Abstract: What determines whether secular and religious organizations provide substitutes or complements? To investigate this question, we focus on one area, care of the poor, in which states and churches have significant overlap. While state welfare programs have crowded out church welfare efforts in many places, Utah seems to be an exception to this rule. We argue that the economic force behind Utah's welfare complementarity is the large share of individuals who fund both systems: tax-and-tithe payers. These individuals benefit when the welfare programs increase the value of each other, rather than cannibalize it. We test this theory against county-level data on religious adherence, Utah state welfare use, the 2019 Medicare expansion vote in Utah, and the comparable cases of Texas and Tennessee.

Keywords: Economics of Religion, Welfare Policy, Utah

I. INTRODUCTION

Conventional wisdom and economic theory suggest that the provision of welfare services by the state will crowd out, or at least compete with, church welfare efforts. This story can explain the patterns of welfare provision in most places of the United States and around the globe. An interesting exception to this is found in Utah. Welfare services in Utah are provided by both the Department of Workforce Services and the Church of Jesus Christ of Latter-Day Saints (hereafter the LDS Church), and these two systems function more as complements than substitutes with regard to the populations they serve, the services they provide, and the manner in which they provide them. What explains this exception? We argue that the key to this different relationship is that the median voter in Utah pays both taxes to the state and tithes (of some form) to the LDS Church. Because of this, she will support state welfare policies that complement the already well-functioning LDS welfare system. More generally, when the median voter is a tax-and-tithe payer, she doesn't vote to increase general state-run welfare in some amorphous, ill-defined way—rather, marginal increases in state-run welfare must complement her understanding of "legitimate" welfare. Furthermore, the state legislature overrepresents the LDS community in Utah, ensuring that legislators build a state welfare system that responds to the preferences of the tax-and-tithe-paying median voter. This situation of secular-religious welfare complementarity is unique to Utah be-
cause it is one of the few states (if not the only one) with a religious majority, and a religious majority with a characteristic approach to welfare.

LDS welfare provision has already been a notable case across the social sciences, as is Utah itself for being home to relatively high rates of economic mobility (Barton 1977; Chetty et al. 2014; Goodman and Herzb erg 2019). An exemplar of the welfare approach taken by Utah’s Department of Workforce Services is their Intergenerational Poverty Initiative (hereafter, the Initiative) begun in 2012. Its five and ten-year plans include supporting parents as the “first teachers,” promoting a culture that supports “consistent school attendance,” and most importantly, recognizing “family as the center of economic stability” (Intergenerational Welfare Reform Commission 2015). In 2019, voters in Utah passed the Medicaid expansion, which was ratified by lawmakers with some notable customizations, such as “self-sufficiency requirements” and expanded support for pregnant mothers. Both the Initiative and Medicaid expansion are coherent with LDS values regarding welfare: the role of work, self-reliance, healthcare, and provision for children. This paper analyzes the economic forces behind the division of labor and cooperation of Utah and LDS Church welfare services. We see this as progress toward a more general question: What determines whether secular and religious organizations provide substitutes or complements?

Our analysis follows a long tradition of scholarship investigating the relationship between church and state. We build from public choice, which analyzes political organizations and political choices from the economic point of view, and the economics of religion, which studies religious organizations and religious choices from the economic point of view. Breton (1989) asks a question similar to ours. His response—as well as the default economic response—is that there is no distinction in economic theory between “types” of producers (religious or secular), rather, they are all in competition to provide the demanded goods to individuals at the lowest price. We agree with this analysis, but we adjust our starting place to allow for heterogeneous welfare “goods,” and thus must find out how the conclusion holds in a new setting. Hungerman (2005) also studies a related question, testing whether church and state welfare activities at the national level are substitutes or complements. By estimating the empirical relationship between Presbyterian church donations and spending, he finds them substitutes. Our approach to Utah is analogous to Phillips (1999), who argues that Utah is an exception to the “supply-side” theory of religion, because the religious endogamy, denominational distinctiveness, and high fertility of the LDS Church help it circumvent the predicted effects of religious competition. Anderson (1987) investigates the rent-seeking side of welfare programs and argues that they have effects akin to labor market restrictions. Since “levels of [welfare] are apparently not significantly correlated with the relative voting strength of the poor,” there must be other groups demanding such programs (significantly, he excludes Utah from this analysis because of its unique features). Berman’s (2000) analysis of Ultra-Orthodox Jews highlights how secular services can substitute for religious club goods; thus various religious prohibitions (e.g., “do not accept welfare from the state”) can be understood as taxes upon secular goods, making club members better-off when they are enforced. Finally, our analysis may explain how high levels of welfare spending and robust church adherence can coincide (Gill and Lundsgaarde 2004).

We provide a model which relates the complementarity of Utah welfare systems to the incentives of tax-and-tithe payers. We make simplifying demand-side assumptions about tax-and-tithe payers from religious affiliation, and our primary supply-side assumption is that organization respond to the median voter (Downs 1957). Our theory yields a series of predictions which we test against evidence from Utah and welfare provision in comparable states.

Our paper sheds light on the distinctive relationship between Utah state and LDS Church welfare programs that we observe today. Extensions of our theory lie in general applications to the question of church/state separation—for example, the religious-secular division of labor and trade in services such as education, healthcare, and insurance, amongst others. In short, the applicability of our results relies upon the extent to which tax-and-tithes payers have influence in their respective organizations. Our conclusions emphasize that the individuals who participate in both secular and religious organizations function as an in-
formation and incentive channel between otherwise distinct providers of social services, which has imperative consequences for those being served.

