Ethnic Identity in American History and America's Exceptional Religiosity: Theory and Some Evidence

By

Mukesh Eswaran*
Vancouver School of Economics, University of British Columbia 6000 Iona Drive, Vancouver, B.C., Canada V6T 1L4

December 2020, Revised April 2021

ABSTRACT

Why is religiosity in contemporary America exceptionally high relative to those in other rich countries? I develop a simple theory that hinges on the sense of security of immigrant-identity, which is informed by both religion and ethnicity. Commitments to religion and to ethnicity are complementary in the determination of identity, and immigrants consciously invest in the endogenous component of their sense of identity through the actions they choose (like socializing with an ethnic group or performing religious activities). I demonstrate that the level of religiosity increases with the extent of ethnic fractionalization in the society. I offer some empirical evidence for the theory using contemporary cross-sectional data from the 50 states of the U.S. I test this theory against two alternative theories that have been offered to explain the high American religiosity. I find a robust positive and statistical significant correlation between religiosity and state-level ethnic fractionalization. When tested with world data, the model is rejected—lending further support for the claim that America's religiosity derives from its unique history of exceptionally high and ethnically diverse immigration.

Key Words: Ethnic diversity, identity, immigration, religiosity, American civil religion

* Professor Emeritus, Email: mukesh.eswaran@ubc.ca

Acknowledgements: I would like to thank Mario Ferrero, Matt Lowe, and Munir Squires for helpful comments on an earlier draft. I also thank an anonymous referee for thoughtful comments. I alone am responsible for any drawbacks of this paper. I began this project when I was visiting at the Indian School of Business, Gachibowli, India. I am very grateful for ISB's hospitality.

1. Introduction

Religiosity in America steadily grew over the past two hundred years. ¹ One of the puzzles regarding contemporary America is that its religiosity persists at exceptionally high levels compared to the rest of the developed world. ² All the other OECD countries, without exception, are at historically low levels of religiosity in terms of belief and practice; agnosticism and/or atheism have been steadily rising in the process of secularization. ³ After an extended and heated debate, it is now established that secularization is occurring in the United States, too, albeit at a very slow pace that has masked the decline. ⁴ Nevertheless, the level of religiosity in the United States remains very high by developed country standards. In this paper, I offer a possible explanation for this, emphasizing the role of diversity in the ethnicity of a country made up of immigrants. ⁵ I propose a theory that implies a causal link between ethnic diversity and the extraordinary level of America's contemporary religiosity and I provide some preliminary statistical evidence for this explanation. I also offer some evidence to show that the same theory does not apply to an international sample of countries.

Ethnic diversity is known to have very significant effects on a wide range of phenomena—like the provision of public goods, economic growth, and civil wars—that have been extensively studied by economists. This paper demonstrates that it plays a very significant role also in establishing the exceptionally high level of religiosity in America relative to OECD countries. This point has received some attention in sociology but, surprisingly, it has not been examined by economists despite the fact that religion has significant resource allocation consequences for the U.S. economy. In this paper, I provide a theory based on identity that links ethnic diversity and religiosity and provide some evidence for the theory.

In my argument, I take my initial cue from Will Herberg (1955) who, in his classic work *Protestant, Catholic, Jew*, traced the development of religiosity in the United States up until the 1950s. He arrived at the conclusion that the ethnicities of immigrants played an important role in

_

¹ Finke and Stark (1986) estimate the proportion of Americans who were church adherents to be 34% in 1850 and 45% in 1890. Their extrapolations yield the figures 14% and 58%, respectively, for the years 1800 and 1926.

² Pew Research Center, *The Age Gap in Religion Around the World*, September 2018

³ For Western European countries, see e.g. Pew Research Center, *Being Christian in Western Europe*, May 2018

⁴ See Voas and Chaves (2016) and the papers cited therein for the relevant literature.

⁵ Handlin (1951, p. 3) remarked in his Pulitzer-winning book, *The Uprooted*: "I once thought to write a history of immigrants in America. Then I discovered that the immigrants *were* American history." (emphasis in the original)

the shaping of their identities, which later morphed into religious identities and that the three religions in the title of his book have been the only ones accepted in mainstream America at the time. As far as I am aware, this paper is the first to offer a simple model of religiosity based on ethnic identity, to derive formal propositions on America's religiosity, and to test the underlying role of ethnic diversity.

Herberg's view in brief was that immigrants who came to America were thrown into a society where previous identities had to be largely erased to the point of shedding their native language, norms, and customs. They were then confronted with having to secure an identity for themselves, an entity that answers to the question, "Who am I?" in Herberg's words. Since the Constitution of America guaranteed freedom of religion, all were free to practice their religion of choice. The religion of their home country was naturally what most people adopted and practiced. And in the constitutional separation of church and state, with state sponsorship of any religion being forbidden, religious pluralism thrived. In this view, pluralism accompanied the embracing of religious identities by America's immigrants. Basing his thesis on the empirical work of Ruby Jo Kennedy (1944) on New Haven, Connecticut, Herberg posited that, instead of indiscriminate assimilation, immigrants assimilated into a "triple melting pot" along religious lines—in particular, Protestant, Catholic, and Jewish. Belonging to one of these religions was necessary to be accepted as an American and to be seen as embracing "the American way of life".

