

Red States, Blue States, and Divorce: Understanding the Impact of Conservative Protestantism on Regional Variation in Divorce Rates¹

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Why do states with larger proportions of religious conservatives have higher divorce rates than states with lower proportions of religious conservatives? This project examines whether earlier transitions to marriage and parenthood among conservative Protestants (known risk factors for divorce) contribute to this paradox while attending to other plausible explanations. County-level demographic information from all 50 states is combined from a variety of public data sources and merged with individual records from the National Surveys of Family Growth to estimate both aggregated county and multilevel individual models of divorce. Results show that individual religious conservatism is positively related to individual divorce risk, solely through the earlier transitions to adulthood and lower incomes of conservative Protestants. However, the proportion of conservative Protestants in a county is also independently and positively associated with both the divorce rate in that county and an individual's likelihood of divorcing. The earlier family formation and lower levels of educational attainment and income in counties with a higher proportion of conservative Protestants can explain a substantial portion of this association. Little support is found for alternative explanations of the association between religious conservatism and divorce rates, including the relative popularity of marriage versus cohabitation across counties.

The puzzling paradox of higher divorce rates in more religiously conservative states has eluded explanation in the social sciences. In the aggregate,

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states with larger proportions of conservative Protestants, sometimes labeled as “red states” because of their Republican political affinities, have higher divorce rates than states with lower proportions of conservative Protestants, often characterized as “blue states” because of their Democratic Party leanings (Glenn and Shelton 1985; Lesthaeghe and Neidert 2006). This seemingly occurs despite the centrality of lifelong monogamous heterosexual marriage in conservative religious discourse (Gallagher 2003; Wilcox 2004). As Wilcox notes, the purposeful sacralization of marriage as the bedrock of both family and church imbues marital relationships with particular meaning in conservative churches. Divorce represents a failure to fulfill God’s will for both church and family. For those scholars who have found that religious belief and participation generally strengthen marriages and improve relationship quality (Wolfinger and Wilcox 2008; Lichter and Carmalt 2009), the failure of conservative religious concentration to deter divorce is unexpected. Actually increasing rather than decreasing aggregate divorce risk suggests that something about the cultural and organizational practices of conservative Protestants works against their aspiration to promote stable lifelong marriages. Yet scholars have just begun identifying the mechanisms through which conservative religious influence might affect divorce risk at the individual level (Glass and Jacobs 2005; Regnerus 2007; Vaaler, Ellison, and Powers 2009), and only a few empirical studies have demonstrated an independent effect of religious affiliation on divorce risk once other confounding variables are controlled (Chi and Houseknecht 1985; Call and Heaton 1997; Mullins et al. 2006).

The easy explanation of this “red state–blue state paradox” is that the geographic regions rich in conservative Protestants are unique on many other demographic dimensions less favorable to marital stability, making this paradox simply another ecological fallacy. More conservative regions have residents with lower mean levels of education, younger ages at marriage, quicker transitions to the first birth, higher hazards for subsequent births, lower rates of maternal labor force participation, and lower family incomes (Simpson 2006), which Cahn and Carbone (2010) call “the red family pattern.” Most of these traits increase divorce risk at the individual level (Martin and Bumpass 1989; Call and Heaton 1997).

A second related explanation locates the origins of the paradox in the stronger marital culture in more conservative parts of the country, leading

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to higher overall rates of marriage and lower rates of cohabitation (Lesthaeghe and Neidert 2006). Unions that might progress to cohabitation and then dissolve, or remain nonresidential until dissolution in blue states, may end up as marriages that rapidly divorce in red states, inflating divorce rates (Regnerus 2007; Vaaler et al. 2009).

Inherent in both the demographic and the marital culture explanations, however, lies an unanswered question: Why are cohabiting unions less frequent, why are early marriages and early first births more common, and why is the transition to adulthood faster and maternal labor force participation lower in these conservative regions of the country? Are these characteristics exogenous to religious affiliation or at least partially endogenous with respect to religion? Why aren't the cultural support for marriage and disapproval of divorce in conservative denominations enough to overcome these heightened risk factors for divorce? The answer may lie in the unique religious culture of Christian conservatives. This religious culture praises the sanctity of marriage while simultaneously eliciting patterns of behavior that destabilize marriage. In particular, the emphasis placed on sexual restraint until marriage and abstinence-only education, the strong familism and valuation of children, and the stigma attached to abortion and certain forms of birth control may encourage early family formation and cessation of education among the children of conservative Protestants (Regnerus 2007; Fitzgerald and Glass 2008). Moreover, these effects of religious culture may spill over into local institutions, including schools, medical providers, and employers, potentially affecting not just conservative Protestants themselves but others living in areas dominated by conservative Protestants.

The alternative explanation of the red state–blue state paradox is that some unmeasured source of heterogeneity is responsible for both the concentration of conservative Protestants in a county and that county's divorce rate. The primary candidates are poor local economic conditions (high poverty and unemployment) and southern regional location (Lesthaeghe and Neidert 2006). Scholars have argued that a unique southern culture emerged from the historical circumstances of the antebellum South that can explain the greater social disorganization of the South in general (Reed 1982; Simpson 2006). The southern "culture of violence" theory has been used to explain greater crime, homicide, and suicide in southern states (Messner, Baller, and Zevenbergen 2005) but could be fruitfully extended to divorce as well. The implication of the culture of violence thesis is that conservative Protestant denominations, with their firm behavioral guidelines and avoidance of moral relativism, are popular in the South and in other economically disadvantaged areas (Woodberry and Smith 1998) precisely because of the unique challenges of widespread gun ownership, agricultural dependence, and rural dispersion (all of which make social control problematic). If true,

the popularity of conservative Protestantism may be preventing an even stronger regional increase in divorce relative to the economically developed areas of the United States.

Our goal is to adjudicate between these three diverse explanations of regional variation in divorce using county-level information obtained from public data sources and individual-level data from the National Surveys of Family Growth. We test the theoretical links between religious conservatism and divorce propensities in two ways. First, we analyze the macro-level impact of county-level conservative religious concentration on county divorce rates before and after adding contextual measures of marital culture and early transitions to adulthood. To control for the theoretical alternative that social disorganization creates both high concentrations of conservative Protestants and divorce, we include measures of (southern) regional and local economic conditions in county-level analyses. Our second strategy directly tests the microlevel theoretical processes linking religious conservatism and heightened divorce risk by creating multilevel models of individual divorce risk as a function of individual religious and family formation traits, as well as county religious context. Once we have established the individual vulnerability of conservative Protestants to divorce, we examine any additional contextual effects of local religious culture on divorce risk, as well as other contextual variables through which religious culture may operate.

Three interrelated questions will be addressed: (1) Are county concentrations of conservative Protestants and county divorce rates associated with each other, net of county race/age structure, geographic region, and local economic conditions? Can this association between the concentration of conservative Protestants and divorce be explained by lower marital selectivity or demographic risk factors such as earlier family formation and lower educational attainment? (2) Is this geographic pattern just the aggregated result of individual processes linking conservative Protestant affiliation to demographic risk factors for divorce, or are there contextual effects of religious culture on individual divorce risk irrespective of individual religious affiliation? (3) Do contextual effects of religious culture on individual divorce risk operate by heightening individual risk factors such as earlier family formation and lower educational attainment or heightened risk in the local pool of eligible marriage partners?

This research improves on prior theoretical and empirical work in this area by (a) collecting detailed information on local area characteristics from a wide array of sources, (b) using actual divorce rates from county records in multivariate models rather than residence patterns of divorced individuals irrespective of the time or place of their divorce, (c) directly testing alternative explanations of the aggregate association between the concentration

of conservative Protestants and county divorce rates, and (d) incorporating the aggregate results into multilevel models to properly specify the role of contextual factors in individual divorce risk.

BACKGROUND

Individual-Level Determinants of Divorce

The rapid increase in divorce over the second half of the 20th century and its recent stabilization at fairly high rates have attracted much attention because of the generally negative consequences of divorce for women and children's well-being (McLanahan and Sandefur 1994; Smock, Manning, and Gupta 1999; Amato 2010). Concern over the destabilization of family relationships has not been confined to academics and policy makers, however. Religious institutions have responded with a series of faith-based initiatives, including marriage encounter weekends, workshops, counseling services, and prenuptial courses for engaged couples. Denominations also vary in their emphasis on marital stability and treatment of divorced individuals. For instance, both Catholic and Mormon theology heavily emphasize the permanence and importance of marriage, while conservative Protestant denominations emphasize the sacred character of marriage without official censure of the divorced. However, conservative Protestants have been leaders of the movement to strengthen marriage by restricting sexual activity to marriage and making divorce more difficult to obtain (Regnerus 2007; Vaaler et al. 2009).

Yet, the influence of religious affiliation on individual probabilities of divorce has been variable and inconsistent over time, with Catholic affiliation losing its negative effect on divorce propensity over the late 20th century (Lehrer 2004) and conservative Protestant affiliation showing mixed results but usually a slight positive effect on divorce risk, depending on the control variables, sample, and analytic method used to detect influence (Chi and Houseknecht 1985; Sweezy and Tiefenthaler 1996; Call and Heaton 1997; Barna Research Group 2001; Lesthaeghe and Neidert 2006; Mullins et al. 2006). Only Mormon affiliation has shown a negative effect on individual divorce risk (Lehrer and Chiswick 1993), and even that effect may be duration dependent. More consistent effects on the propensity to divorce have been found for other dimensions of religious activity, particularly religious participation and religious endogamy among spouses (Call and Heaton 1997; Lehrer 2004). Irrespective of denomination, spouses who attend religious services regularly and whose affiliations are similar are less likely to divorce. While the effects of some types of religious exogamy on divorce are declining over time (e.g., mainline Protestant-Catholic pairings), one particular type stands out: the particularly high probability of divorce when con-

servative Protestant women are paired with spouses who do not share their faith (Lehrer and Chiswick 1993; Vaaler et al. 2009).

The body of literature on religion and individual divorce risk suggests two important complications for any contextual analysis of divorce. First, conservative denominations may operate at cross-purposes in local areas, with pairings of observant believers reaping the positive consequences of religiosity, while nominal affiliators or those in exogamous unions reap only the negative effects of local religious and institutional cultures. Only the net effect of these two forces will appear in the aggregate. Second, the concentration of conservative Protestants in an area may not have a linear relationship to divorce risk, because extremely high concentrations of conservative Protestants could decrease the formation of religiously exogamous unions among conservative Protestant women.

The literature on other demographic risk factors for divorce is fairly consistent: early age at marriage (particularly the wife's age at marriage), early age at first birth, premaritally conceived birth, premarital cohabitation, lower educational attainment, lower household income, and African-American ethnicity are all associated with an elevated risk of divorce, while Hispanic ethnicity and rural residence are associated with lower divorce propensities (Shelton 1987; Martin and Bumpass 1989; Trent and South 1989; Waite and Lillard 1991; Amato and Rogers 1997; Call and Heaton 1997). Many of the studies examining religious influences on divorce incorrectly "control" for these demographic characteristics without considering their endogeneity with respect to religious affiliation. Yet a growing body of literature demonstrates that childhood religious conservatism predicts several of these risk factors after other family-of-origin variables are controlled.