II. A THEORY OF CHURCH AND STATE WELFARE COMPLEMENTARITY

While care for the poor is an activity older than economic analysis, economic laws apply across time and space. We approach our research question alongside the growing economics of religion literature. McBride (2007a, p. 399) offers a great explanation for how rational choice theory applies to religious choices as well:

This rational choice approach takes as given the notion that individuals and institutions, even religious ones, care about the costs (monetary, time, effort, emotion, etc.) and benefits (spiritual, social, etc.) of their actions, and that a religious institution succeeds, in part, by providing incentives that generate desired behavior.

McBride has analyzed features of the LDS church, such as religious authority (2016) and free riding (2007a and 2007b), from the economic point of view. This paper focuses on another distinguishing characteristic of the LDS church, specifically, the Church Welfare Plan.

Our theory builds upon Breton (1989), which applies a key assumption in economic theory—that individuals are indifferent as to who produces the goods that they consume (deciding solely on the margin of price)—to public goods. Economic theory predicts that producers of public goods assemble themselves to serve the demands of individuals according to their comparative advantage. It is worth quoting Breton (1989, p. 726) at length on this point:

The family or kinship system will, in other words, be a more effective provider of child care, nursing and convalescence services, unemployment relief, assistance to the elderly and to single mothers, loan guarantees, and protection against homelessness and destitution in societies characterized by a low degree of geographic mobility and a strong attachment to ancestral homes and places of residence. For reasons that are obvious, the nuclear family is much less capable of supplying many of the income redistributational services just listed and the monoparental family is still less effective.

It is a reality today that public goods once provided by the family and church are now produced by governmental organizations. Interestingly, the persisting LDS Church Welfare Plan combines some of the features that Breton (1989) mentions—an emphasis on family ties, support by the local community, and informal norms encouraging work. Notice, too, that these informal tie-in goods increase the marginal cost of using welfare services to users of these programs.

Kahl (2005) considers the heterogeneity of welfare provision across European states, arguing that different religious origins (i.e., Protestant or Catholic) resulted in different state social service policies. This is important for our theory since we view the welfare services provided by various secular and religious organizations as heterogeneous and thus resulting in combinations that fall on a range of related as substitutes to complements. Breton & Wintrobe’s (1982) analysis of private and public bureaucracies provide a public choice explanation for welfare heterogeneity. Policies that address the same general issue—“welfare” for example—are constituted by two parts: 1) an essential core of services that defines the type of policy (e.g., transferring resources to the poor), and 2) a blend of inessential services that are the result of exchanges by utility-maximizing bureaucrats (e.g., work-fare requirements). We assume similarly that bureaucrats can adjust their welfare programs at the margin in order to please their tax-and-tithe paying constituents.

Hungerman (2005) finds that church welfare activities substitute for government welfare activities—a “crowding-out” effect estimated at 20-38 cents on the dollar using the 1996 welfare reform. This comports with our theory, however, since tax-and-tithe payers across the nation are funding a plurality of private and
public welfare systems. Therefore, it would be very costly to identify a federal welfare program that “complements” all other religious welfare programs, even after assuming that tax-and-tithe have great influence over federal welfare policies. In Utah, the majority of tithe-payers pay their tithes to the same religious organization, the LDS Church, which provides a single, unique welfare approach to welfare, and they are numerous enough to influence the position of the “median voter.” In a survey from Dahl & Ransom (1999), 80% of LDS members from Utah responded that they attend “Sacrament Meeting” at least three times per month, and within that group, they estimate around two-thirds pay tithes. With the percentage of Utah members who report LDS membership around 60% today, faithful tithe payers to the LDS Church could make up at least 32% of the population. And of course, this does not account for those who simply prefer the values of the LDS Church with regard to welfare provision.

Finally, Gill and Lundsgaarde (2004, p. 107) deal with the question of state welfare provision intruding on the long tradition of church welfare, hypothesizing that “the level of religious participation in society should vary inversely with the per capita level of social welfare provided by the state”. Similarly, Chen & Lind (2007, p. 42) argue that religious intensity generally comes with forms of social insurance, which can help explain why fiscal and social conservativism coincide; “The religious right may be against welfare because it competes against their constituency”. The arguments from both papers may be true, but only to the extent that religious members have no significant degree of control over the resources of the state welfare provision. In fact, various studies have documented the “delegated” nature of the U.S. welfare system, meaning that the government outsources much of its on-the-ground welfare provision to local, private agencies (Morgan & Campbell, 2011). Our choice of Utah is fitting in that there are two main welfare service providers, and the individuals who pay taxes and tithes make up a large portion of the overall population.

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**a. A Model of Dual Welfare Systems**

We make two main assumptions in our theory of decisions regarding religious and secular welfare policies. First, welfare policies are heterogeneous. This means that some welfare policies relate as substitutes, while others function as complements. Second, tax-and-tithe payers fund both secular and religious welfare systems (by state mandate and church appeal), though the cost of individual consumption from each system may vary. Our supply-side assumption is that state authorities have a strong incentive to conform to the welfare choices of the median voter, whether she is a tax-and-tithe payer or just a taxpayer.

We formalize the demand and supply of welfare policy as follows. Let $W_0, W_1, W_2$ represent three different welfare policy bundles. From the perspective of tax-and-tithe payers, $W_0$ and $W_1$ are substitutes. However, they view $W_0$ and $W_2$ as complementary. This means that in the presence of $W_1$ the value of $W_0$ to tax-and-tithe payers is less than it otherwise would have been. On the other hand, the value of $W_0$ is enhanced when $W_2$ is also provided. The quintessential example of complementary goods provided by economic textbooks is bread and butter. Perhaps a better example for our situation is the federal tax deduction for church donations. In the presence of this policy, the value of church donations to tax-and-tithe payers is increased.

