
</tr>
<tr>
<td>Democratic State Legislatures$_t$</td>
<td>0.02** (0.06)</td>
<td>0.0003</td>
</tr>
<tr>
<td>Women’s Movement Opinion$_{t-2}$</td>
<td>-1.11** (0.43)</td>
<td>-0.02</td>
</tr>
<tr>
<td>Women’s Movement Opinion$_{t-3}$</td>
<td>-0.54† (0.33)</td>
<td>-0.01</td>
</tr>
<tr>
<td>Δ Women’s Workforce$_{t-3}$</td>
<td>0.72 (0.83)</td>
<td>0.01</td>
</tr>
<tr>
<td>Δ Women’s Workforce$_{t-4}$</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Δ Women in Congress$_{t-1}$</td>
<td>0.43† (0.25)</td>
<td>0.01</td>
</tr>
<tr>
<td>Δ Passage of Bills</td>
<td>-2.06 (1.71)</td>
<td>-0.03</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.48 (1.73)</td>
<td>0.01</td>
</tr>
<tr>
<td>$\rho_1$</td>
<td>0.14† (0.08)</td>
<td>0.15*</td>
</tr>
<tr>
<td>$\rho_2$</td>
<td>0.35** (0.08)</td>
<td>0.10</td>
</tr>
<tr>
<td>$\rho_3$</td>
<td>0.38** (0.08)</td>
<td>0.06</td>
</tr>
<tr>
<td>Wald Statistic</td>
<td>319.07</td>
<td></td>
</tr>
<tr>
<td>pr &gt; Wald</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-256.76</td>
<td></td>
</tr>
<tr>
<td>AIC</td>
<td>535.52</td>
<td></td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>115</td>
<td></td>
</tr>
</tbody>
</table>

Temporal Domain: 1960-1992

Two-tailed Significance Tests: †: p ≤ 0.1; *: p ≤ 0.05; **: p ≤ 0.01

Standard errors in parentheses.

Mobilization as a result of bill passage if bill passage does not indicate that a particular goal has been met. Rather, the feminist movement may continue to mobilize after the passage of legislation to make sure the legislation is implemented and enforced in
a way consistent with the feminist movement’s goals.\textsuperscript{24}

There is little change between Tables 1 and 2 in the effects of the political opportunity variables when we add the passage of feminist legislation to the analysis. We again find greater numbers of state legislatures controlled by the Democratic party increase feminist movement activity; however, while the sign remains consistent, the negative relationship between Democratic state legislatures and the anti-movement is no longer significant. Gender opportunities also still appear to play a role in shaping movement and oppositional movement activity, although we see some changes in these effects for a few of these variables. When we control for bill passage, the effect of women’s representation in Congress changes sign, suggesting that movement mobilization increases as the number of women elected to the U.S. Congress increases. The sign shift is not surprising, when we control for the level of bill passage, we would expect that women’s movement would mobilize in response to the opportunity presented by having women in Congress – just as we see them responding to the number of Democratic state legislatures. The relationships between the anti-feminist movement and women elected to the U.S. Congress is no longer significant with the bill passage measure, but is still signed in the same direction as in the previous analysis.

As a robustness check we also analyzed only those events associated with the abortion rights movement and the anti-abortion movement. These results and a detailed discussion of these results can be found in Appendix B. We still find support for H1 and H2, that movements and counter movements respond to each other when just focusing on the campaign surrounding abortion. No support is found for H3 and H4 regarding the effect of policy success of the feminist movement but given that much of the battle surrounding abortion have occurred mainly in the courts and state legislatures and less

\textsuperscript{24}The Equal Rights Amendment’s passage in the U.S. Congress and the Supreme Court’s decision in \textit{Roe v. Wade} might be considered particularly important events. We ran a series of robustness checks that also include variables to control for these specific events. Our results remain consistent even when these significant events are taken into consideration. Several of the relationships, in particular those associated with the anti-feminist movement, become stronger with these controls in the model. We report the more parsimonious models here.
so in Congress, we believe that different measures of policy success might be necessary to accurately test hypotheses 3 and 4 for this issue area.