Glass and Jacobs (2005) show that, net of parental social class, parental educational attainment, and region, the white children of conservative Protestants have lower educational attainment, earlier ages at marriage and first birth, and more traditional divisions of labor within marriage that limit wives' participation in paid work. Darnell and Sherkat (1997) and Beyerlein (2004) show similar findings regarding the lower educational attainment of conservative Protestants, while Uecker and Stokes (2008) confirm the earlier ages at marriage. Pearce and Davis (2006) and Regnerus (2007) report in separate analyses that conservative Protestant affiliation among youths heightens the risk of an early premarital pregnancy, often followed by a quick marriage at a young age, a pattern shown to be a particularly strong predictor of subsequent divorce.

Regnerus (2007) calls this the "evangelical anomaly": restrictive attitudes about sex among religiously conservative adolescents combined with relatively indistinguishable rates of sexual activity. These adolescents feel both embattled with a popular culture saturated with sexual images and

unable to resist the lure of sexuality despite their desire for traditional marriages. Analyzing data from the AddHealth survey and National Survey of Youth and Religion, Regnerus finds that conservative Protestant youths have less information about sex, are more opposed to birth control, and see less reason to delay marriage and childbearing in committed relationships. The result is seen in both elevated teen pregnancy rates and marriage rates.

The earlier ages at marriage and first birth exhibited by women raised in conservative Protestant households may also account for their pattern of higher overall fertility (Hout, Greeley, and Wilde 2001; Lehrer 2004). Coupled with strong religious proscriptions against abortion and birth control methods thought to be abortifacients, the pro-family ideology of conservative Protestants has resulted in above-average family sizes at the same time that Catholic fertility has declined.

Finally, both Sherkat (2000) and Ellison and Bartkowski (2002) find in cross-sectional analyses that conservative Protestant couples have more traditional divisions of labor, a result echoed by Wilcox (2004) in his analysis of housework among conservative Protestant fathers. Whether this pattern is the result of earlier family formation or a direct result of religiously based support for distinct gendered family roles, the fact that conservative Protestant couples engage in gender-specific patterns of work and family involvement may leave them with fewer financial resources and more financial obligations than other couples at similar life stages.

In an economic environment that encourages the postponement of marriage and children, dual-earner family structures, and fertility limitation, conservative Protestants exhibit an oppositional behavioral pattern (Lesthaeghe and Neidert 2006) that is both true to their theological values and difficult to materially sustain. The key components of this pattern are early and more frequent childbearing (sometimes beginning premaritally), full-time domesticity with circumscribed labor force participation among mothers, and limited access to postsecondary schooling. This pattern of early transition to adulthood among the children of conservative Protestants provides the strongest theoretical link between individual religious affiliation and divorce risk, as well as regional concentrations of conservative Protestants and higher divorce rates. Without the time or education to develop strong relationship skills or develop strong human capital with which to earn adequate incomes in an increasingly uncertain economy, conservative Protestants face significant challenges in sustaining their marital relationships. As Regnerus (2007) points out, conservative Protestants feel that they "should" marry but also feel entitled to "good" marriages and satisfying intimate relationships with their spouses. While embeddedness in faith-based communities may help alleviate these stresses and teach coping skills,

the stronger material constraints and time pressures faced by young parents are primary mechanisms through which divorce risk may be heightened.

Other countervailing forces may mute the impact of this rapid transition to adulthood among conservative Protestants. As Sweezy and Tiefenthaler (1996) note, higher numbers of children, lower levels of maternal labor force participation, and rural residence raise the costs of single parenthood and the search costs for a new partner. Research on the effects of children and mother's earnings on divorce risk is not unequivocal, however. Women heighten their labor force activity in anticipation of divorce (Rogers 1999), and while first births delay the risk of divorce (Waite and Lillard 1991), children are increasingly less likely to deter divorce over the long run. Thus, there is reason to believe that the material and relationship pressures of early family formation may outweigh obstacles to dissolution of the marriage. If so, the accelerated transition to adulthood may be a prime factor in the regional patterning of divorce.

Contextual Determinants of Divorce

Although regional variations in divorce have been observed for some time (Glenn and Shelton 1985), direct tests of the mechanisms driving such variation have been rare. Analyses have noted compositional differences across states that may account for some of the regional dispersion, especially race, educational attainment, and household income (Glenn and Shelton 1985; Simpson 2006). Geographic regions may share characteristics that strengthen marriage; for example, northeastern states traditionally have contained more extended families, have fewer internal migrants from other parts of the country, and hence may have more stable communities and more informal social support for couples. Yet measures of anomie or social embeddedness have been of limited utility in explaining contemporary regional variations in divorce. In the search for state-level policies that might explain divorce propensities, such as generosity of Aid to Families with Dependent Children, no-fault divorce, property division laws, and so forth, scholars have generally concluded that few effects of any significant magnitude can be found (Peters 1986; Sweezy and Tiefenthaler 1996).

Two studies have specifically looked at conservative religious context as a risk factor for divorce. Conceptualizing religious context as protective where normative disapproval of divorce is strong, and reasoning that states with high proportions of conservative Protestants make the search costs for another marital partner high, Sweezy and Tiefenthaler (1996) found that residents of states with higher concentrations of religious fundamentalists were, *ceteris paribus*, less likely to be divorced. Mullins et al. (2006) used county-level data rather than state-level data on the concen-

tration of conservative Protestants and found exactly the opposite: that counties with higher concentrations of mainline Protestants and fewer conservative Protestants had lower concentrations of divorced individuals in 1990, even after controlling for county unemployment rate, median household income, and ethnic composition. However, both these studies used data on marital history rather than current divorce risk, so their counts of the divorced included those who divorced many years ago as well as those who divorced in another location and subsequently moved to their current location.

These two studies illustrate the difficulty of explaining regional variation in divorce without contemporaneous divorce rates and all relevant demographic covariates. Both studies conceptualize religious affiliation as socially integrative and emphasize the normative constraints of religious participation. Yet these are "soft" constraints relative to the material deprivation and relational difficulties of married life that normally precipitate divorce.

Lesthaeghe and Neidert (2006) develop a more convincing explanation of the spatial patterning of divorce, emphasizing the degree of secularization and postindustrial modernity in family patterns across states. American states vary dramatically in their progression through the "second demographic transition," characterized by the postponement of marriage, reduced fertility, high levels of education and labor force participation among women, and high rates of nonmarriage among adults (proportions single or cohabiting). This second demographic transition has been the response of individuals and families to the changing economic and political reality wrought by corporate capitalism, the weakening of unionized industrial employment, and the rising value of formal education in new knowledge sectors of advanced industrial societies. Yet the more sparsely populated areas of the American West and Great Plains, along with the southern states, are moving far more slowly through the second demographic transition and are far more likely to be both politically and socially conservative in their ideological beliefs. Conservative religious groups flourish in these areas and undergird the persistence of family formation patterns and socially conservative gender relations that do not fit well with the stagnant earnings of men without postsecondary degrees. Since the changing economic base of American society affects these regions as well, family patterns and economic realities exist in dramatic tension with one another. While some scholars focus on the pragmatic accommodation of conservative Protestants to this new economic reality (Demmit 1992; Gallagher 2003), adherence to the family values espoused by their faith contributes to the kind of economic stress and relational difficulties that test the limits of marital partnership.

While religious or moral traditionalism may have been more effective in reducing divorce rates in the past and may continue to do so in strong local or isolated subcultures (e.g., Amish communities), the contemporary eco-

conomic context within which most young people form unions and bear children materially rewards those who wait the longest to choose lifetime partners and accept the responsibilities of parenthood. The early transitions to adulthood in areas dominated by conservative Protestants thus are at odds with the emergence of a global capitalism that has transformed the opportunity structure for American workers. Using Sewell's (1992) theory of structure and agency, this subcultural schema of early marriage and gender traditionalism does not fit the current structuration of capitalism in ways that advance this subculture's core commitments to marital fidelity and stability.

Evidence of these contextual processes is mounting. Strayhorn and Strayhorn (2009) report a larger percentage of teen births in areas with higher concentrations of conservative Protestants. Morrison (2009) reports both earlier ages at first birth and slightly higher total marital fertility in counties with higher concentrations of conservative Protestants, controlling for county economic disadvantage.

Yet a different theoretical interpretation of southern exceptionalism comes from the social disorganization literature. Proponents of the "culture of violence" thesis in the South emphasize not the unique religious culture and early family formation of the southern region but the traditions of self-reliance, distrust of strangers, and general acceptability of violence to settle interpersonal disputes (Messner et al. 2005). The historical roots of this unique constellation of traits come from the collective grievances of occupation and defeat following the Civil War and the failure of industrial development to take root in this predominantly rural region. It is easy to see how these characteristics could increase relationship violence and family stress as well, leading to higher divorce rates. Combined with reluctance to seek help and generalized distrust in social institutions (Simpson 2006), couples with relationship difficulties may perceive few alternatives to divorce. Yet these same dense, closed social networks have also been viewed as protective factors for couples; for instance, embeddedness in tight kin and community networks may create greater social support for their relationship, fewer plausible alternative partners, and higher normative costs for divorce (Sweezy and Tiefenthaler 1996). Thus, the net impact of any unique regional cultural factors is unknown.

The impact of local economic hardship on divorce is better known. High rates of poverty and unemployment, now more often characteristic of rural areas and the South, are related to higher divorce rates regionally (Glenn and Shelton 1985), just as income troubles heighten the risk of divorce at the individual level. More recently, Amato and Beattie (2011) have shown in dynamic analyses that increases in the state unemployment rate actually decrease subsequent divorce rates, but this may reflect the economic costs of divorce and an accumulated demand for divorce that gets expressed

as economic conditions improve. As a result, economic underdevelopment must be controlled in any analysis of the impact of religious concentration on divorce.

This review of both individual and contextual determinants of divorce risk suggests that religious affiliation heightens divorce mostly through indirect mechanisms, including the unintended consequences of attempts to restrict sexual activity and childbearing to marriage, promote childbearing and familism more generally over individualism and fertility limitation, and create gender-differentiated family obligations. While many positive traits among conservative Protestants could strengthen marriage and lower divorce, including greater religiosity, lower rates of cohabitation before marriage, and greater social integration and normative constraint in areas with high concentrations of conservative Protestants, these protective factors may be overwhelmed by material and relationship difficulties.

To adjudicate between these divergent explanations of regional variations in divorce risk, our analyses first determine whether in fact the county concentration of conservative Protestants (relative to mainline denominations) has a positive impact on county divorce rates, net of the county age and race distribution. Once established, we test the following competing claims:

HYPOTHESIS 1.—*The contextual effect of religious conservatism on divorce rates is an artifact of county-level macroeconomic conditions, regional location, and levels of interpersonal violence.*

HYPOTHESIS 2.—*The contextual effect of religious conservatism on divorce rates is created by local marital cultures, measured as high rates of marriage versus cohabitation that may result in more poor-quality marriages and interfaith relationships.*

HYPOTHESIS 3.—*The contextual effect of religious conservatism on divorce rates is produced by county patterns of early family formation, low educational attainment, and low family income.*

Once we establish a nonspurious contextual effect of religious conservatism on county divorce rates, we explore whether this aggregate result simply mirrors individual-level processes among conservative Protestants or whether community religious cultures have independent effects on individual divorce risk. We test the following claims:

HYPOTHESIS 4.—*Individual divorce risk mirrors aggregate county divorce rates; that is, personal religious conservatism increases the risk of ever divorcing because of its association with lower educational attainment and earlier family formation among adherents.*

HYPOTHESIS 5.—*County proportion of conservative Protestants has an independent impact on individual divorce risk net of personal religious identification. In other words, aggregate patterns of religious conservatism*

and divorce risk do not simply reflect the concatenation of individual patterns of behavior, but reflect the broader operation of conservative religious cultures on local populations.