In $t_0$, the church begins by producing welfare policy $W_0$, which is distinct from other welfare goods in that the church specializes along its comparative advantages (providing friendly house visits, for example). The state also begins by producing welfare policy $W_1$, differentiated along its own comparative advantage (a soft budget constraint for funding, for example). Church members view state welfare as an inferior substitute for their own, and the price faced by tax-and-tithe payers for their personal use of state welfare is prohibitively high (for all time periods); $P_1 = \infty$. However, for only taxpayers, the price of using state welfare (its marginal cost) is zero: $P_1' = 0$. Finally, the price of using church welfare services is purposively set above zero by church authorities, $P_0 > 0$.

In the next time period, $t_1$, we relax some constraints so that tax-and-the prayers now have the ability to choose which welfare program is produced by the state. The binding constraints represent a set of alternative situations in which the median voter would not be a tax-and-tithe payer—for example, if the federal
government directed the state welfare programs, or if the cost of switching the state welfare production remained too high. Since tax-and-tithe payers face relatively high prices for individual consumption of welfare, \( P_0 > 0 \) and \( P_1 = \infty \), they will demand a complementary welfare policy, \( W_2 \), which is now marginally less costly, \( P_0 > P_2 \). By increasing the value of church welfare, its marginal cost is now also lower to tax-and-tithe payers, \( P_0 > P_0' \). The mechanism here is basic utility maximization—individuals paying both taxes and tithes every year have an incentive to choose programs that enhance one another’s value rather than cannibalize it.

Our analysis yields a set of predictions:

1. Prediction 1: Forces toward complementarity will be stronger where tax-and-tithe payers constitute a large proportion of the population (relative to other groups) and when their combined tax-and-tithe burden is high (relative to their budgets).

2. Prediction 2: To make state welfare complementary, tax-and-tithe payers will vote to mitigate the production of the substitute state welfare policy bundle, \( W_1 \), and make access more expensive for users, \( P_1 > P_0' \).

3. Prediction 2: When state welfare is complementary, religious leaders will become more lenient toward member use of state welfare services. This means the price of the complementary welfare policy, \( P_2 \), for tax-and-tithes payers is lower than the substitute welfare policy \( P_1 > P_2 \).

b. Complements and Substitutes

In sum, we predict that a jurisdiction will have state and religious welfare systems that are complements when the median voter pays both taxes and tithes to single secular and religious organizations. What does it mean to say that two systems of welfare are complementary? “If two goods are complements, then large changes in price ratios lead to only small shifts in relative quantities bought” (Hirshleifer 2009, p. 106). Mathematically, the cross-elasticity of substitute goods is positive, while the cross-elasticity of complements is negative. When thinking about welfare systems as complements, then, we look at how each system increases the value of the other.

Up to this point, we have considered the possibility that each system “specializes” in providing the specific kinds of welfare services for which it has the comparative advantage. However, there is another way in which church and state welfare policies could be complementary—if they are nearly identical. Interestingly, this is what substitutes (butter and margarine) generally look like. The key to this situation, though, is that these duplicate welfare programs are consumed by two distinct markets—tithe-payers on the one hand and simply taxpayers on the other. Tax-and-tithe payers who see their own church’s welfare system as the best approach to caring for those with lower income might seek to duplicate these kinds of welfare policies at the secular level so that they may reach a broader and/or entirely different market. In other words, the value of a welfare policy to consumers is also determined by the specific group of people it is able to reach. We will show that Utah’s state welfare system exhibits both forms of complementarity.

III. A SHORT HISTORY OF DUAL WELFARE SYSTEMS

The secular U.S. welfare system began its ascent with the Social Security Act of 1935. In the very next year, 1936, the Church of Jesus Christ of Latter-day Saints consolidated their welfare services under the Church Welfare Plan—as it is still called today—to provide a religious and family-based substitute for government welfare. Both programs originally responded to the suffering experienced during the Great Depression, although they approached this goal using different means. We discuss the origins of LDS and Utah welfare programs, comparing and contrasting both approaches as they developed into their modern forms.
a. The beginnings of both systems

The LDS Church Welfare Plan has its roots in many pre-Depression activities of church members, most notably the Relief Society (Barton 1977; Blumell 1979; Mangum and Blumell 1993). The Relief Society originated in 1890 as LDS women dispersed financial aid to the needy in their neighborhoods and eventually furnished their bishop with a list of recipients plus detailed knowledge of the cases. Even here were the marks of a unique welfare system: “Beginning with the 1901 handbook, the bishops were instructed to provide some kind of employment, however small, to those receiving aid if they were capable of working” (Blumell 1979, p. 91). The purpose behind church provision was expressed by Apostle Richards, who, after attending the 1918 National Conference of Social Work, urged his church members that “if we are not the leaders in the social work in our communities, strangers come in and take up the work” (Blumell 1979, p. 96). During the Great Depression, however, LDS leaders reasoned that public welfare for Latter-day Saints could be legitimate since they paid their fair share of taxes as citizens (Blumell 1979). Blumell (1979, p. 105) also reports that although LDS members did not yet make up a majority in Salt Lake County, the total of county charity cases was 1,188, while those in the LDS church wards totaled more than 7,700.

From 1936-1938, LDS leadership consolidated the efforts of the Relief Society and transformed it into the Church Welfare Plan (as it is called today). Efforts to provide basic necessities were rapidly expanded to include: the bishops’ storehouse (1937), a regional employment office (1948), and a pasta plant (1963) (The Church of Jesus Christ of Latter-day Saints 2011). The value of such extensive and ongoing investment is made clear by the doctrine of the church, summarized by President David O. McKay in 1936: “[The welfare program] is established by divine revelation, and there is nothing else in all the world that can so effectively take care of its members.”