**Conclusion**

In the analyses above, we focused primarily on two sets of hypotheses. The first set focuses on the degree to which opposing movements mobilize in reaction to their counterpart’s mobilization. Here we find that anti-feminists movements mobilize in reaction to visible events staged by the feminist movement (confirming H1) and that feminists in turn mobilized in reaction to visible mobilization of conservative movements (confirming H2). Clearly, feminists and the conservative movements that oppose them are entwined in a dramatic dance: visible feminist events inspire the movements that oppose them to mobilize, and when they do, the feminist movements mobilize in response. Our analysis, which controls for other possible effects, shows clear effects of these reactive mobilizations occurring. In this dance, however, one partner clearly follows more closely. Feminist movement activity had a much larger impact on the anti-feminist movement; although feminists responded to anti-feminist events, the effect was not as strong.

We also found that movements mobilize in reaction to policy successes with a few caveats. The second set of hypotheses examined whether anti-feminist movements were mobilized in reaction to feminist policy successes (H3) and whether feminist movements de-mobilized after policy successes (H4). Here we found that when women’s movement legislation was adopted, the conservative movements that opposed them were mobilized by these policy successes (confirming H3) and that this effect was not just in the short term but also over the long run. On the other hand, we found little evidence that feminist successes— at least in the form of achieving feminist legislation – demobilized the women’s movement (H4). Thus, our results suggest that both policy success and mobilization inspire opposing movements to mobilize. We did not have available an
good or easily available measure of the passage of anti-feminist legislation, but clearly one important point of future research would be to examine how these might affect feminist mobilization over the long-term.

These findings have several theoretical and methodological implications for the study of social movements. First, our research suggests that many of the quantitative models of women’s movement mobilization and outcomes are likely to be mis-specified. Given the very strong effect that these movements have on each other, quantitative research on women’s movement mobilization or outcomes should include measures that take into account countermovement mobilization as well. Many qualitative scholars of women’s movements or of social movements generally have argued for the importance of the wider organizational fields in explaining mobilization and outcomes (see for example Klandermans 1992, Evans 1997, Rose 2011, Rohlinger 2002), but quantitative studies have largely ignored these calls. Our study shows that where movements face an oppositional movement, their mobilization over time cannot be understood without consideration of the opposition as well. Our results also suggest that previous policy success is also an important consideration in understanding conservative movement or countermovement mobilization. Although we do not yet know if the same dynamic would occur for other movements in opposition to each other, if these results hold across multiple countermovements, our research also suggests that explanations of their mobilization may be slightly different from the explanations for why other movements mobilize. This suggests the continued importance of both additional theorizing about countermovements and the need for continued quantitative testing of some of the existing theoretical works such as (Meyer & Staggenborg 1996).

Second, our analysis has interesting implications for understanding the long-term cycles of women’s activism since one implication of our results is that as long as one of these movements remains active, the other will also mobilize. This contradicts the literatures on waves of the women’s movement (see for example Rupp & Taylor 1987) and on cycles of protest (see for example Tarrow 1994, Koopmans 1993) that
see movement mobilization abating in part because of conservative backlash. Our results suggest instead that conservative forces *lengthen* the waves of mobilization. Unfortunately our data presents only a short snapshot from 1960 to 1995, making longer-term analyses impossible and leaving many questions unanswered about the current and future dynamics of the women’s movement and anti-women’s movement. Does this mean that women’s movement issues can never be fully settled, and that feminists and anti-feminists remain forever locked in battle over policy issues? There is evidence of course that some battles are won; women for example now do routinely work outside of the home and participate in politics, things unthinkable a century ago. On the other hand, until recent debates about access to birth control that arose with Obamacare and funding for Planned Parenthood, access to birth control might also have been considered a settled issue. All of this suggests that much more work needs to be done in theorizing what leads to an issue being settled, and in exploring specific issue campaigns within the feminist and anti-feminist movements. These questions suggest the importance of building even longer time series and collecting movement mobilization data even during highly conservative times.

Third, the paper suggests the importance of altering our empirical and theoretical focus when studying social movement mobilization. Our results highlight the importance of utilizing theories of social movement mobilization that focus on continued mobilization over time rather than those developed to study initial mobilization on the concept of cycles of protest. Most studies of social movement mobilization examine factors that while changing over time exist from the movement’s inception (e.g., resources, grievances, political opportunities). The results of this study suggest that the causes of movement mobilization might shift over time – in particular oppositional movement mobilization may become more important in the later years of a movement’s mobilization. Meyer & Staggenborg (1996), for example, argue that movement counter-movement dynamics are kept alive by opposing movements shifting among venues and preventing the institutionalization of policies on the other side. All of this suggests
the need to examine movement mobilization and policy successes in state legislatures and the courts, as well as to consider larger processes like the institutionalization of social movements to develop a fuller understanding of the dynamics of movements and the movements that oppose them.