HYPOTHESIS 5a.—*County proportion of conservative Protestants affects individual divorce risk net of personal religious identification by encouraging individuals' early transitions to adulthood.*

HYPOTHESIS 5b.—*County proportion of conservative Protestants affects individual divorce risk net of personal religious identification by affecting the characteristics and behaviors of significant alters in the local marriage market and local community norms governing the selectivity of marriage.*

DATA AND METHODS

Data

The first part of our analysis is conducted using only aggregated county-level data on most of the 3,143 counties in the United States. A small number of counties ($N = 23$) were omitted either because of extremely low population densities that made the religious affiliation counts unreliable or because they were “divorce destination” counties in Nevada that produced unreasonably high divorce rates (presumably from nonresidents). The second portion combines individual- and county-level data into a series of multilevel models. This allows us to examine how contextual factors influence individual risk for divorce. The data used for the county-level analysis come from 2003 public-use data from the Glenmary Institute for Religious Research, the 2000 U.S. census, and county court records for all 50 states on marital dissolutions in the year 2000. With county geocodes (Federal Information Processing Standards [FIPS]) used as identifiers across data sources, records for each county in the United States were constructed and merged into a county-level data file for use in all analyses. The only major demographic characteristics unavailable at the county level were mean age at first marriage and mean age at first birth. The census provides such information at the state level, so that was added to county-level records for the analyses here. The public-use data sources for each variable entered into the county data set are in table A1 in appendix A.

Individual-level data come from cycles 5 (1995) and 6 (2002) of the National Survey of Family Growth (NSFG). The NSFG is a multistage, random sample of noninstitutionalized women ages 15–44. In cycle 6, for the first time, the NSFG also collected data on a sample of men ages 15–44. To obtain an adequate sample size, cycle 5 female data and cycle 6 female and male data were merged. The county-level data set we created was then appended to the NSFG data by county FIPS code to produce a file for multilevel analysis. The resulting data file contained information on approxi-

mately 23,000 individuals. Since divorce can be observed only among those ever married, the effective sample size for the analyses of divorce reported here was 12,594 individuals across 1,379 counties.

Dependent variable.—The dependent variable in the county-level analysis is the divorce rate in the 3,119 counties of the United States available for analysis. The rate is literally the proportion of divorces occurring annually among the population of married couples in each county, benchmarked in the year 2000. It is equal to the number of divorces that occurred in a county divided by half the number of currently married individuals in a county. This quantity creates a divorce rate per currently married couples as opposed to married individuals. The number of currently married individuals used in the denominator was obtained from Summary File 3 of the 2000 U.S. census.

Data on the number of divorces per county were obtained from a variety of sources. Many states release this information in annual Vital Statistics Reports through either their Department of Health or Department of Vital Statistics. These reports can be accessed via the Internet and were the source for the majority of divorce data used in these analyses. Some states, however, do not publicly release this information online, remove the information after several years, or do not collect the data. When this was the case, every effort to make direct, personal contact with state employees and officials in order to obtain the necessary information was made. States for which data were not available online or came from different sources include Alaska, Colorado, California, Georgia, Indiana, New Mexico, South Dakota, and Texas (see app. B for details on data construction for counties in these states). Data on the number of divorces were obtained for the year 2000 with the following exceptions: Connecticut (1995), Massachusetts (2003), and Pennsylvania (2002).

The dependent variable in the multilevel analysis is a dichotomous response variable that takes on a value of one if an individual in the merged 1995 and 2002 NSFG ever experienced a divorce. "Ever divorced" is not the ideal indicator for a causal model since both geographic location and religious affiliation may have changed since the respondent's divorce took place. Yet because respondents in the NSFG are relatively young, the risks of misspecifying conservative Protestant affiliation or county at the time the divorce took place by using current characteristics are minimized.

Religious affiliation.—The data measuring denominational representation in counties were obtained from the Glenmary Research Center's 2000 Religious Congregations Membership Study (RCMS) and were provided as a county-level adherence rate per 1,000 individuals. Our categorization of denominations proceeded from two primary principles: (1) theoretical clarity about what linked denominations to principles of early family formation and (2) parsimony, or the need to limit the number of categories to

those necessary to incorporate real differences in the data. Theoretically, we wished to combine those conservative Protestant denominations whose beliefs in biblical inerrancy led them to espouse principles of sexual exclusivity to marriage, early family formation and fertility, as well as gender differentiation in roles and responsibilities following marriage. Practically, we needed to limit the number of categories so that multilevel models could be estimated that required multiple members of each denominational group in each county included in the data. For unique smaller groups, this was simply impractical (Mormons, Unitarians, Amish). We had to place them somewhere, but in truth where we placed them mattered little analytically because these categories were so small. Taking a theology of biblical inerrancy as the central feature of conservative Protestantism, we aggregated denominations into three membership categories: (a) conservative Protestant denominations; (b) mainline Christian denominations, incorporating all that do not include biblical inerrancy as a fundamental tenet of faith (including Latter-Day Saints, Catholic, and Orthodox denominations);² and (c) other religions, which is basically an amalgam of all non-Christian religions as well as isolationist Christian sects such as the Amish and Hutterites.³ A fourth category represents individuals with no religious affiliation, enabling us to form county-level religious concentrations expressed as percentages. Coding of specific denominations into these categories is described in appendix C. We chose this simple coding scheme both because of its statistical parsimony and because the more complex schemes used in individual-level data (e.g., Steensland et al. 2000) produced distributions with large numbers of structural zeros and very small numbers at the county level. The data for the unaffiliated percentage were obtained from the Pew Forum on Religion and Public Life's 2008 U.S. Religious Landscape Survey.

² Mormons and Catholics were coded as mainline denominations in all analyses. In disaggregated analyses separating Catholics into their own analytic category, the Catholic adherence rate never had a discernibly different effect on divorce rates compared to the mainline Protestant rate. The Mormon adherence rate exhibited a small positive effect on the divorce rate when separated into its own category. However, the effect was infrequently significant across models, which we believe was due to the odd distribution and low statistical power of this variable (most counties having no discernible Mormon population). Grouping Mormons with conservative Protestants despite their theological dissimilarity did not alter model coefficients for that category in sensitivity analyses. The inclusion of both Catholics and Mormons in the mainline category produced no substantive changes in the other coefficients in any reported models.

³ The results are not altered by the shifting around of a number of small denominations that might be grouped in a number of different ways in different coding schemes (Missouri Synod of the Lutheran Church, Amish, and Hutterite, all of which are sometimes considered evangelical or conservative Protestant but are considered mainline or "other" here). These groups amount to a very small portion of the population overall, which is why their categorization fails to change the empirical results for conservative Protestant concentration.

While the Glenmary RCMS provides valuable insight into the state of religious affiliation in the United States, it has several shortcomings. First, there were some denominations and religious groups that chose not to participate in the study. This led to undercounts of adherents and, subsequently, adherence rates for those denominations. The mean total rate of adherence—for all denominations and religious groups—obtained by the RCMS was 529.7, far short of the 1,000 that would come from complete coverage of all denominations, religious groups, nonreligious, and unaffiliated individuals. Second, there were many individuals who were observed attending religious services in neighboring counties rather than in the county in which they resided. This led some counties to have rates of adherence (per 1,000) greater than 1,000 (Finke and Scheitle 2005). For these reasons, the adherence rate for all counties was adjusted to simulate complete coverage—that is, a rate of 1,000 per 1,000 individuals.⁴ After adjusting the adherence rates, we scaled them to range from zero to one. The mainline denomination percentage was excluded in all analyses to avoid multicollinearity.

⁴ The adjustment procedure operated as follows: First, data were obtained from the Pew Forum on Religion and Public Life's 2008 U.S. Religious Landscape Survey on the percentage of individuals within each state that were unaffiliated. These individuals identified as atheist, agnostic, or "nothing in particular" and were not included in the RCMS. While the RCMS provided data at the county level, the Pew Forum on Religion and Public Life had rates of adherence (per 1,000) only at the state level. Each county was therefore assigned its state rate. The conservative Protestant denomination rate, mainline denomination rate, Catholic denomination rate, Mormon denomination rate, other denomination rate, and the unaffiliated rate were used to adjust the adherence rate. The conservative Protestant, mainline, and Catholic adherence rates were summed to create an initial adherence rate. The conservative Protestant, mainline, and Catholic rates were then divided by the sum of the three adherence rates. Next, the sum of the Mormon, other denomination, and unaffiliated adherence rates was subtracted from 1,000. None of these three rates were adjusted; this ensured that rates expected to be low were not overinflated. The difference represented the sum of the adjusted rates of conservative Protestant, mainline, and Catholic denominational adherence. To obtain the adjusted conservative Protestant adherence rate, the difference was multiplied by the original conservative Protestant rate divided by the sum of the original conservative Protestant, mainline, and Catholic rates. To obtain the adjusted mainline adherence rate, the difference was multiplied by the original mainline rate divided by the sum of the original conservative Protestant, mainline, and Catholic rates. To obtain the adjusted Catholic adherence rate, the difference was multiplied by the original Catholic rate divided by the sum of the original conservative Protestant, mainline, and Catholic rates. The subsequent sum of the new conservative Protestant, new mainline, new Catholic, Mormon, other, and unaffiliated rates equaled 1,000 for all counties. The adjustment equations are listed as follows:

$$\begin{aligned}
 E_{\text{new}} &= (1,000 - M - O - U) \times [E_{\text{old}} / (E_{\text{old}} + M_{\text{old}} + C_{\text{old}})], \\
 M_{\text{new}} &= (1,000 - M - O - U) \times [M_{\text{old}} / (E_{\text{old}} + M_{\text{old}} + C_{\text{old}})], \\
 C_{\text{new}} &= (1,000 - M - O - U) \times [C_{\text{old}} / (E_{\text{old}} + M_{\text{old}} + C_{\text{old}})], \\
 E_{\text{new}} + M_{\text{new}} + C_{\text{new}} + M + O + U &= 1,000.
 \end{aligned}$$

Individual religious denomination in the multilevel models is captured through a series of binary variables. To remain consistent with the county-level analysis, we coded individual religious affiliation as conservative Protestant, mainline, other religion, or unaffiliated. Mainline denomination was excluded as the reference category.