Throughout the next century, state and federal welfare also grew to provide more services to broader populations. The first state relief organization was started in New York in 1931 (Malmgren 1965). When Congress passed the Emergency Relief and Construction Act in 1932, federal funds were made available to states through the Reconstruction Finance Corporation, and they dispersed nearly $3 million worth of direct relief of food, clothing, and fuel to Utah’s population (Malmgren 1965, p. 41). In 1935, Utah created its permanent State Department of Public Welfare. The welfare system was quickly evolving into its modern system:

The Utah citizen finding himself without any means of support had only to apply to the nearest county relief administration or its agent, state his case, fill out the proper financial statement, submit to the necessary investigation and be given his requirements.

At the federal level of the same year, President Roosevelt had signed into law three separate welfare programs: an old-age retirement program ("Social Security"), the Unemployment Insurance system (UI), and the Aid to Dependent Children program (known as Temporary Assistance to Needy Families, or TANF, since 1996). Through these social insurance programs, and Social Security Disability Insurance added in 1956, the federal government sought to aid individuals who had worked in the past and lost their income (or spouse’s income) involuntarily.

Medicare and Medicaid began in 1965. The purpose of the former is to ease healthcare costs for the elderly, while the latter provides healthcare to those with low incomes; both have grown dramatically over time. Medicaid in particular is the largest means-tested program in terms of expenditure, with real per capita Medicaid spending rising by 210% from 1986 to 2007 (Moffitt 2015, p. 735). Since families do not know how much the government spends on their healthcare through these programs, social scientists cannot use household or consumer surveys to better understand these programs. However, numerous studies have pointed out the decline of church-related welfare activities and other private provision during the expansion of state welfare efforts (Beito 2000) or presented various ways to analyze their contemporary relationship, or lack thereof (Brooks 2000; Hien 2014; Dills and Hernández-Julián 2014).
Throughout the expansion of government welfare, LDS members in need of welfare assistance were (and still are) counseled to seek assistance first from family and local community, and only after these proved insufficient, could they turn to the Church Welfare Plan, or as a last resource, to state resources. The Church Welfare Plan illustrates the clear distinction between LDS welfare and perceptions of welfare efforts outside the Church:

It is significant to note that about this same time [as the Church Welfare Plan], when the Lord established his way of caring for those in need, the “world,” or government, introduced its form of dole assistance—a counterfeit alternative to the Lord’s way... Individual and family initiative was supplanted by government handouts (Haight 2020, p. ?).

The LDS Church, like other religious organizations, wants to ensure that their essential values are maintained amidst a growing secular power. Pragmatically, self-reliance is also desirable because federal aid may prove to be unreliable; “The federal government, the presidency continued, would probably curtail aid to states and counties, making it ‘imperative that the church shall, so far as it is able, meet this emergency’” (Mangum and Blumell 1993, p. 131).

b. Utah state and LDS church welfare today

To understand the LDS approach to welfare in the modern world, we rely primarily on Chapters 21-22 on “Caring for Those in Need” in the LDS General Handbook. The chapter titles of this section are revealing: “Ministering” and “Providing for Temporal Needs and Building Self-Reliance.” LDS members who minister, a duty that is part of their baptismal covenant, are subject to a series of exhortations in the text:

Ministering sisters represent the Lord, the bishop, and Relief Society leaders... Ministering brothers and sisters are flexible in how they minister. They customize their contacts, service, and any messages to meet the needs of members... Ministering brothers and sisters listen so they can understand how best to serve (21.1).

In practice, welfare assistance is both assessed and carried out at the most local level—that of the household—and coordinated through quarterly meetings with Elders quorum or Relief Society presidencies. What is the goal of LDS welfare? The General Handbook also discusses this: “The purposes of Church welfare are to help members become self-reliant, to care for the poor and needy, and to give service” (22.1). Self-reliance is defined as “the ability, commitment, and effort to provide the spiritual and temporal necessities of life for self and family” (22.1.1). The stated temporal goals for all LDS members in the rest of this section are specific and include: eating nutritious food and getting regular exercise, obtaining as much education as possible, building a long-term supply of food in case of emergency, avoiding unnecessary debt and building up financial reserves, and practicing discipline in the spiritual life as well. Work is identified as "the foundation upon which self-reliance and temporal well-being rest” (22.1.1.3).

Understandably, LDS members are sometimes presented as symbols of quintessential American values such as self-reliance, strong familial networks, and sobriety. Ruthven (1991, p. 24) points to a paradox: “Super-capitalists’ and proselytizers for free enterprise that they are, [members of the LDS Church] nevertheless seem to reject the individualism upon which American capitalism is predicated”. There are now 15 million members of the LDS Church worldwide, and over 60% of Utah reports that they are members—though there is ample inter-county variation. Utah County, the second most populous county in the state, boasts membership in the church of 82% of its inhabitants, while Salt Lake County, the most populous but fastest-declining in LDS membership, is at 49%. Duties of members include paying tithes (10 percent of pretax income, though defined ambiguously) and fast offerings, “ministering” visits to other members’ households at least once a month, and “serving in a calling,” which means voluntary church positions—summing up to
around 14 hours spent per family per week on church-related activities (Ruthven 1991, p. 40). Importantly, it is actually the contributions from “fast offerings,” a sum given to the church each month as family members fast together for one meal, that funds many LDS welfare activities, though we will simply refer to the sum of all LDS contributions (including time) as the family’s “tithe.” Compared to other churches, LDS members have significantly higher fertility, attendance, and donations. Utah is the most religiously homogenous state in the Union.15

With respect to welfare policy, Utah is home to the 7th lowest poverty rate in the United States. This feat is compounded by its being an outlier in demographic and political spheres as well: 1) Utah fertility has historically been the highest in the nation—only falling to 4th place in 2019 at 2.03 which is still higher than the below-replacement national average of 1.73, and 2) Utah state and local government spending per capita is the 10th lowest in the nation (National Center for Health Statistics and the U.S. Census Bureau). Tennessee and Texas, which rank similarly at 13th and 12th lowest in state and local spending per capita, are home to poverty rates ranking the 13th and 12th highest in the nation (U.S. Census Bureau). While Utah, Tennessee, and Texas are all considered highly religious, only in Utah do these conditions seem to result in a society that is largely successful at caring for its poor. Finally, LDS member engagement in politics is notable, and in 2019, LDS members accounted for 90% of the state legislature (The Salt Lake Tribune 2019).