Our analysis also has important methodological implications that develop from our finding of a dynamic relationship underlying events within both the feminist and anti-feminist movements. The activities of the women’s movement in one time period influences the events and activities of the movement at future time periods. This raises both theoretical and methodological issues concerning future quantitative research on women’s movement in particular and other social movements more generally. We expect that the time dependence between events observed in the women’s movement is not isolated to this particular movement and the oppositional movement associated with it. Rather, we expect that temporal dynamics underly the mobilization and demobilization of other social movements. However, social movement scholars often examine cross-sectional data and even when utilizing time series data do not incorporate dynamic analyses into their empirical studies of social movement activities or outcomes. To truly understand the processes of mobilization and demobilization these dynamics need to be incorporated into both theories and empirical studies of social movements. Moreover, given the negative consequences of ignoring time dependence (or the event counts distributions of data), our findings suggest that social movement scholars need to carefully select models that best match the data generating processes. Commonly used Poisson or Negative Binomial models for count data may not be appropriate choices for the data generating process underling count data of movement events.

Moreover, while time series analysis often examines endogenous effects of variables by looking at how previous time periods of one variable influence current levels of the other variable, we find a great degree of simultaneity in the interaction of movements and oppositional movements. Although we tested different lag structures and
are looking at quarterly data, which are already more finely grained than most social movement data, we found that the movements react to each other in the same time period. Thus, we suspect that the reactions of movement to opposition movement events and vice versa are very quick, occurring on a daily, weekly, or monthly basis. One unanswered question, however, is whether the quick reactions we find in the case of the women’s movement are mirrored in other movements. One possibility is that timing varies depending on the movement and its relationship with the opposing movement. Some oppositional movements, perhaps those that are acting in highly confrontational ways or endanger activists in personal ways, may be more likely to inspire immediate response, while other interactions may be slower. All of this suggests that the unit of analysis in movement research deserves more scrutiny, particularly since most analyses are conducted using the year as the unit of analysis. As movement scholars collect more event data, it may be helpful to focus on more finely grained data, and to have more attention paid to the time unit used when research is conducted.

Finally, it is important to remember that our event data consists only of those highly visible events of movements that registered in a major national newspaper. Hence, we have already selected those events that reach the public sphere. We do not know whether an unbiased measure of all movement events would have produced the same results. But the results do suggest that within the public sphere, movement and countermovement activity affect each other. Future research would therefore want to consider in greater detail how the media, which serves as the mediator of the events in our data, influences the dynamic relationship between movements and countermovements. Acknowledging the biased nature of event data also suggests that women’s movement supporters have reason for optimism even when oppositional movements are strong. Since the women’s movement has been identified as differing from other movements because they focus on all sorts of societal change and not just on changing government policy (see Van Dyke, Soule & Taylor 2004), that even the policy changes they acquire with limited focus nonetheless inspire opposition suggests that they have
made an important impact on society.
References


A Data

Table 3: Descriptive Statistics: 1960q1 to 1995q1*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro-Feminist Events</td>
<td>5.12</td>
<td>4.57</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>Anti-Feminist Events</td>
<td>2.86</td>
<td>4.32</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Democratic President</td>
<td>0.40</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Democratic State Legislature</td>
<td>27.61</td>
<td>4.37</td>
<td>18</td>
<td>37</td>
</tr>
<tr>
<td>Women’s Movement Opinion</td>
<td>61.61</td>
<td>3.58</td>
<td>54.93</td>
<td>68.12</td>
</tr>
<tr>
<td>∆ Women’s Workforce</td>
<td>0.16</td>
<td>0.24</td>
<td>-0.5</td>
<td>1.10</td>
</tr>
<tr>
<td>∆ Women in Congress</td>
<td>0.27</td>
<td>2.14</td>
<td>-6</td>
<td>22</td>
</tr>
<tr>
<td>∆ Bill Passage*</td>
<td>0.01</td>
<td>1.05</td>
<td>-1</td>
<td>4</td>
</tr>
</tbody>
</table>