Other independent and control variables.—To measure the impact of early transitions to adulthood in the aggregate, the following variables were created: the percentage of individuals ages 18–24 enrolled in college, the percentage of individuals 25 and over who graduated from high school, the percentage of individuals 25 and over with a bachelor's degree or higher, the percentage of mothers in the labor force with children under the age of 6, median family income, and the average number of children per family. These variables were obtained from Summary Files 1 and 3 of the 2000 U.S. census. The percentages were scaled to range from zero to one, and income was scaled to thousands of dollars. The average number of children under 18 per family was constructed from Summary File 1 of the 2000 U.S. census. To create this variable, the average number of adults per county was estimated by multiplying the number of married couple families by two and adding the result to the number of single-parent families. This quantity was then subtracted from the average family size in each county.

Finally, median age at first marriage and average age at first birth were also included as direct indicators of the early transitions to adulthood since these are strongly associated with increased risk of divorce at the individual level. Because both are available only at the state level, each county within a state was assigned its state's values. Median age at first marriage was measured as a four-year average (2000–2003) and was obtained from the American Community Survey 2002–3 and the Census Supplementary Survey 2000–2001. Age at first birth was measured for the year 2000 and was obtained from the National Center for Health Statistics (National Vital Statistics Reports: vol. 51, no. 1).

To measure marital selectivity, or the risk of being married, the percentage of all individuals presently married and the percentage of cohabiting households out of all households were included as independent variables in the analyses. The number of currently married individuals was drawn from Summary File 3 of the 2000 U.S. census and transformed into a percentage ranging from zero to one.⁵ The number of cohabiting households per county comes from Summary File 1 of the U.S. census and was also transformed into a percentage from zero to one.

⁵ The correlation between the number of marriages per county occurring in 2000 and the percentage of currently married individuals is $-.23$. After constructing the dependent variable, the correlation between the divorce rate and the percentage of currently married individuals is only $-.07$.

To estimate southern exceptionalism and social disorganization, the percentage of individuals residing in rural areas, the unemployment rate, and the aggravated assault rate were included in analyses. Dummy variables for the South, Midwest, and West were also created with Northeast as the reference category. The percentage of the population residing in rural areas was obtained from Summary File 1 of the 2000 U.S. census and was scaled to range from zero to one. The unemployment rate is measured as the number of unemployed individuals divided by the total labor force. It was obtained from the Bureau of Labor Statistics (2000) and was scaled to range from zero to one. The number of aggravated assaults per county for the year 2000 was drawn from the Federal Bureau of Investigation's Uniform Crime Report (Crime in the United States—2000). The number of assaults was transformed into a rate per 1,000 individuals and logged to reduce skewness. To prevent undefined values, counties with zero incidences of assault were recoded as having 0.01 aggravated assaults.

To control for the age and race structure of each county, the following variables were included in all models: the percentage of individuals ages 25–44, the percentage of individuals ages 45–64, the percentage of individuals ages 65 and over, the percentage of the population that is African-American, and the percentage of the population that is Hispanic.

At the individual level, we tried wherever possible to match our measures to those at the county level. To control for race, sex, and age, we included African-American, Hispanic, and female as binary variables, while we included age as a continuous variable. Educational attainment was measured with a binary response variable that indicated completion of a college degree. Several indicators of early transition to adulthood were also included. Having ever cohabited before one's first marriage was included as a binary variable. Number of children, age at first marriage, and age at first birth were included in the analysis as continuous variables. Means and standard deviations for all variables in the analyses are presented in table 1.

Analytic Strategy

Ordinary least squares (OLS) regression was used to analyze the county-level data. Because counties have widely varying populations, all analyses were weighted by county population size. In the first model the county divorce rate was regressed on the set of religious adherence variables. This baseline model shows whether religious conservatism had any initial effect on the divorce rate net of the county's age/race structure. The second model adds dummy variables indicating region and items measuring economic marginality and southern exceptionalism. This model shows whether the effect of conservative religious concentration is an artifact of economic disadvantage or southern regionalism.

Red States, Blue States, and Divorce

TABLE 1
DESCRIPTIVE STATISTICS FOR VARIABLES IN THE ANALYSIS, U.S. COUNTIES,
2000 AND NSFG (1995 AND 2002 MERGED)

| Variables | Mean | SD | Min | Max |
|--|-------|------|--------|-------|
| County level: | | | | |
| Divorce rate | .02 | .01 | 0 | .12 |
| % ages 25–44, 2000 | .28 | .03 | .15 | .48 |
| % ages 45–64, 2000 | .23 | .03 | .06 | .46 |
| % ages over 65, 2000 | .15 | .04 | .02 | .35 |
| % African-American, 2000 | .09 | .15 | 0 | .87 |
| % Hispanic, 2000 | .06 | .12 | 0 | .98 |
| Conservative Protestant rate | .34 | .25 | 0 | .88 |
| Other denomination rate | .01 | .03 | 0 | .48 |
| Unaffiliated rate | .15 | .04 | .06 | .28 |
| South | .45 | .50 | 0 | 1 |
| Midwest | .34 | .47 | 0 | 1 |
| West | .14 | .35 | 0 | 1 |
| % rural, 2000 | .60 | .31 | 0 | 1 |
| % unemployed, 2000 | .04 | .02 | .01 | .17 |
| Logged aggravated assault rate | –.63 | 2.74 | –11.07 | 6.29 |
| % enrolled in college, ages 18–24 | .23 | .15 | 0 | .94 |
| % graduated from high school, 25 and over | .77 | .09 | .35 | .97 |
| % with at least bachelor's degree, 25 and over | .17 | .08 | .05 | .64 |
| Family income | 42.13 | 9.89 | 14.17 | 97.23 |
| % mothers in labor force with children under 6 | .65 | .09 | .27 | .92 |
| Median age at first marriage | 24.49 | .98 | 21.90 | 29.90 |
| Average age at first birth | 24.34 | .98 | 22.50 | 27.80 |
| % cohabiting | .05 | .01 | 0 | .16 |
| % currently married | .48 | .05 | .20 | .67 |
| Average number of children | 1.24 | .22 | .41 | 3.36 |
| Individual level (NSFG): | | | | |
| Divorced | .30 | .46 | 0 | 1 |
| Conservative Protestant denomination | .12 | .32 | 0 | 1 |
| Other denomination | .04 | .20 | 0 | 1 |
| Unaffiliated | .08 | .27 | 0 | 1 |
| Age | 29.73 | 8.52 | 14 | 45 |
| African-American | .22 | .42 | 0 | 1 |
| Hispanic | .18 | .39 | 0 | 1 |
| Female | .79 | .41 | 0 | 1 |
| Time | 1.54 | .50 | 1 | 2 |
| Age at first marriage | 22.33 | 4.53 | 13 | 43 |
| Age at first birth | 22.88 | 5.17 | 12 | 43 |
| College graduate | .45 | .50 | 0 | 1 |
| Cohabiting before first marriage | .40 | .49 | 0 | 1 |
| Number of children | .96 | 1.17 | 0 | 5 |

The third model adds indicators of marital culture (or marital selectivity) to determine whether the increase in marriage and decline in cohabitation associated with religious conservatism create increased divorce rates. The fourth model adds divorce risk factors stemming from early transitions to adulthood to test whether the effect of conservative religious

concentration on divorce can be explained by pervasive patterns of early marriage and childbearing among county residents.

Finally, each demographic risk factor for divorce was individually regressed on the indicators of religious concentration, along with the region, economic marginality, and age/race structure of each county. The results of these models help clarify which demographic risk factors are most strongly associated with conservative Protestant concentration across counties.

To examine the impact of contextual factors on individual risk for divorce, we switch to a series of multilevel analyses. All variables were mean-centered for the multilevel models. We analyze the data by using a random intercept model that allows each county to have a different intercept. The basic model is

$$y_{ij} = \beta_{0j} + \beta_n x_{ij} + e_{0ij}, \quad (1)$$

where Y_{ij} is a binary response variable for individual i in county j , indicating whether she or he has ever divorced; β_{0j} is the intercept for county j ; and β_n is a series of slope coefficients for the matrix (X) of independent variables. The intercept for the j th county includes a random component that allows it to vary by county. This is represented as

$$\beta_{0j} = \beta_0 + u_{0j} \quad (2)$$

and can be substituted into model 1 to produce the following:

$$y_{ij} = \beta_0 + \beta_n x_{ij} + e_{0ij} + u_{0j}. \quad (3)$$

This allows the intercept to vary by county. This model allows for both individual- and county-level effects on individual likelihood of divorce to be assessed. Multilevel models for binary outcomes were fitted using SAS PROC GLIMMIX.

Models 1 and 2 contain only individual-level variables with a random intercept. Model 1 is a baseline model; model 2 includes individual-level transitions to adulthood. These determine whether personal religious affiliation affects divorce risk and how much of the effect occurs indirectly through early transitions to adulthood among conservative Protestants. Models 3, 4, and 5 include county-level correlates with a random intercept. Model 3 includes county religious concentration as well as individual religious affiliation. Model 4 adds individual-level transitions to adulthood to determine how much of the contextual effect of religious culture on divorce risk occurs through increases in personal risk factors such as leaving school early. Model 5 is the saturated random intercept model, containing all individual- and county-level variables, which assesses how much of the contextual impact of religious culture occurs through collective changes in the pool of eligible partners.

In addition to modeling divorce, we also examine the impact of contextual factors on age at first birth, age at first marriage, the likelihood of graduating from college, and income. Baseline models contain individual-level variables with a random intercept; saturated models include individual- and county-level variables with a random intercept. Continuous outcomes were fitted using SAS PROC MIXED while graduating from college was fitted using SAS PROC GLIMMIX.

RESULTS

County-Level Processes

Table 2 displays the results of multivariate models of county divorce rates. Model 1 displays the baseline coefficients, revealing a significant positive impact of conservative religious concentration on county divorce rates. With controls for only the age and race structure of the county, a 1% increase in the county's share of conservative Protestants relative to mainline Protestants yields an increase in the divorce rate of 0.02%. The average county would almost double its divorce rate as its proportion conservative Protestant moved from 0 to 100%. However, this effect is still much smaller than the unaffiliated effect, which is almost three times larger and indicates the strength of any religious identification in reducing divorce overall.

Model 2 adds the block of variables measuring southern exceptionalism and social disorganization. While virtually all the coefficients in this block are statistically significant and operate in the expected direction, their inclusion does not reduce the coefficient for conservative religious concentration at all. Thus, the association between county proportions of conservative Protestants and divorce rates does not seem reducible to the popularity of conservative religious denominations among southerners and disadvantaged populations.