We note at least three explicit ways in which LDS and Utah state welfare programs in modern Utah function as complements. First, while federal funding for state welfare programs comes with many strings attached, Utah policymakers have been successful at customizing many of these rules to accord with their unique approach to welfare. Second, Utah’s state welfare program has increasingly focused on the family as an anti-poverty institution, and the LDS “Welfare Services Fact Sheet” makes it clear that this is something the church values: “The responsibility for each person’s spiritual and temporal well-being rests first upon himself, second upon his family, and third upon the Church.” Third, the kinds of state welfare services that LDS members consume are those not readily provided through the LDS welfare system. A prime example of this is Medicaid, which was recently expanded at the behest of Utah voters to cover pregnant women with incomes up to 137% poverty. In an 2018 initiative, the legislature was asked to work out an agreement that would allow the federal expansion of Medicaid to be available to low income Utahans. After much debate, the Utah Legislature passed a plan that would expand Medicaid under a recently accepted 1115 Medicaid waiver that would permit a community activity requirement as a condition of participation for all recipients who are capable of fulfilling it (Utah Department of Health 2020).

There is great concern, continuing to this day, that “strangers” will intervene to alter the values instilled by Church teaching. In wholly federal programs such as Food Stamps, a program designed by the federal government, efforts to enhance openness, reduce stigma, and build clientele are often key drivers. By contrast, church welfare programs are designed to be the last and temporary resorts for families.

IV. TESTING THE THEORY

The economic approach does not rely on changes in taste to carry the explanatory burden for market, political, or religious decision-making. However, the welfare programs chosen by a society will certainly be affected by its members’ political and religious commitments. In this section, we investigate whether the prevalence of tax-and-tithe payers in Utah can help explain the unusual complementarity of its welfare systems.

The ideal test of our theory would be the specific features of a welfare system in a state identical to Utah in every respect but its high proportion of tax-and-tithe payers. Second-best might be the statistical equivalent—looking at how LDS member and non-LDS member voting and use of welfare varies—though such data do not exist for understandable reasons. We therefore suggest three tests of our theory and its predictions: 1) comparisons with two counterfactuals, Tennessee and Texas; 2) the relationship between LDS adherence and welfare use at the county level; 3) changes in the specific features of Utah welfare policy over time. We have argued that a necessary condition for church-state program complementarity is that a large
segment of the population funds both the specific church and specific state in question. Utah is an excellent case study because the majority of its tithe-payers support a single church (and pay taxes to a single state), although religious behavior is not compelled by the state like we may find elsewhere in the world when the first condition holds. Utah state also enjoys high state-capacity, meaning that there is a wide array of state welfare programs in its feasible set, so voter choice is relatively less restricted than in other global societies with a religious-majority (Piano 2019). We find that the predictions of our theory hold, helping to explain recent developments in Utah welfare policy like the Intergenerational Poverty Initiative and Medicaid expansion vote.

a. The Specialness of Utah

What determines whether state and church welfare programs will function as complements or substitutes? Specifically, why do we see complementary programs in Utah though not in other states? Our theory answers:

Prediction 1: Forces toward complementarity will be stronger where tax-and-tithe payers constitute a large proportion of the population (relative to other groups) and when their combined tax-and-tithe burden is high (relative to their budgets).

The key to Utah’s complementary approach to welfare lies in their high proportion of tax-and-tithe-payers —specifically tithe-payers to a single religious organization (the LDS Church). The lower the proportion of tax-and-tithe payers (to the same tithing recipient), then the less religious and secular welfare providers will function as complements.\textsuperscript{18} To test this prediction, we compare Utah’s state welfare expenditures with two other states: Texas and Tennessee.

According to Pew Research, both Utah and Texas are tied at 11th place for religiosity (measured by a combined index including rates of church attendance and respondents who say religion is “very important” to them). Texas, however, has tithe-payers across a plurality of religious denominations; 31% respond that they are evangelical Christians, 13% as mainline Protestant, and 23% are Catholic. In Tennessee, 73% of adults identify as “highly religious,” with 52% saying they are evangelical Christians, 13% as mainline Protestants, and 6% as Catholics. Even though all considered “Christian,” the approach to welfare in each of these religious traditions is markedly distinct. For example, Kahl (2005) shows that Protestant religious traditions focus their welfare efforts on the “deserving poor,” i.e., those willing to work, whereas the Catholic tradition does not distinguish between “deserving” and “undeserving,” and therefore historically Protestant and Catholic states have measurably different approaches to welfare today. Another important distinction between LDS Church members and other denominations is a difference in involvement. Table 1 documents how LDS members are significantly more likely to participate in both worship and small group meetings than Protestants. This likely affects the intensity with which religious preferences for welfare play out.
### Table 1.