*Data Range 1960q1 to 1991q1

Dependent Variables: We model two dependent variables: all women’s movement events and all events that oppose the women’s movement. In additional analysis reported in Appendix B we move abortion rights and anti-abortion movement events. The event data are taken from the Dynamics of Collective Action data set, which assembled all collective action events from 1960 to 1995 reported in the daily editions of the New York Times. For a extensive description of the data collection process, see Walker, Martin, and McCarthy (2008, pp. 45-48) and Earl, Soule and McCarthy (2003). The event data used here were created by aggregating by quarter the 1331 events which made claims related to the women’s movements or abortion; these events were then coded according to whether they supported or opposed feminist positions. We define feminist events as those events which take positions combatting any subordination on the basis of gender or seeking to improve the status of women. Concretely, this includes events focused on combatting sex discrimination; activities critiquing sex role stereotyping in all areas; support for the Equal Rights Amendment and the expansion and protection of reproductive rights; advocating government support for mothers, poor women, and displaced homeowners; concern about the working conditions, pay, and benefits of all women workers; advocating increased funding for research specific
to women; supporting gay and lesbian rights; advocating for family law reform; opposing violence against women; encouraging increased political representation of women and women’s issues; advocating for the decriminalization of prostitution, and opposing pornography. The movement that arose in opposition to the feminist movement focused primarily on campaigns to oppose public policies that further the equality of the sexes, especially the passage of the Equal Rights Amendment, and the expansion of reproductive rights, including the legalization of abortion following the Supreme Court case Roe V. Wade. It is also opposed to gay and lesbian rights, liberalized sex education, public funding for child care facilities, feminist curricula, and affirmative action. In addition, some movement events criticized specific claims of sex discrimination, domestic violence, and sexual harassment.

Because the valiance coding in the Dynamics of Contention data can sometimes be misleading (Olzak 2010), all those events which were related to women or abortion were coded by hand by three coders (the two authors and one graduate assistant) using the what, where, why, and how fields as well as the title of the article. The specific coding of particular events and the code to retrieve the events that made claims about the women’s movement are available by request from the authors. Cohen’s kappa statistic is generally considered a robust measure of intercoder reliability across multiple coders (Lombard, Snyder-Duch & Bracken 2010, Landis & Koch 1977, Fleiss & Cohen 1973) since it takes into account the probability that coders could attach similar values by chance. In our case, Cohen’s kappa indicated that there was high levels of intercoder reliability for both pro-feminist events (k=0.81, p=0.000) and anti-feminist events (k=0.87, p=0.000).

We recognize that this data set does not represent an unbiased or complete collection of all movement events since the extensive literature on the bias of event data gathered from newspapers suggests that our list of events are likely to represent large, dramatic events involving physical violence, formal organizations or elites involved in policy making (McCarthy, McPhail & Smith 1996, Oliver & Myers How Events Enter the
We are primarily interested in the relationship between the women’s movement and the movement that opposes it. As a result in every model we include the event measure for the opposing movement. For example, when modeling the general women’s movement events we include the measure of general anti-feminist movement events as well. Additionally, our models include controls for political opportunities, gender opportunities, and women’s movement success.

**Feminist Movement Success.** To examine the effect of movement success on movements and the movements that oppose them, we use the number of pieces of feminist legislation which passed by the House and the Senate and became law. To calculate this measure we started with Christina Wolbrecht’s (2000) data on bill sponsorship and co-sponsorship of feminist legislation to create a list of feminist bills proposed in each session of Congress. We then researched the legislative history of each bill to determine which bills became law. This measure is coded to reflect the quarter a piece of legislation become law. Data is only available until 1992, so inclusion of this variable reduces the length of our time series.

**Political Opportunities:** We use two different measures of political opportunities: party control of state legislatures and party of the president. Party control of the
state legislature is the number of state legislatures under the control of the Democratic Party. Party control of the presidency is a dummy variable series with 1 indicating that a Democrat is in the White House. Presidential support or opposition to the women’s movement may be more specific to presidential administration. Banaszak (2010) notes that many Republican presidents early in the women’s movement were more supportive than presidents later in the movement. We tested an alternative specification of this measure of political opportunity by creating dummy variables for each presidential administration, excluding one presidential term in our analysis. We find that there is variation across presidential administrations in terms of the number of events, but, like below, it appears which party the president is from has little influence on the number of events even in a given time period. The results for the key variables reported in the manuscript above are robust to this alternative specification.