Model 3 introduces the block of variables representing the marital culture of the county. While both the proportion of married individuals in each county and the proportion of cohabiting individuals are statistically associated with divorce rates, the pattern indicates that increases in the proportion married in a county do not appear to result in a larger proportion of high-risk matches. Rather, increases in the proportion married lower divorce rates while increases in the proportion cohabiting raise divorce rates. This combination of effects actually raises the impact of religious conservatism on divorce slightly since stronger marital cultures in counties with more conservative Protestants suppress the effect of religious conservatism on divorce. These findings in model 3 are more consistent with a "spousal alternatives" hypothesis in which the costs of divorce are higher in populations with fewer unmarried individuals (South and Lloyd 1995). The posi-

TABLE 2
OLS REGRESSION MODELS PREDICTING DIVORCE RATE, U.S. COUNTIES, 2000

| Variables | Model 1 | Model 2 | Model 3 | Model 4 |
|---|--------------------|--------------------|--------------------|--------------------|
| Conservative Protestant rate | .018*** (.001) | .018*** (.001) | .020*** (.001) | .013*** (.001) |
| Other denomination rate | .009** (.003) | .014*** (.003) | .015*** (.003) | .028*** (.003) |
| Unaffiliated rate | .051*** (.003) | .035*** (.004) | .015*** (.005) | .014** (.005) |
| % ages 25–44, 2000 | .036*** (.006) | .034*** (.007) | .025*** (.007) | .034*** (.008) |
| % ages 45–64, 2000 | –.047*** (.007) | –.027*** (.007) | .008 (.008) | .009 (.009) |
| % ages over 65, 2000 | .028*** (.005) | .029*** (.006) | .028*** (.005) | –.019** (.007) |
| % African-American, 2000 | –.003** (.001) | –.005*** (.001) | –.016*** (.002) | –.009*** (.002) |
| % Hispanic, 2000 | –.001 (.001) | –.003** (.001) | –.003** (.001) | .004** (.002) |
| South | | .002*** (.000) | .003*** (.000) | .001 (.001) |
| Midwest | | .003*** (.000) | .003*** (.000) | .001** (.000) |
| West | | .004*** (.001) | .004*** (.000) | .004*** (.001) |
| % rural, 2000 | | –.003*** (.001) | –.002*** (.001) | –.004*** (.001) |
| % unemployed, 2000 | | .022* (.011) | .002 (.010) | –.011 (.012) |
| Logged aggravated assault rate, 2000 | | .000** (.000) | .000 (.000) | –.000 (.000) |
| % cohabiting | | | .110*** (.015) | .038* (.018) |
| % currently married | | | –.045*** (.005) | –.052*** (.007) |
| % enrolled in college, ages 18–24 | | | | –.002 (.001) |
| % graduated from high school, ages 25 and over | | | | .005 (.004) |
| % with bachelor's degree or higher, ages 25 and over | | | | –.015*** (.003) |
| Family income | | | | –.000** (.000) |
| % mothers in labor force with children under 6 | | | | –.003 (.003) |
| Median age at first marriage | | | | –.000+ (.000) |
| Average age at first birth | | | | –.001* (.000) |
| Average number of children | | | | –.014*** (.002) |

TABLE 2 (Continued)

| Variables | Model 1 | Model 2 | Model 3 | Model 4 |
|--------------------|----------------|-----------------|----------------|-------------------|
| Constant | .002 (.003) | -.001 (.003) | .012 (.003) | .074*** (.009) |
| R^2 | .192 | .224 | .282 | .338 |

NOTE.— $N = 3,119$. Unstandardized coefficients; numbers in parentheses are SEs.

+ $P < .10$ (two-tailed tests).

* $P < .05$.

** $P < .01$.

*** $P < .001$.

tive effect of the unaffiliated rate on divorce is also dramatically reduced in model 3, indicating that part of the negative impact of the proportion unaffiliated on divorce is explained by the greater incidence of cohabitation as the unaffiliated proportion grows.

Model 4 incorporates the measures of early transitions to adulthood/early family formation within the county. The addition of this block of variables reduces the impact of conservative Protestant concentration by about one-third (from a coefficient of .02 to .013). Stepwise regressions (not shown) indicate that the biggest reduction in the coefficient size for conservative Protestant concentration comes from the addition of two variables in this block: median family income and mean age at first birth. As hypothesized, the association of religious conservatism with the early assumption of adult responsibilities without adequate financial preparation has a large impact on the divorce risk facing these young families.

We turn now to the strength of these associations between the proportions of conservative Protestants and early family formation within counties. Table 3 displays the results of regressions of religious concentration variables on the accelerated transition to adulthood/risk factors for divorce, ranging from educational attainment to age at first marriage. Across the board, the concentration of conservative Protestants in a county is associated with known risk factors for divorce: lower educational attainment, earlier ages at first marriage and first birth, lower family income, and lower likelihood of maternal employment. However, high proportions of conservative Protestants in a county also increase the number of married individuals and decrease the number of cohabiters, suggesting that conservative religious institutions can indirectly lower divorce risk by reducing cohabitation in favor of legal marriage. Overall, the increase in divorce risk derived from the early assumption of family responsibilities overwhelms the smaller decrease in risk from the lower probability of cohabitation prior to marriage.

Sensitivity analyses.—Several sensitivity checks were performed to check the robustness of the results and test potentially better-fitting non-linear specifications. Table 4 displays these results.

TABLE 3
OLS REGRESSION MODELS PREDICTING INTERVENING VARIABLES, U.S. COUNTIES, 2000

| Variables | Family Income | % Enrolled in College, Ages 18-24 | % Graduated High School, Ages 25 and Over | % with a Bachelor's Degree or Higher, Ages 25 and Over | % Mothers in Labor Force with Children under the Age of 6 | Median Age at First Marriage | Average Age at First Birth | % Cohabiting | % Currently Married | Average Number of Children |
|--|------------------------|-----------------------------------|---|--|---|------------------------------|----------------------------|--------------------|---------------------|----------------------------|
| Conservative Protestant rate | -17.248*** (1.002) | -.034* (.016) | -.086*** (.006) | -.042*** (.008) | -.103*** (.007) | -.765*** (.103) | -.897*** (.010) | -.022*** (.001) | .045*** (.003) | -.128*** (.015) |
| Other denomination rate | 24.549*** (2.938) | .487*** (.046) | -.115*** (.016) | .313*** (.023) | -.361*** (.020) | 1.045*** (.291) | .140 (.282) | -.025*** (.004) | -.111*** (.010) | .445*** (.043) |
| Unaffiliated rate | -39.156*** (4.356) | .100 (.069) | .045 ⁺ (.024) | .004 (.034) | .123*** (.030) | 6.424*** (.433) | 10.222*** (.419) | .109*** (.005) | -.059*** (.015) | -.744*** (.064) |
| % ages 25-44, 2000 | 61.633*** (6.628) | -2.168*** (.105) | -.278*** (.037) | .143** (.052) | .152*** (.046) | 3.795*** (.659) | 4.369*** (.638) | .130*** (.008) | -.059** (.022) | -.946*** (.098) |
| % ages 45-64, 2000 | 204.284*** (7.468) | -1.566*** (.130) | .132** (.046) | -.096 (.065) | .087 (.057) | .835 (.815) | -3.773*** (.790) | .055*** (.010) | .306*** (.028) | -2.117*** (.121) |
| % ages over 65, 2000 | -117.733*** (5.512) | -1.172*** (.092) | -.254*** (.032) | -.202*** (.046) | .271*** (.040) | 6.590*** (.579) | 6.419*** (.561) | -.017* (.007) | .291*** (.020) | -2.210*** (.086) |
| % African-American, 2000 | -20.276*** (1.230) | -.096*** (.020) | -.103*** (.007) | -.005 (.010) | .095*** (.009) | 2.149*** (.126) | 1.113*** (.122) | .007*** (.002) | -.160*** (.004) | .574*** (.019) |

TABLE 4
SENSITIVITY ANALYSES: CONSERVATIVE PROTESTANT EFFECT ACROSS SPECIFICATIONS

| Specification | Model 4: Conservative Protestant Rate Coefficient |
|--|---|
| A1. Conservative Protestant rate (in quadratic equation) | .016*** (.003) |
| A2. Conservative Protestant rate squared | -.005 (.004) |
| A3. Conservative Protestant rate (in spline equation) | .004 (.006) |
| A4. Cubic spline 1 | .131 ⁺ (.077) |
| A5. Cubic spline 2 | -.234 ⁺ (.142) |
| A6. Cubic spline 3 | .110 (.086) |
| B. Counties in South | .009*** (.001) |
| C1. Lowest unemployment rate quartile | .007*** (.002) |
| C2. Second-lowest unemployment rate quartile | .011*** (.002) |
| C3. Second-highest unemployment rate quartile | .015*** (.002) |
| C4. Highest unemployment rate quartile | .012*** (.002) |
| D1. State-level analysis | .013* (.006) |
| D2. State-level analysis: spatial autoregression | .016*** (.004) |
| E. Two-stage least squares | .013*** (.001) |
| F. Top quartile of conservative Protestant range only | -.003 (.003) |

NOTE.—Unstandardized coefficients; numbers in parentheses are SEs. (A) Models changing the functional form of the relationship between conservative Protestant and divorce rate; (B) model restricted to southern counties only; (C) models run separately by unemployment quartile of county; (D) models run at the state level of aggregation rather than the county; (E) model run using instrumental estimation of the county conservative Protestant rate; (F) model restricted to conservative Protestant concentrations above .58 ($N = 272$).

⁺ $P < .10$ (two-tailed tests).

* $P < .05$.

** $P < .01$.

*** $P < .001$.

First, a quadratic term and a spline function with a knot at the 75th percentile of the conservative Protestant adherence rate were separately included in regressions of the divorce rate by county, primarily to determine whether the relationship between the proportion of conservative Protestants and divorce risk might diminish as the proportion of conservative Protestants becomes quite large. When religious homophily within a county be-

comes especially pronounced, the probabilities of religious intermarriage and “poor-quality” matches between partners should diminish as well, reducing divorce risk. However, neither nonlinear term was significant with these data, producing no improvement in model fit.

Second, the analyses were performed only on the subsample of counties within the South. This approach served to eliminate any unmeasured regional variation in culture or economic prosperity as the source of the effect of religious conservatism on divorce in a national analysis, a potentially serious misspecification. In essence, the robustness of the relationship between the concentration of conservative Protestants and divorce risk was analyzed in a region characterized by greater social disorganization, earlier transitions to adulthood, lower educational attainment, and higher rates of marriage overall. This produced no significant differences from the county-level results using data from all regions. The regression coefficient for the conservative Protestant rate (0.009; $P < .001$) was slightly smaller than the coefficient of the full model (0.013; $P < .001$). Thus, even in the South, variation in the proportion of conservative Protestants predicts divorce rates.

Third, the county data were stratified by quartiles of the unemployment rate and the models were run separately for counties within each quartile. This ensured that the effect of the concentration of conservative Protestants on divorce risk was not due to the popularity of religious conservatism in areas with concentrated poverty and unemployment. No significant differences from the original results were found: the coefficient for religious conservatism was significant in all four unemployment quartiles, though slightly smaller in the lowest unemployment quartile.

Fourth, the analyses were conducted using state-level data instead of county-level data. Divorce law is determined by states, and all counties within a state share the same legal framework for divorce that might alter their divorce propensities. Again, these analyses produced no substantial differences from the county-level results. We also used the state-level data to test for any spatial autoregression that might increase divorce in states geographically proximate to high-divorce regions.⁶ But the spatial autoregression coefficient was not significant, and its inclusion did not diminish the impact of the concentration of conservative Protestants on the

⁶Spatial autoregression occurs whenever spatial proximity of one region to another allows the characteristics of one region to bleed into adjacent regions. In this context, high rates of divorce in one county may be contagious and affect the divorce rate of surrounding counties. While spatial autoregression is most likely at the county level rather than at the state level, the complexities of estimating spatial autoregression with over 3,000 counties resulted in a failure of model convergence within STATA. No such problems were found in the simpler analysis of spatial contagion across the 50 states, so that coefficient is presented here.

divorce rate. In fact, the impact of religious conservatism grew slightly larger once state-level spatial contagion was controlled.