<table>
<thead>
<tr>
<th>Religious Organization</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDS Church</td>
<td>67%</td>
<td>29%</td>
<td>4%</td>
</tr>
<tr>
<td>Jehovah's Witness</td>
<td>64%</td>
<td>35%</td>
<td>2%</td>
</tr>
<tr>
<td>Evangelical Protestant</td>
<td>43%</td>
<td>49%</td>
<td>8%</td>
</tr>
<tr>
<td>Historically Black Protestant</td>
<td>41%</td>
<td>53%</td>
<td>6%</td>
</tr>
<tr>
<td>Mainline Protestant</td>
<td>20%</td>
<td>61%</td>
<td>19%</td>
</tr>
<tr>
<td>Orthodox Christian</td>
<td>20%</td>
<td>68%</td>
<td>11%</td>
</tr>
<tr>
<td>Catholic</td>
<td>16%</td>
<td>70%</td>
<td>14%</td>
</tr>
</tbody>
</table>


First, we analyze the pattern of welfare expenditure patterns in the three states. These are reported in Table 2. There is a clear difference between Utah and the others—while all three have comparable levels of annual welfare spending, the level of government that does the spending is different. Utah features a slightly lower per capita expenditure on public welfare in general, but it’s spending at the local level (i.e., cities and townships) on “Other Public Welfare,” which includes support of private welfare agencies, is nearly twice that of either Tennessee or Texas. Utah hospital expenditures follow the reverse pattern of the other states, with funds dispersed mostly at the state level. We interpret these patterns as revealing how secular welfare in Utah complements LDS welfare activities primarily located at the local level (the ward), while the state has specialized in healthcare services. Of course, while these patterns of service provision likely follow from the legal framework of each state, this itself is evidence of varying median voter populations, that is, the endogeneity of state policy (Besley and Case, 2000).

### Table 2. 2017 Expenditures on Welfare (per capita)

<table>
<thead>
<tr>
<th></th>
<th>Tennessee Both</th>
<th>Tennessee State</th>
<th>Tennessee Local</th>
<th>Texas Both</th>
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<th>Utah Local</th>
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<td>Public welfare</td>
<td>$1,745</td>
<td>$1,720</td>
<td>$25</td>
<td>$1,349</td>
<td>$1,322</td>
<td>$26</td>
<td>$1,263</td>
<td>$1,209</td>
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<td>Cash assistance payments</td>
<td>$87</td>
<td>$ 7</td>
<td>$0</td>
<td>$1</td>
<td>$61</td>
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<td>$191</td>
<td>$191</td>
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<tr>
<td>Vendor payments</td>
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<td>$1,487</td>
<td>$3</td>
<td>$1,158</td>
<td>$1,154</td>
<td>$4</td>
<td>$939</td>
<td>$939</td>
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<td>Other public welfare</td>
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<td>$22</td>
<td>$130</td>
<td>$108</td>
<td>$22</td>
<td>$132</td>
<td>$79</td>
<td>$53</td>
</tr>
<tr>
<td>Hospitals</td>
<td>$563</td>
<td>$49</td>
<td>$513</td>
<td>$658</td>
<td>$256</td>
<td>$402</td>
<td>$729</td>
<td>$627</td>
<td>$102</td>
</tr>
</tbody>
</table>

Source: The Census Bureau, “Annual Survey of State and Local Government Finances.”
Second, we can approximate the tax burden on the average Utahan by analyzing per capita tax and expenditure trends over time. Ceteris paribus, our theory predicts that more complementary pressure will be exerted when the tax burden is higher because the relative price of substitute welfare programs increases when more tax/tithe money is spent on welfare. Figure 1 plots data on Utah’s tax revenues from the Census Bureau, with a clearly increasing tax burden in Utah over time. In Figure 2, we break down Utah’s expenditures into three categories of interest: education, health, and welfare.

Figure 1.

Figure 2.
We include education expenditure because it provides another example of complementarity between the LDS church and state policy, and by law, a set proportion of the budget (100% of income tax revenue) goes toward its funding. Utah has one of the lowest private school attendance rates, and the Salt Lake City metro area ranks 8th lowest with 7.2% attending private school (Broughman and Swaim, 2013). This means that the vast majority Utah’s children attend public schools, perhaps because parents have found their unique practice of “religious released-time programs” valuable and complementary to their home environment (Utah Administrative Code R277-610). Again, we find cooperation between a largely religious population and their capable, secular state.

b. Workfare

Our next prediction deals with a mechanism for shifting state welfare services toward more complementary welfare policy:

Prediction 2: To make state welfare complementary, tax-and-tithe payers will vote to mitigate the production of the substitute state welfare policy bundle, $W_1$, and make access more expensive for users, $P_1 > 0$.

An inherent part of the LDS approach to welfare is that benefits “tied” to activities in three supporting organizations: 1) one’s family, 2) the church, and 3) the local community (Goodman and Herzberg, 2019). These “tie-ins” have been replicated in various ways at the state level, making the Utah state welfare bundle more costly to use than others. Anderson (1987, pp. 384-84) describes:

For many years Utah has had a very strict, mandatory “workfare” system which by all accounts has been effectively enforced. This system has had the effect of reducing the real value to recipients of AFDC and other welfare payments, ceteris paribus. Hence, while Utah has nominal AFDC payments above the national average, there are reasons for supposing that the real income equivalent (i.e., the value to recipients) of AFDC is lower than the nominal figures would indicate.19

A more recent example of this is Utah’s Intergenerational Poverty Initiative, born in 2012 from the Intergenerational Poverty Mitigation Act. While explicitly admitting the limits of governmental action, principles of the Initiative include family economic stability, home visiting, and an emphasis on building a culture that encourages and mentors welfare recipients.20 The Initiative imitates many formal and informal institutional aspects of the LDS welfare system, such as emphasizing the dignity of work, the virtue of generosity, and promoting self-reliance through temporary financial aid to able-bodied community members.21

One strategy to complement church welfare through state policy was identified by our theory as duplication—provided that each program reached a different set of welfare recipients. As can be seen in Figure 3, LDS adherence and the percent of families in poverty at the county level has a negative (if any) relationship.22
It is evident that the majority of people eligible to be served by the Initiative or Utah state welfare efforts in general are not LDS adherents. We offer this as evidence that policies such as the Initiative are meant to complement church activity by reaching previously unreachable markets through a different channel—the state—with a similar approach to welfare as in the LDS church.

c. The Median Member?