**Gender Opportunities:** We measure gender opportunities using three measures designed to capture both political and social opportunities: public opinion about gender, women’s workforce participation, and the proportion of women in the U.S. Congress. First, we use a public opinion measure that is specific to the particular type of events we use as a dependent variable. Traditional measures of public opinion about gender attitudes often create problems for time series research because the questions are not asked consistently, at regular intervals, and at a frequency that corresponds other political phenomena we are interested in analyzing. To overcome these problems we constructed a single measure of public opinion about gender attitudes over time using algorithm developed by James Stimson to create public policy mood (Stimson 1991, Ondercin 2007). For technical details about how to calculate the measure please see Stimson (1991). The logic underlying the measure is that all the questions about gender are tapping into some latent trait. The algorithm then uses the shared variation in public opinion questions to estimate a measure of the latent concept, in our case attitudes about gender.

The gender attitudes series is based on 205 survey questions about the roles of
men and women in society and different gender related policies. Each survey question was asked at least twice using the exact same question wording. Survey questions that are very similar but have small question wording changes are counted as different questions to ensure that any movement in series is artificial resulting from a change in wording. Questions were gathered from iPoll the Roper Center’s on-line archive of public opinion data and National Election Studies. Eight Roper-defined categories were used to identify questions on iPoll: women, men, equality, work, family, rights, abortion and sex. The measure is coded such that higher scores reflect more liberal attitudes defined as responses that indicate equality between men and women or minimize the differences between the sexes. Questions were excluded if the response categories did not provide a clear indication of liberal or conservative position.

As a result of how the measure is calculated the resulting series has an artificial metric. Meaning that there is no inherent meaning to say the 50 point mark like there is with a traditional measure of public opinion. We cannot say that 50% of the population agrees with some position or holds a certain set of attitudes. However, change in the levels of the series are still meaningful. If we move, say from 50% to 60% we can say there is a 10% increase in support for gender attitudes.

When modeling all women’s movement and anti-feminist movement events we use a general measure of gender attitudes. When modeling the abortion rights and anti-abortion movements we use measures of public opinion on abortion.

Second, we control for women’s increased workforce participation by the proportion of women 16 years or older in the civilian labor force. The third measure of gender opportunities is a count of the number of women serving the U.S. Congress provided by Center for American Women and Politics (CAWP 2010).

Third, we include the proportion of women in the U.S. Congress. This measure helps us capture the political opportunities available to women.

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B Abortion Rights and Anti-Abortion Mobilization

Examining a specific campaign within the larger feminist movement and anti-feminist movement allows us to explore whether the relationships we discussed above also characterize more focused activity surrounding a single issue campaign. The issue of abortion is perfect for such an exploration since much of the popular discussion of the mobilization around abortion characterizes it in terms of reactions to both movement activity and policy successes. Given that the abortion movement started later the time span of our analysis is restricted with abortion rights 1967q2-1994q4 and anti-abortion 1971q2-1994q4. The introduction of bill passage further restricts our analysis for abortion rights to 1967q2-1992q4 and anti-abortion 1971q2-1992q4. The only other difference in our model specification is that we use measure of public opinion that utilizes only questions that focus on abortion.

Table 4 reports the basic model of both abortion rights movement and anti-abortion movement events. Once again we see that the movements are responding to each other. Activities in the abortion rights movement cause the anti-abortion movement to mobilize and increase the number of anti-abortion events. Additionally, when the anti-abortion movement holds an event the abortion rights movement mobilizes as well, holding more events. When we look at the long-run effects we find that the abortion rights movement activity had substantially more impact on the anti-abortion movement than the anti-abortion movement had on the abortion rights movement. Looking at the long-run effects we see that one event held by the anti-abortion movement results only in 0.10 events in the abortion rights movement. However, one event in the abortion

\[26\] Similar to the pro-feminist and anti-feminist movements, we converted the abortion rights and the anti-abortion rights event counts into z-scores to provide a continuous distribution in order to conduct Granger Causality tests. We fail reject the null that abortion rights events do not Granger cause anti-abortion events. However, we can reject the null that anti-abortion events do not Granger cause abortion rights events. Because Granger causality is not found going in both directions we once again do not run into problems with endogeneity.
Table 4: Abortion Rights Movement and Anti-Abortion Movement – Without Bill Passage