Fifth, to deal with the nonrandom distribution of conservative Protestants across counties, two-stage least-squares regression using instrumental variables was applied to ameliorate possible unobserved heterogeneity and endogeneity. The percentage of individuals voting for George W. Bush by county in the 2004 presidential election was used as an instrument, as it is likely to be highly correlated with the proportion of conservative Protestants while having no effect on the divorce rate (Lesthaeghe and Neidert 2006). The results showed no substantial difference from the initial county analyses: the coefficient for the estimated conservative Protestant rate remained the same (at 0.013; $P < .001$). All these sensitivity checks serve to confirm the robustness of the county-level results.

In our final attempt to find any nonlinear effects of conservative Protestant concentration on divorce risk, we separated the range of values in the conservative Protestant distribution into quartiles. The highest quartile contained 272 counties while the remaining 2,847 counties were distributed across the lower three quartiles. Thus, the highest quartile contained less than 10% of all counties, with conservative Protestant concentrations ranging from 58% to 88%. Only in this specification, which separated the most religiously homogeneous counties from all others, did we detect a significant nonlinear pattern. While in the bottom three quartiles the conservative Protestant effect was robust and identical in size ($b = .015$; $P < .001$), the top quartile analysis yielded essentially no effect ($b = -.003$; NS). There was essentially no additional elevated risk of divorce in the most religiously conservative counties, once risk through earlier transitions to adulthood was controlled. But even in these counties, early transitions to adulthood created a positive indirect effect of conservative Protestant concentration on divorce.

Individual-Level Processes

We turn now to the multilevel logistic models that test the microlevel impact of conservative Protestant affiliation on individual divorce risk, which are presented in table 5. Model 1 presents a baseline model with random intercepts and controls for individual age, gender, ethnicity, and region. Conservative Protestant affiliation at baseline produces a 17% increase in the risk of ever divorcing among respondents in the NSFG. However, this increase in risk becomes insignificant with the addition of variables indicating the respondent's family formation behavior and educational attainment in model 2, confirming the hypothesized pathway between individual religious affiliation and heightened divorce.

Model 3 adds a baseline contextual model at the county level to the baseline individual model to ascertain whether any impact of community religious conservatism on individual divorce risk exists. The effect of county religious conservatism is quite significant in this model, producing an 18% increase in the relative individual risk of experiencing divorce for each percentage increase in the local proportion of conservative Protestants. In column 4, the full individual model is presented with the baseline county model, and this contextual effect is reduced somewhat but still robust, indicating that little of the contextual effect of religious culture operates through increased individual risk of early transitions to adulthood. In column 5, the full individual and the full county-level models are estimated. In this specification, the direct effect of community religious context is reduced by over one-third, as the effects of community-level patterns of early family formation and cessation of education prove to be the pathways through which community-level religious conservatism increases individual divorce risk. Yet the residual impact unexplained by family formation context continues to be about a 7% increase in the individual risk of experiencing divorce for each percentage increase in local conservative Protestants. Importantly, this increase occurs for both respondents who are not themselves religiously conservative and those who are.

We estimated a series of cross-level interactions to determine whether county-level religious context enhances the impact of personal religious conservatism on divorce risk either directly or indirectly through the intervening variables of individual family formation and educational attainment, but we found none to be significant. Nor did county-level conservative Protestant concentration interact with any other personal characteristics such as gender, ethnicity, or region to influence divorce risk. We also tested whether other facets of community conservatism (average age at marriage and percentage of college graduates) interact with personal religious conservatism to affect divorce risk but found no significant cross-level effects. This indicates that the contextual effects of conservative local environments on individual divorce risk are relatively constant across individuals.

To complete our multilevel analyses, we created models of family formation and individual attainment (age at first marriage, age at first birth, college completion, and current income) to determine the impact of both personal religious conservatism and community-level religious conservatism on stressors that contribute to divorce risk. These analyses are presented in table 6. Table 6 shows both baseline models with only individual-level predictors and random intercepts and saturated models with individual-level and county-level predictors. In all models for all outcomes, personal conservative Protestant affiliation results in disadvantage: earlier ages at first marriage and first birth, lower likelihood of completing college, and lower

TABLE 5
MULTILEVEL LOGISTIC MODELS PREDICTING DIVORCE RATE

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Intercept | .27*** (.09) | .24*** (.10) | .24*** (.09) | .22*** (.10) | .23*** (.09) |
| Individual level: | | | | | |
| Conservative Protestant | 1.17* (.09) | 1.12 (.07) | 1.14 ⁺ (.07) | 1.09 (.07) | 1.10 (.07) |
| Other denomination | .57*** (.12) | .58*** (.12) | .61*** (.12) | .61*** (.12) | .62*** (.12) |
| Unaffiliated | 1.25** (.08) | 1.18* (.08) | 1.24** (.08) | 1.17 ⁺ (.09) | 1.16 ⁺ (.09) |
| Age | 1.09*** (.00) | 1.10*** (.00) | 1.09*** (.00) | 1.10*** (.00) | 1.10*** (.00) |
| African-American | .98 (.06) | .97 (.06) | 1.00 (.06) | 1.00 (.06) | 1.01 (.06) |
| Hispanic | .67*** (.06) | .65*** (.06) | .67*** (.07) | .65*** (.07) | .64*** (.07) |
| South | .92 (.07) | .92 (.07) | 1.09 (.07) | 1.06 (.07) | 1.05 (.07) |
| Midwest | .86* (.07) | .88 ⁺ (.07) | 1.02 (.08) | 1.20 (.08) | .95 (.08) |
| West | 1.13 ⁺ (.06) | 1.13* (.06) | 1.05 (.07) | 1.06 (.07) | .98 (.07) |
| Female | .96 (.07) | 1.19 ⁺ (.09) | .97 (.07) | 1.17 ⁺ (.09) | 1.18 ⁺ (.09) |
| Time | 1.04 (.05) | 1.11* (.05) | 1.07 (.05) | 1.12* (.05) | 1.11* (.05) |
| Age at first marriage | | .99* (.00) | | .99 ⁺ (.00) | .99 ⁺ (.00) |
| Age at first birth | | .99*** (.00) | | .99*** (.00) | .99*** (.00) |
| College graduate | | .66*** (.04) | | .68*** (.04) | .68*** (.04) |
| Cohabiting before first marriage . . . | | .98 (.04) | | 1.00 (.04) | .99 (.04) |
| Number of kids | | .82*** (.02) | | .82*** (.02) | .82*** (.02) |
| County level: | | | | | |
| % ages 25–44, 2000 | | | 1.18 (1.21) | .66 (1.21) | .29 (1.36) |
| % ages 45–64, 2000 | | | .68 (1.40) | .70 (1.40) | 2.91 (1.69) |
| % ages over 65, 2000 | | | 4.31 (1.16) | 2.24 (1.17) | 2.25 (1.24) |
| % African-American, 2000 | | | .77 (.22) | .73 (.23) | .74 (.29) |
| % Hispanic, 2000 | | | 1.81** (.21) | 1.81** (.21) | 1.57* (.22) |
| Conservative Protestant rate | | | 2.81*** (.16) | 2.47*** (.16) | 1.75*** (.20) |
| Other denomination rate | | | .60 (.60) | .71 (.60) | 2.22 (.62) |
| Unaffiliated rate | | | 1.40 (.72) | 1.49 (.73) | .32 (.85) |

Red States, Blue States, and Divorce

TABLE 5 (Continued)

| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---------|---------|---------|---------|----------------------------|
| Logged aggravated assault rate, 2000 | | | | | .99 (.01) |
| % cohabiting | | | | | 3.78*** (.33) |
| % currently married | | | | | 2.82 (1.21) |
| % with bachelor's degree or higher, ages 25 and over | | | | | 2.34 ⁺ (.50) |
| Family income | | | | | .99 (.00) |
| Median age at first marriage | | | | | .88** (.05) |
| Average age at first birth | | | | | .97 (.04) |
| Random effect: | | | | | |
| Intercept | | | | | |
| Variance | .09*** | .08*** | .06** | .06** | .04* |
| SE | (.02) | (.02) | (.02) | (.02) | (.02) |

NOTE.— $N = 12,594$. Coefficients presented are odds ratios; numbers in parentheses are SEs.

⁺ $P < .10$ (two-tailed tests).

* $P < .05$.

** $P < .01$.

*** $P < .001$.

personal earnings in the current period. County conservative Protestant concentration, on the other hand, showed no direct contextual effects on any intervening variable except current income once other county characteristics are controlled. Since income is measured contemporaneously rather than at the time of divorce, the income models are useful only for demonstrating the generally negative impact of conservative Protestant county concentration on individual earnings. Lower county proportion of college graduates and median family incomes, however, encouraged earlier individual transitions to adulthood, demonstrating indirect effects of county conservative Protestant concentration on individual-level risk factors for divorce.

DISCUSSION

While the risk of divorce in the United States has stabilized at a level slightly below its historic high in the 1980s, that level is still much higher than in other European countries and represents a significant cost to America's children and families (Cherlin 2009). The results here show that communities with large concentrations of conservative Protestants actually produce higher divorce rates than others, both because conservative Protestants