In January 2020, Utah’s Medicaid expansion began to take effect so that eligible adults with an income up to 138% of the poverty line could access its services. Results from the vote show that 53% of Utahans supported the expansion. Why did Utah citizens, the majority of whom are adherents of the LDS church that famously support conservative politics, vote for this expansion of state and federal welfare? Our theory has an explanation:

*Prediction 3:* When state welfare is complementary, religious leaders will become more lenient toward member use of state welfare services. This means the price of the complementary welfare policy, , for tax-and-tithes payers is lower than the substitute welfare policy $P_1 > P_2$.

Though the LDS church has eschewed dependence on federal aid in no uncertain terms, in practice, LDS members have occasionally approached Medicaid as a fallback (they do pay taxes, after all). This option is especially important for young couples who want to start having children while going to college. Relatively low divorce rates and relatively high birth rates are hallmarks of the LDS approach to life, and Medicaid allows for these values to be lived out while couples are still young (A., 2019). The recent Medicaid expansion allows for approximately 90% of the funding to come from the federal government, which effectively lowers the relative price of expanding welfare at the state level and thus heightens the demand. We provide the county-level distribution of voting results in Figure 4.23

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Figure 3.

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As with welfare services, the particular features of this new Medicaid expansion bear the mark of LDS values. Utah’s fallback Medicaid expansion plan (approved in December 2019 after the original, more stringent plan was rejected by the CMS) includes a “self-sufficiency requirement” (since suspended due to COVID-19). In addition to low-income elderly and disabled residents, coverage is available for pregnant women with incomes up to 139% of the poverty line and children in households with incomes up to 200%. Healthinsurance.org discusses another difference between Utah and other cases of Medicaid expansion:

In most of the states that use HealthCare.gov, enrollment in private plans in the exchange declined from 2019 to 2020. But Utah was one of just a handful of those states where enrollment increased in 2020. Now that Medicaid has been expanded, however, some of those individuals are likely to voluntarily switch from their exchange plans to Medicaid (enrollment in Medicaid continues year-round; it’s not limited to an annual enrollment window the way it is for private plans).

Since the Centers for Medicare and Medicaid Services (CMS) approved Utah’s program in December 2019 and the new eligibility guidelines took effect in January 2020, a federal judge has already blocked some work requirements (healthinsurance.org). The Trump administration has since appealed.

Even as Utah’s expansion aligns with LDS values to the extent that it includes work requirements and special support for children and pregnant mothers, the results of the vote were still a surprise; “If it wins approval here, it could happen almost anywhere” (Pear 2018). Our final prediction regarding state-church complementarity is about how the tax-and-tithe paying pressure can work both ways. While state policy can function as a complement by providing a similar welfare service to a different market, the state can also specialize according to its comparative advantage and provide welfare services that are too costly for the church to supply. We argue that healthcare services are an example of the church-state division of labor with regard to welfare services in Utah.
V. CONCLUSION

In sum, this paper investigates the way in which religious and secular policies interact—specifically, whether or not they function as complements or substitutes. The answer we propose is that it depends on the share of individuals who pay for the policies in both spheres of society. Individuals with hard budget constraints have little reason to fund superfluous welfare systems, so there is additional incentive to specialize and not duplicate services. Furthermore, individuals who must pay a fixed price for the two systems but who exercise some degree of control over the quality of the service will adjust them to be mutually value-enhancing.

By examining the case of Utah, we show that its high proportion of tax-and-tithe payers yields a unique complementarity between secular and religious welfare services in this jurisdiction. The supply and demand forces contributing to this outcome are the value maximization of the tax-and-tithe payer and the pressure of the median voter within both the church and state. In practice, complementary welfare policies could take at least two forms: 1) division of labor along the comparative advantage of each organization (the state and the church), and/or 2) duplication of service kind and quality at different levels to reach different markets. We find examples of both types of complementarity in Utah. The state “specializes in” certain types of social services – hospitals and healthcare, for example – since it may be prohibitively costly for the LDS Church given existing infrastructure. The LDS church does their part by running their largely successful Welfare Plan which supplies basic welfare services, complete with home visits and personalized, neighborly assistance, in return for volunteering services. The LDS approach to welfare is also replicated at the state level with an emphasis on “self-sufficiency requirements” and the family as the God-given solutions to poverty. The median voter result is simple enough to see in a state with a majority of LDS members (who historically also vote nearly identically), and we provide evidence from the 2019 Medicaid Expansion Vote that the “median member” may also exert pressure on church welfare policy to be more lenient toward use of state healthcare services.

Our theory of welfare system complementarity can be generalized to apply to any services produced by the different sectors of a society. As communities around the world become increasingly pluralistic and their economies global, our theory uncovers a condition under which local governments are likely to complement the activities of civic organizations, such as religious communities, schools, or even extended families. Though we discuss this little, we suspect the resulting competition-with-complementarity is also not insignificant for the wellbeing of those they are trying to serve, the poor.