<table>
<thead>
<tr>
<th></th>
<th>Movement</th>
<th>Opposition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$ (s.e.)</td>
<td>Short-Run</td>
</tr>
<tr>
<td>Anti-Abortion$_t$</td>
<td>0.11** (0.01)</td>
<td>0.08</td>
</tr>
<tr>
<td>Abortion Rights$_t$</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Democratic President$_t$</td>
<td>0.33 (0.22)</td>
<td>0.23</td>
</tr>
<tr>
<td>Democratic State Legislatures$_t$</td>
<td>-0.001 (0.03)</td>
<td>0.001</td>
</tr>
<tr>
<td>Abortion Opinion$_{t-1}$</td>
<td>0.01 (0.11)</td>
<td>0.01</td>
</tr>
<tr>
<td>Abortion Opinion$_{t-3}$</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>$\Delta$ Women’s Workforce$_{t-3}$</td>
<td>-1.98** (0.39)</td>
<td>-1.36</td>
</tr>
<tr>
<td>$\Delta$ Women’s Workforce$_{t-4}$</td>
<td>1.23** (0.56)</td>
<td>0.89</td>
</tr>
<tr>
<td>$\Delta$ Women in Congress$_{t-1}$</td>
<td>-0.03 (0.03)</td>
<td>-0.02</td>
</tr>
<tr>
<td>$\Delta$ Women in Congress$_{t-2}$</td>
<td>-0.06 (0.08)</td>
<td>-0.04</td>
</tr>
<tr>
<td>Intercept</td>
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<td>0.14</td>
</tr>
<tr>
<td>$\rho_1$</td>
<td>0.07 (0.06)</td>
<td>0.07</td>
</tr>
<tr>
<td>$\rho_2$</td>
<td>0.18** (0.07)</td>
<td>0.11†</td>
</tr>
<tr>
<td>$\rho_3$</td>
<td>-0.03 (0.08)</td>
<td>-0.07</td>
</tr>
<tr>
<td>Wald Statistic</td>
<td>9.18</td>
<td>6.25</td>
</tr>
<tr>
<td>pr &gt; Wald</td>
<td>0.03</td>
<td>0.10</td>
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<tr>
<td>Log-Likelihood</td>
<td>-179.84</td>
<td>-193.41</td>
</tr>
<tr>
<td>AIC</td>
<td>381.68</td>
<td>406.81</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>99</td>
<td>83</td>
</tr>
</tbody>
</table>

Temporal Domain: 1967-1995

Two-tailed Significance Tests: †: p ≤ 0.1; *: p ≤ 0.05; **: p ≤ 0.01

Standard errors in parentheses.

The abortion rights movement results in over 3 events in the anti-abortion movement.

Political opportunities appear to have a more limited effect on the abortion rights
and anti-abortion movement than on the general women’s movement and the con-
servative movement that opposes it. An increase in the number of state legislatures controlled by the Democratic Party still reduces the number of events held by the anti-abortion movement. But party control of the state legislature has no influence on the behavior of the abortion rights movement. As before, party control of the presidency shows no significant relationship with either movement.

Gender opportunities continue to shape both movements’ activities even when we look at the specific issue of abortion, although the configuration of effects is slightly different than when we look at all events. Using a specific measure that focuses on abortion attitudes, we find that attitudes about abortion have little influence on the activities of the abortion rights movement. On the other hand, when abortion attitudes become more liberal, we see an increased number of events in the anti-abortion movement. A liberal shift in attitudes creates a new grievance for the anti-abortion activists to mobilize against. We also find a significant relationship between women’s workforce participation and the activities of the abortion rights movement. This relationship appears to be complex and contradictory. Women’s workforce participation lagged three quarters is negatively and significantly related to the abortion rights movement holding events. However, the relationship is reversed at the fourth lag, where women’s workforce participation increases the number of events in held by the abortion rights movement. Taking both of those factors into consideration and examining the long-run effects, it appears that overall women’s workforce participate has a net negative effect on abortion rights movement activity. Finally, as women’s representation in Congress increases we see a significant increase in the mobilization of the anti-abortion movement.