TABLE 6
MULTILEVEL MODELS PREDICTING INTERVENING VARIABLES (EARLY TRANSITIONS TO ADULTHOOD): POOLED 1995 AND 2002 NSFG

| Variables | | | | | | | | | | | |
|----------------------------------|----------------------------|-------------------|----------------------------|-------------------|------------------|------------------|-------------------|----------------------------|--|--|--|
| | Marriage | Marriage | Birth | College | College | Income | Income | | | | |
| Intercept | 19.67*** (.22) | 20.23*** (.17) | 20.24*** (.23) | 20.73*** (.18) | .26*** (.02) | .30*** (.02) | 10.40*** (.03) | 10.44*** (.03) | | | |
| Individual level: | | | | | | | | | | | |
| Conservative Protestant | -.84*** (.14) | -.72*** (.14) | -.89*** (.13) | -.84*** (.13) | .91*** (.01) | .92*** (.01) | -.06*** (.01) | -.06*** (.02) | | | |
| Other denomination | 1.00*** (.23) | .64** (.23) | 1.28*** (.23) | .94*** (.23) | 1.04* (.02) | 1.02 (.02) | -.02 (.02) | -.04 ⁺ (.02) | | | |
| Unaffiliated | -.31 ⁺ (.17) | -.34* (.17) | -.45*** (.17) | -.47** (.17) | .93*** (.01) | .93*** (.01) | -.08*** (.02) | -.08*** (.02) | | | |
| Age | .11*** (.01) | .10*** (.01) | .23*** (.01) | .23*** (.01) | 1.01*** (.00) | 1.01*** (.00) | .00*** (.00) | .00*** (.00) | | | |
| African-American | 1.04*** (.12) | .87*** (.12) | -2.31*** (.11) | -2.53*** (.11) | .92*** (.01) | .91*** (.01) | -.31*** (.01) | -.32*** (.01) | | | |
| Hispanic | -.78*** (.12) | -1.04*** (.13) | -1.78*** (.12) | -2.06*** (.12) | .81*** (.01) | .80*** (.01) | -.28*** (.01) | -.30*** (.01) | | | |
| South | .27 ⁺ (.16) | .04 (.13) | .05 (.16) | .08 (.14) | 1.02 (.01) | 1.02 (.01) | .02 (.02) | -.01 (.02) | | | |
| Midwest | .18 (.17) | .04 (.15) | -.09 (.17) | -.15 (.16) | 1.00 (.02) | 1.02 (.01) | .05* (.02) | .04 ⁺ (.02) | | | |
| West | -.33* (.13) | .13 (.13) | -.29 ⁺ (.15) | .12 (.14) | 1.01 (.01) | 1.04*** (.01) | -.06*** (.02) | .03 (.02) | | | |
| Female | .21 (.23) | .08 (.18) | -1.66*** (.15) | -1.72*** (.14) | 1.05** (.02) | 1.05*** (.01) | -.18*** (.02) | -.18*** (.02) | | | |
| Time | 1.46*** (.13) | 1.20*** (.09) | 1.37*** (.14) | 1.09*** (.10) | 1.11*** (.01) | 1.09*** (.01) | .02 (.02) | .00 (.01) | | | |
| Age at first marriage | | | | | 1.00*** (.00) | 1.00*** (.00) | .01*** (.00) | .01*** (.00) | | | |
| Age at first birth | | | | | .99*** (.00) | .99*** (.00) | .00 (.00) | .00 (.00) | | | |
| College graduate | | | | | | | .28*** (.01) | .27*** (.01) | | | |
| Cohabiting before first marriage | | | | | | | -.10*** (.01) | -.11*** (.01) | | | |

themselves exhibit higher divorce risk and because individuals in communities dominated by conservative Protestants face higher divorce risks. Uncovering the mechanisms through which religious rhetoric and practices directly and indirectly influence marital stability helps reveal both the strengths and the weaknesses of a religiously based marriage system. The results of these aggregate and multilevel analyses highlight the pathways through which conservative religious beliefs and the social institutions they create, on balance, decrease marital stability through the promotion of practices that increase divorce risk in the contemporary United States.

The concentration of conservative Protestants in the South and in disadvantaged communities cannot explain the association of religious conservatism and elevated divorce rates. Nor can the association between high levels of religious conservatism and high levels of marriage within counties, which might indicate a preference for marriage over cohabitation in high-risk relationships and subsequent higher formal rates of marital dissolution. While counties with more conservative Protestants do have higher proportions married and less cohabitation, this actually serves as a pathway to lower divorce rates, not higher.

The major pathway linking religious conservatism and divorce is the early cessation of education in favor of marriage and childbearing. Early childbearing among couples with relatively low levels of education, coupled with low rates of maternal employment, leads to financial difficulties that can seriously strain marital relationships. The inclusion of family formation behaviors in the contextual models reduced the impact of conservative Protestant concentration on county divorce rates by over one-third. In the multilevel models of individual divorce risk, individuals' early transitions to adulthood reduced the direct impact of conservative Protestant affiliation on divorce risk to insignificance, although contextual effects of county conservative Protestant affiliation remain strong.

The effects of large concentrations of conservative Protestants on aggregate divorce rates do not simply reflect the higher divorce risk of conservative Protestants themselves. Rather, the community norms and institutions structuring marriage and fertility that stem from the beliefs of conservative Protestants affect all youths irrespective of their personal religious affiliation, increasing divorce risk among all those in that environment. Moreover, the effects of personal and community-level conservative Protestant affiliation are additive, meaning that conservative Protestants in strongly conservative Protestant counties have higher divorce risks than conservative Protestants in mainline dominant counties.

While the results here show conclusively that early transitions to adulthood can indeed help explain why conservative Protestants and regions with more conservative Protestants have higher divorce rates, the bulk of the contextual effect of conservative Protestant county presence still re-

mains after these early transitions have been accounted for. This residual impact of aggregate religious conservatism on individual divorce may be the result of a number of factors.

One plausible interpretation of the results is that as conservative Protestant presence increases, elite conservative Protestant influence grows stronger, which results in policies and programs that do little to reduce divorce, but only increase early marriage. Conservative Protestant community norms and the institutions they create seem to increase divorce risk for themselves as well as others as their proportions grow in U.S. counties. This effect reflects the balance of weaker processes that reduce divorce risk (such as lower cohabitation and higher marriage rates, and quite plausibly greater religiosity in the local population) and stronger processes that raise divorce risk (such as problematic religious exogamy between spouses, lack of sexual knowledge, difficulty accessing contraception or abortion, low support for quality public education, etc.). But where conservative Protestants can create a moral cartel in the most religiously homogeneous counties (those with conservative Protestant concentrations of two-thirds or more), perhaps the calculus changes slightly. These extremely high local concentrations presumably reduce the divorce-prone religiously exogamous unions between conservative Protestant wives and unaffiliated husbands (Lehrer and Chiswick 1993; Vaaler et al. 2009), may raise overall levels of religious practice that stabilize marriages, and may create the kind of social integration that promotes higher marital quality. Or perhaps there are simply fewer palatable alternatives to one's current marriage and less lifestyle variety and choice in general wherever conservative Protestant concentrations are very high. Whatever the reason, perhaps the "red family system" of Cahn and Carbone (2010) works better when everyone in a local marriage market adheres to the same strict understandings and beliefs about sexuality, marriage, and family formation. Unfortunately, such dense concentrations are rare in U.S. counties (less than 10%) and could shrink further as immigration and increasing rates of disaffiliation (Sherkat 2001; Hout and Fischer 2002; Kosmin and Keysar 2009) produce greater religious pluralism.

Other plausible explanations for the residual impact of county religious conservatism revolve around community norms and resources to improve marital quality. For example, help-seeking behavior may be discouraged or delayed in communities where marriage is idealized or marital failure is viewed as shameful, and community resources for marital counseling may be weak or exclusively religious in nature. Norms against admitting marital problems may also deter help seeking and may especially affect those in interfaith marriages.

Methodological drawbacks of our analysis might also be responsible for the unexplained contextual effect of conservative Protestant concentration

on divorce. First, the accuracy of the variables used to measure accelerated transitions to adulthood in counties may be weak enough to attenuate their association with county-level divorce rates. In particular, the imprecision of the measures of age at first marriage and first birth (measured only at the state level) may have mitigated the ability of the model to assess the role of religious conservatism in increasing divorce by promoting early family formation. Second, the data are cross-sectional, necessitating a strong assumption that the transition to adulthood variables are stable within counties over time since they are theorized as precursors of divorce risk. Finally, not all possible covariates of divorce risk could be accurately measured at the county level. For example, the monetary costs of divorce may vary by county in ways that correspond to the concentration of conservative Protestants, although no prior work has demonstrated strong deterrent effects of legal costs on divorce probabilities.

Future work should further investigate the possibility that the residual impact of county conservative Protestant concentration on divorce may be at least partially explained by some of the institutional forms and practices we suspect are more prevalent in these counties. These include county per capita indicators of premarital pregnancies, crisis pregnancy centers, abstinence curricula in school districts, levels of taxation and community services (Republican Party domination), unionization among wage and salaried workers, median family wealth, median hourly wages, and motherhood employment penalties. These institutional forms, especially in counties with moderate religious heterogeneity, may help explain higher divorce risk among all residents.

This research contributes to our understanding of the unintended consequences of strong normative prescriptive standards of behavior. Because the sacred character and permanence of heterosexual marriage are flash points in America's current "culture wars," and the regulation of sexual conduct, fertility, and marriage according to religious morality has become a matter of contested public policy, it is especially important to delineate the paradoxical effects of religious affiliation on marital stability at both the individual and community levels. The straightforward and expected outcomes of strong religious prohibitions against nonmarital sexuality and divorce turn out to be relatively weak protections against actual divorce, while the hidden potential for destabilizing marriage by encouraging marriage between partners with few material and relationship skills is revealed. By attending to both these contradictory effects, the construction of evidence-based policy interventions to promote and sustain marriage would be enhanced.

APPENDIX A

TABLE A1
COUNTY DATA SOURCES

| Variable | Source |
|--|--|
| Divorce rate | State Vital Statistics Reports |
| % ages 25–44 | Census Summary File 1, 2000 U.S. Census |
| % ages 45–65 | Census Summary File 1, 2000 U.S. Census |
| % ages over 65 | Census Summary File 1, 2000 U.S. Census |
| % African-American | Census Summary File 1, 2000 U.S. Census |
| % Hispanic | Census Summary File 1, 2000 U.S. Census |
| % rural | Census Summary File 1, 2000 U.S. Census |
| % enrolled in college, ages 18–24 | Census Summary File 3, 2000 U.S. Census |
| % graduated from high school, 25 and over | Census Summary File 3, 2000 U.S. Census |
| % with bachelor's degree or higher, 25 and over | Census Summary File 3, 2000 U.S. Census |
| Family income | Census Summary File 3, 2000 U.S. Census |
| % mothers in labor force with children under 6 | Census Summary File 3, 2000 U.S. Census |
| % cohabiting | Census Summary File 1, 2000 U.S. Census |
| % currently married | Census Summary File 3, 2000 U.S. Census |
| Average number of children | Census Summary File 1, 2000 U.S. Census |
| Median age at first marriage | Census Supplementary Survey 2000–2001, U.S. Census; American Community Survey 2002–2003, U.S. Census |
| Average age at first birth | National Vital Statistics Reports: vol. 51, no. 1; National Center for Health Statistics, 2000 |
| % unemployed | Bureau of Labor Statistics, 2000 |
| Logged aggravated assault rate | Crime in the United States, 2000; Federal Bureau of Investigation's Uniform Crime Reports |
| Conservative Protestant rate | 2000 Religious Congregations Membership Study |
| Other denomination rate | 2000 Religious Congregations Membership Study |
| Unaffiliated rate | 2008 U.S. Religious Landscape Survey, Pew Forum on Religion |

APPENDIX B

Estimates of Divorce Rate by County in States without County Vital Statistics

Divorce data for Colorado were obtained through personal contact with the Vital Statistics Unit of the Colorado Department of Public Health and Environment; for Georgia, they were obtained through personal contact—by the National Center for Family and Marriage Research—with the Department of Community Health Vital Statistics Division; for South Dakota, they came through personal contact with the Department of Health; and for Texas, they were obtained from the *Texas Vital Statistics Report, 2000*. Divorce data for California and Indiana were obtained via the Internet through each state's judicial branch. Divorce data for Maine were acquired

through personal contact with the judicial branch, and divorce data for New Mexico came through personal contact with the Judicial Information Division.

The state of Alaska reported only the number of resident females and resident males from each county who were granted a divorce; it did not supply the total number of divorces per county. It was therefore possible for the number of divorces listed for resident females and males to be different. Additionally, the state of Alaska had a number of marriages that occurred where the residency of the divorcees was unknown or occurred outside of the state.

Because females are more likely to file for divorce, each county was initially assigned the value for the number of resident females divorced per county. The number of divorces in which residency was unknown ($N = 77$) and the number of resident divorces that occurred outside of Alaska ($N = 254$) were then accounted for. These divorces ($N = 331$) were distributed proportionately to county population.