How will Utah welfare systems look in the years to come? Interestingly, there may be a similar case from education with which to compare. Before 1818, all schools in America were run by various religious organizations that were overwhelmingly Protestant (Glanzer and Milson, 2006). Early public schools retained an orientation toward Protestantism, so much so that the Catholic and Jewish immigrants in the 19th century protested and finally developed their own set of private schools as alternatives for their children. Finally, the Blaine amendments were passed in which Protestants ceded their influence over public schools for no religious influence at all—secular religion stepped in to mediate. The state-funded system that had emerged out of the Protestant majority was no longer attractive once groups with other economic and spiritual commitments began influencing state decisions. Similarly, Utahans in the recent past have allowed their state to spend increasing amounts on their preferred versions of public goods like education, healthcare, and welfare. There may come a time when state and church welfare complementarity breaks down because the tax-and-tithe payers have lost their influence. In fact, there are good reasons to suspect that the heyday of such a partnership has already passed.
NOTES

1 We dedicate this work to Abe (Abby) Herzberg, who loved ideas and always challenged and encouraged discussion. You are gone, but your curiosity and inspiration will live on forever in our hearts.

2 We thank Jordan Lofthouse for this clarifying formulation.

3 Intergenerational poverty is defined as two or more generations relying upon public assistance for at least 12 months in their childhood and in adulthood (Intergenerational Welfare Reform Commission).

4 While not explicitly partnering with the LDS Church for this Initiative, its focus on family bears great resemblance to the values of the LDS Church and its Intergenerational Poverty Advisory Committee Chair is Bishop H. David Burton. Other religious leaders in the state serve as well.

5 Boettke, et al. (2011) discussion of quasi-markets gives a more realistic version of this assumption—perhaps an avenue for future research.

6 For a proper introduction, see Iannaccone (1998).

7 He calls this the “goods are goods” assumption:
Put differently, the idea that supply sources are selected on the basis of comparative advantage implies that the sources are competing with each other. In other words, families, voluntary organizations, co-operatives, business enterprises, and governments are engaged in a competitive struggle to supply the goods and services that the members of society are demanding (Breton 1989, p. 729).

8 This is not to say that the LDS welfare system is not decentralized in important ways. Since the actual dispersion of welfare is done at the ward level, local bishops have a fair amount of discretion in deciding who receives welfare and how much.

9 It is notable that even 40% of their respondents reported that they had sought advice about tithing (which type of income, how often, etc.), since it seems that LDS doctrine is very unclear about which type of income should be tithed (Dahl and Ransom 1999, p. 706).

10 As will be explained in the next section, two welfare programs could be complementary for two reasons: they share the same values but serve different markets, or they divide the labor of welfare provision and specialize.

11 Many reasons for this can be found in Iannaccone (1992).

12 One example of this would be a church’s ability to provide mentors or “role models” from the church body. An instance of secular specialization would be the economies of scale available to a state in providing welfare services like Social Security that require a high degree of redistribution.

13 “The bishop [of the Second Ward in Salt Lake City] explained that all needy families in his area were looked after systematically and that suffering could not long continue because the Relief Society visited every family monthly and reported to him all needy cases” (Blumell 1979, p. 93).

14 Recently, the LDS Church has come under scrutiny for its $100 billion investment fund (Lovett and Levy, 2020).

15 For a summary of the views of LDS members on political and economic issues, see Table 3 of the Appendix.

16 Of course, this is not without debate; see Gringeri (2001), for example.

17 Health insurance coverage has been a concern in Utah, perhaps because the LDS Church emphasizes marriage and growing a family at a young age (when most couples are still in college) (Davidson, 2019). The LDS Church does not have a program similar to Medicaid, so it plays an important role in the monetary costs of having babies.

18 An interesting extension of our theory would analyze the degree of complementarity or substitution between religious providers (who compete for tithes) within the same taxation jurisdiction.

19 In their study of the feminization of poverty, Kimenyi & Mbaku (1995) also include a dummy for Utah since its “welfare institutions have been influenced by Mormon doctrine” which would be an exogenous influence on births to unmarried women (their dependent variable).

20 The Initiative’s most recent Five- and Ten-Year Plan includes acknowledgements like: “To be sure, government has a limited role in ensuring parents are central to the healthy development of their children. However, the state can assist in addressing the parenting gap and creating a statewide culture that promotes healthy child development” (Intergenerational Welfare Reform Commission, 2015). The Intergenerational Poverty Advisory Committee consists of an LDS bishop as the chair, various scholars, and a local rabbi.
"Utah promotes the values of personal responsibility and the importance of work not only for its role in establishing economic stability but also for the dignity of work. The data reveals that most individuals receiving public assistance benefits do have income through wages, but clearly that income is not sufficient to meet the basic needs of their families" (Intergenerational Welfare Reform Comission, 2015).

Of course, there are countless significant variables that we are not controlling for. The highest poverty is in San Juan county, which has a majority Native American population. The other relatively high poverty counties are also very rural.

The level of support for the Medicaid extension in San Juan county (not heavily LDS) may be influenced by the fact that its large proportion of Native American residents already have access to Indian Health Services, and thus may value extended Medicaid protection less than those without access to the additional program.

"It’s worth noting that it’s cheaper for the federal government to cover the population between 100 and 138 percent of the poverty level under Medicaid, than to pay for premium subsidies. But it’s cheaper for the state to have that population covered by private plans in the exchange, with federal subsidies, since the state pays nothing at all for that option" (Norris 2020).


Table 3.

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<tr>
<td><strong>Partisanship (among registered voters)</strong></td>
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<tr>
<td>Rep/Rep leaning</td>
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<td>Dem/Dem leaning</td>
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<td><strong>View of Obama (among registered voters)</strong></td>
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2011 National Survey of Mormons, Oct. 25-Nov. 16, 2011. IDE0, PARTY, Q101a,b,g. Estimates of ideology based on full sample; estimates of partisanship and views of political figures based on registered voters. General public figures for ideology and partisanship from aggregated Pew Research Center surveys conducted September-November 2011. General public figures for Obama and Romney favorability from November 2011 Pew Research Center survey. Figures may not add to 100% because of rounding.

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