We also see the dynamic relationship reflected in the coefficients of ρ reported in Table 4. Only the coefficient on ρ2 reaches traditional levels of significance. Once again we reject the null associated with the Wald test, indicating time dependence in our data for the abortion rights movement model. For the anti-abortion model we can reject the null at the 0.10 level but not the .05 level, suggesting that issues with
time dependence are not as severe between the counts of anti-abortion events. We still feel that the \( \text{PAR}(\rho) \) is the appropriate model choice. We are concerned about the negative consequences of ignore time dependence and, perhaps more importantly, our theory suggests a dynamic relationship. We should note that there is no disadvantage to this approach because if there is no time dependence between counts the \( \text{PAR}(\rho) \) reverts to a standard Poission (Brandt & Williams 2001). For these reasons, we prefer to take the the more conservative approach and model the data with the \( \text{PAR}(\rho) \), making the \( \text{PAR}(\rho) \) the better theoretical fit.

Table 5 includes the measure of feminist bill passage in the U.S. Congress. The results are rather similar to those reported in Table 4, the activities in the abortion rights movement influence the events in the anti-abortion movement, and the activities of the anti-abortion movement influences the abortion rights movement. An event held by the anti-abortion movement results in the abortion rights movement holding about 0.14 events. An event held by the abortion rights movement results in the anti-abortion movement holding 3.6 events. These results continue the trend that events of the opposition movement have a smaller impact on the movement compared to the impact movement events has on mobilization of the opposition. The bill passage measures are signed in the predicted direction, indicating demobilization in the abortion rights movement (H3) and mobilization of the anti-abortion movement (H4), but neither coefficient reaches traditional levels of statistical significance. The limited relationship between movement success and the abortion movements may be a product of our measure of movement success. While the U.S. Congress acted on the issue of abortion, the majority of abortion policy making has occurred elsewhere – in state legislatures and in the courts. Additionally, our measure of feminist movement success is a general measure, not specifically focused on the issue area of abortion. As a result, our measure of policy success may contain too much noise to uncover a clear relationship.

The relationships between the political and gender opportunities and movement activities remain consistent in the models with bill passage with respect to the decisions
<table>
<thead>
<tr>
<th>Movement</th>
<th>Opposition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Short-Run</td>
</tr>
<tr>
<td>Anti-Abortion Events,(t)</td>
<td>0.13**</td>
</tr>
<tr>
<td>Abortion Rights Events,(t)</td>
<td>—</td>
</tr>
<tr>
<td>Democratic President,(t)</td>
<td>0.42</td>
</tr>
<tr>
<td>Democratic State Legislatures,(t)</td>
<td>-0.01</td>
</tr>
<tr>
<td>Abortion Opinion,(t-1)</td>
<td>-0.05</td>
</tr>
<tr>
<td>Abortion Opinion,(t-3)</td>
<td>—</td>
</tr>
<tr>
<td>∆ Women’s Workforce,(t-3)</td>
<td>-1.91**</td>
</tr>
<tr>
<td>∆ Women’s Workforce,(t-4)</td>
<td>1.14†</td>
</tr>
<tr>
<td>∆ Women in Congress,(t-1)</td>
<td>-0.02</td>
</tr>
<tr>
<td>∆ Women in Congress,(t-2)</td>
<td>0.03</td>
</tr>
<tr>
<td>∆ Passage of Bills,(t)</td>
<td>-0.15</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.52</td>
</tr>
<tr>
<td>ρ1</td>
<td>0.09</td>
</tr>
<tr>
<td>ρ2</td>
<td>0.19*</td>
</tr>
<tr>
<td>ρ3</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

| Wald Statistic | 7.25 | 6.24 |
| pr > Wald | 0.06 | 0.10 |
| Log-Likelihood | -162.91 | -166.56 |
| AIC | 349.82 | 355.13 |
| Degrees of Freedom | 89 | 73 |

Temporal Domain: 1967-1995
Two-tailed Significance Tests: †: \( p \leq 0.1 \); *: \( p \leq 0.05 \); **: \( p \leq 0.01 \)
Standard errors in parentheses.

We clearly reject the null of no time dependence for the Wald test associated with the abortion rights model. Once again, we can reject the null of
the Wald test associated with the anti-abortion model at the 0.10 level of significance. As stated above, the PAR(ρ) model is the appropriate model specification for the series for both theoretical and empirical reasons.