Each county population (C_{pop}) was divided by the state population (S_{pop}). This was then multiplied by the number of divorces needed to be distributed ($N = 331$). The distributed divorces (D_{dist}) were then added to the number of resident females divorced per county (F_{div}):

$$[(C_{\text{pop}}/S_{\text{pop}}) \times 331] + F_{\text{div}}.$$

Once calculated,

$$\sum [(C_{\text{pop}}/S_{\text{pop}}) \times 331] + F_{\text{div}} = 2,800.$$

This is equal to the total number of divorces (2,800) recorded by the Alaska Bureau of Vital Statistics for the year 2000.

APPENDIX C

Coding Schema for Religious Denominations and Regions

Conservative Protestant

Evangelical Covenant Church

Evangelical Free Church of America

Evangelical Mennonite Church

Fellowship of Evangelical Bible Churches

General Association of Regular Baptist Churches

General Six Principle Baptists

Hutterian Brethren

Independent Free Will Baptists Associations

Independent, charismatic churches

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Independent, noncharismatic churches
International Church of the Foursquare Gospel
International Churches of Christ
International Pentecostal Church of Christ
International Pentecostal Holiness Church
Interstate and Foreign Landmark Missionary Baptist Association
Jasper Baptist and Pleasant Valley Baptist Association
Landmark Missionary Baptist, independent associations and unaffiliated churches
Midwest Congregational Christian Fellowship
Missionary Church
National Association of Free Will Baptists
National Primitive Baptist Convention, USA
New Hope Baptist Association
New Testament Association Independent Baptist Churches/other fundamental Baptists
Old Missionary Baptists Associations
Old Order River Brethren
Original Free Will Baptists
Pentecostal Church of God
Primitive Baptist Church
Primitive Baptist, East District Association of
Progressive Primitive Baptists
Protestant Reformed Churches in America
Reformed Church in the United States
Salvation Army
Separate Baptists in Christ
Seventh-Day Adventist Church
Southern Baptist Convention
Southwide Baptist Fellowship
Strict Baptists
Two-Seed-in-the-Spirit Predestinarian Baptists
United Reformed Churches in North America
Vineyard USA
Wayne Trail Missionary Baptist Association
Wesleyan Church

Mainline

Albanian Orthodox Diocese of America
American Baptist Association
American Baptist Churches in the USA
American Carpatho-Russian Orthodox Greek Catholic Church

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Antiochian Orthodox Christian Archdiocese of North America
Apostolic Catholic Assyrian Church of the East, North America
Armenian Apostolic Church/Catholicossate of Cilicia
Armenian Apostolic Church/Catholicossate Etchmiadzin
Association Reformed Presbyterian Church
Association of Free Lutheran Congregations
Bulgarian Orthodox Diocese of the USA
Catholic Church
Church of Jesus Christ of Latter-day Saints
Christian Church (Disciples of Christ)
Christian Reformed Church in North America
Congregational Christian Churches, additional (not in any CCC body)
Coptic Orthodox Church
Cumberland Presbyterian Church
Episcopal Church
Evangelical Lutheran Church in America
Evangelical Presbyterian Church
Free Methodist Church of North America
Friends (Quakers)
Fundamental Methodist Conference
Greek Orthodox Archdiocese of America
Greek Orthodox Archdiocese of Vasiloupulis
Holy Orthodox Church in North America
International Council of Community Churches
Lutheran Church—Missouri Synod
Macedonian Orthodox Church: American Diocese
Malankara Archdiocese, Syrian Orthodox Church in North America
Malankara Orthodox Syrian Church, American Diocese
Mennonite Brethren Churches, U.S. Conference of
Mennonite Church USA
Mennonite; other groups
Moravian Church in America—Alaska Province
Moravian Church in America—Northern Province
Moravian Church in America—Southern Province
National Association of Congregational Christian Churches
Netherlands Reformed Congregations
North American Baptist Conference
Orthodox Church in America: Albanian Orthodox Archdiocese
Orthodox Church in America: Bulgarian Diocese
Orthodox Church in America: Romanian Orthodox Episcopate of America
Orthodox Church in America: territorial dioceses
Orthodox Presbyterian Church
Patriarchal Parishes of the Russian Orthodox Church in the USA

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Presbyterian Church (USA)
Presbyterian Church in America
Primitive Methodist Church in the USA
Reformed Baptist Churches
Reformed Church in America
Reformed Mennonite Church
Romanian Orthodox Archdiocese in America and Canada
Russian Orthodox Church outside of Russia
Serbian Orthodox Church USA (New Gracanica Metropolitanate)
Serbian Orthodox Church in the USA
Syrian Orthodox Church of Antioch
Ukrainian Orthodox Church of the USA
Unitarian Universalist Association
United Church of Christ
United Methodist Church
Universal Fellowship of Metropolitan Community Churches
Wisconsin Evangelical Lutheran Synod

Other

Amish; other groups
Baha'i
Beachy Amish Mennonite Churches
Bruderhof Communities
Buddhists
Conservative Mennonite Conference
Eastern Pennsylvanian Mennonite Church
Hindus
Jains
Jewish estimate
Muslim estimate
Old Order Amish
Old Order Mennonite
Sikhs
Taoists
Zoroastrians

Region Coding

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.

Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.

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South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia.

West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

APPENDIX D

TABLE D1
CORRELATION MATRIX

| Vari- ables | V1 | V2 | V3 | V4 | V5 | V6 | V7 | V8 | V9 | V10 | V11 | V12 | V13 | V14 | V15 | V16 | V17 | V18 | V19 | V20 | V21 | V22 | V23 | V24 | V25 |
|----------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|
| V1 | ... | | | | | | | | | | | | | | | | | | | | | | | | |
| V2 | .18 | ... | | | | | | | | | | | | | | | | | | | | | | | |
| V3 | ... | -.27 | ... | | | | | | | | | | | | | | | | | | | | | | |
| V4 | ... | -.01 | ... | ... | | | | | | | | | | | | | | | | | | | | | |
| V5 | ... | -.16 | -.75 | .44 | ... | | | | | | | | | | | | | | | | | | | | |
| V6 | ... | .03 | .17 | -.20 | -.19 | ... | | | | | | | | | | | | | | | | | | | |
| V7 | ... | -.12 | .04 | -.25 | -.16 | -.10 | ... | | | | | | | | | | | | | | | | | | |
| V8 | ... | .29 | .09 | .04 | -.09 | .40 | -.09 | ... | | | | | | | | | | | | | | | | | |
| V9 | ... | -.01 | .23 | -.11 | -.15 | .11 | .05 | -.19 | ... | | | | | | | | | | | | | | | | |
| V10 | ... | .02 | .04 | .22 | -.06 | -.40 | .09 | -.48 | .10 | ... | | | | | | | | | | | | | | | |
| V11 | ... | .14 | .16 | -.03 | -.13 | .50 | .07 | .74 | -.09 | -.54 | ... | | | | | | | | | | | | | | |
| V12 | ... | -.12 | -.20 | -.07 | .27 | -.33 | -.23 | -.42 | .05 | .01 | -.65 | ... | | | | | | | | | | | | | |
| V13 | ... | -.02 | -.03 | .10 | -.16 | -.21 | .24 | -.26 | .00 | .65 | -.37 | -.29 | ... | | | | | | | | | | | | |
| V14 | ... | -.17 | -.38 | .42 | .36 | -.09 | -.24 | .19 | -.30 | -.10 | .04 | -.08 | ... | | | | | | | | | | | | |
| V15 | ... | .04 | -.12 | .02 | -.04 | .21 | .21 | .19 | -.09 | -.02 | .12 | -.27 | .23 | .11 | ... | | | | | | | | | | |
| V16 | ... | .08 | .10 | -.06 | -.14 | .17 | .17 | -.00 | .08 | .08 | .14 | -.27 | .11 | -.25 | -.02 | ... | | | | | | | | | |
| V17 | ... | .12 | .37 | -.10 | -.42 | .03 | .01 | -.26 | .18 | .41 | -.24 | -.05 | .20 | -.29 | .14 | .16 | ... | | | | | | | | |
| V18 | ... | -.07 | -.20 | .56 | .47 | -.50 | -.11 | .07 | -.26 | .02 | -.02 | .12 | -.07 | .40 | -.23 | -.19 | -.52 | ... | | | | | | | |
| V19 | ... | .04 | .33 | -.23 | .02 | -.05 | -.15 | .17 | .01 | -.07 | .03 | -.08 | -.43 | -.19 | .08 | .14 | -.36 | ... | | | | | | | |
| V20 | ... | -.07 | .04 | .08 | -.01 | -.39 | -.26 | -.60 | .10 | .41 | -.59 | .37 | .23 | -.26 | -.48 | .01 | .14 | .10 | .30 | ... | | | | | |
| V21 | ... | -.06 | .27 | -.10 | -.30 | -.08 | .03 | -.37 | .34 | .27 | -.20 | -.04 | .19 | -.50 | .38 | .14 | .17 | -.21 | .53 | .65 | ... | | | | |
| V22 | ... | -.03 | .50 | -.04 | -.37 | .18 | -.09 | -.39 | .31 | .26 | -.27 | .12 | .07 | -.48 | -.48 | .08 | .22 | .01 | .32 | .66 | .72 | ... | | | |
| V23 | ... | -.13 | .04 | .28 | -.05 | -.34 | -.33 | -.10 | .03 | .03 | -.34 | .48 | -.16 | .04 | -.34 | -.10 | .08 | .03 | .08 | .38 | .07 | .16 | ... | | |
| V24 | ... | -.18 | .10 | .05 | .07 | .04 | -.15 | -.41 | .27 | .19 | -.41 | .28 | -.17 | -.11 | .06 | .37 | -.15 | .23 | .27 | .21 | .33 | .27 | ... | | |
| V25 | ... | -.20 | .15 | .11 | .02 | -.17 | -.07 | -.48 | .27 | .47 | -.40 | .14 | .01 | -.18 | -.22 | .04 | .36 | -.01 | .20 | .36 | .31 | .46 | .22 | .75 | ... |
| V25 | ... | -.08 | .30 | -.64 | -.60 | .38 | .39 | -.02 | .19 | -.09 | .09 | -.20 | .15 | -.27 | .32 | .14 | .30 | -.67 | .00 | -.28 | -.01 | -.01 | -.26 | -.07 | -.12 |

NOTE.—V1 = divorce rate; V2 = % ages 25–44; V3 = % ages 45–64; V4 = % ages 65+; V5 = % African-American; V6 = % Hispanic; V7 = conservative Protestant rate; V8 = other denomination rate; V9 = unaffiliated rate; V10 = South; V11 = Midwest; V12 = West; V13 = % rural; V14 = % unemployed; V15 = logged aggravated assault rate; V16 = % cohabiting; V17 = % currently married; V18 = % enrolled in college, ages 18–24; V19 = % graduated from high school, ages 25 and over; V20 = % with bachelor's degree or higher, ages 25 and over; V21 = family income; V22 = % mothers in labor force with children under 6; V23 = median age at first marriage; V24 = average age at first birth; V25 = average number of children.

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