Subsequent evidence, however, has not borne out Herberg's hypothesis about the erasure of ethnicity. The landmark study of New York City—which could well be the world's greatest melting pot—by Glazer and Moynihan (1970) found that ethnicity was very much alive. That ethnicity is still very relevant has also been documented or argued by Abrahamson (1971), Marty (1972), Stout (1975), Hammond (1988), Hammond and Warner (1993, 1998), Warner (1993), Ebaugh and Chafetz (2000), Putnam and Campbell (2010), and others. Bisin et al (2004), who examine segregation by marriage along religious lines in contemporary America, do not find evidence to support Herberg's and Kennedy's "triple melting pot" notion of assimilation. In the history of the United States, it would appear, ethnicity has always been very salient and remains salient.

To theoretically relate ethnicity to identity, it seems best to start with the concept of "self", which William James (1890) placed at the center of his pioneering work on human psychology. At the

most fundamental level, "self' refers to an individual's concept of herself, who she is, her traits, her abilities, her preferences, her goals, and ambitions. This concept is her response to the question, "Who am I?" It is what she takes to be "me". As against the individual aspect of self, which separates "me" from "not-me", humans also have a secondary identification with a group or groups, which we take to be "us" as opposed to "not-us". The individual and social components of self together constitute a person's identity. The modeling of identity into decision making was pioneered by Akerlof and Kranton (2000).

In relating religion to identity, it is useful to adopt the perspective offered by Mol (1976, 1979). He defined religion as anything that sacralises our sense of identity, and the practice of traditional religion cements our sense of identity by lending it stability. Every religion not only confers continuity to our sense of "me" but also entrenches our commitment to a sense of "us" among those who practice it. Religion as it is usually practiced, we may say, solidifies ethnic identity.

A unique feature of America is that it was formed by mass migrations of myriad ethnic groups. (Immigrants freely came to the country after the American Revolution, except for the period between 1924 and 1965, during which time a quota system was imposed and Asian immigrants were barred.) In a country that is ethnically homogeneous, a person may rarely think about her identity. But when she immigrates, especially to a country with many other ethnic groups, her own ethnicity becomes salient to her. There are two components to ethnicity that we must distinguish between [Cadge and Davidman (2006)]. One is exogenous to her, and is referred to as ethnicity by 'ascription'. This is the ethnicity that is assigned to her by society and it depends on where she was born, her race, the language she speaks, the traditional religion her group subscribes to, etc. There is, in addition, a more important endogenous component that is acquired, which is referred to as 'achieved' ethnicity. This is the intensity of ethnic identity that

⁶ Evidence of this social aspect of identity is one of the best documented facts of social psychology. See e.g. Tajfel (1982) and Tajfel and Turner (1979).

⁷ Until recently, their religions were drawn mainly from numerous Christian denominations. There were the English, the Scottish, the Welsh, the Irish immigrants, of Protestant denominations and Catholicism. There were German immigrants in various religious denominations (Catholics, Mennonites, Brethren, Lutherans, Reformed Lutherans, etc.) There were people from the Netherlands (both Catholic and Protestant), Catholics from Belgium, Lutherans from Sweden and Finland, Jews from Germany, Russia, and Poland. Recently, there have been immigrants from China, Korea, Japan, India, and numerous African countries with a variety of religions. And even this is a very incomplete list.

she voluntarily acquires through choice and by dint of conscious effort. The extent to which she wants to identify with her ethnic group and how involved she wants to be in it is her decision.

Both components of ethnicity are important to immigrants because they are categorized by ascription but, more significantly, they acquire the strength of that identity by engaging with the group for various reasons. Such engagement is driven by the need to "belong", which is wellknown to confer many psychological benefits: cognitive, emotional, and health.8 The reasons for immigrants seeking support are many, for immigration can be a very disorienting experience. All that is familiar is left behind and one is thrown into a completely different environment in which the immigrant does not know how to fit in. It can be an intensely traumatic experience of loneliness, psychological insecurity, and uncertainty about the future [Handlin (1951)].

Religion and ethnicity, of course, are generally not identical. The major religions pertain to that which is universal, eternal, and almost always "other worldly". Ethnicity, by contrast, is necessarily time-bound; it arises from a specific location in time and space and in a particular culture. When immigrants seek a secure sense of identity, they frequently search for it in religion and they end up choosing the religion they grew up with because that is the most familiar. The practice of religion typically requires the aid of the relevant ethnic group. Since ethnicity is one response to our innate need for belonging, socializing with the same ethnic group from which the immigrant hails becomes doubly important. This leads to a very strong link between religion and ethnicity, a correlation which has been observed and documented by several scholars cited earlier. And given the advantages of belonging in the pursuit of security, religious behavior also displays a significant amount of "belonging". There are several specific routes through which this link between ethnicity and religion is established in practice.⁹

In extreme cases, religion and ethnicity are essentially equivalent; it is very difficult to separate them for they are virtually one and the same. ¹⁰ In most cases, however, the two can be distinguished and there is also a causation that goes from ethnicity to religion (but reverse causality is also possible). Nevertheless, the connection between the two may be rather tight, as

⁸ See the review by Baumeister and Leary (1995).

⁹ These are not presented here for space considerations but are available in the self-contained document called "Supplementary Material" for this paper, where I briefly survey how various immigrant ethnics groups in history have adapted to America. Available at https://economics.ubc.ca/faculty-and-staff/mukesh-eswaran/#supplementarymaterial-accompa-1

The example that is often given of this is the Jewish ethnic group and Judaism.

for Polish Catholics for example. In other cases, despite the fact that in America one's religion can be freely chosen, within limits, the choice was, as Smith (1978, p. 1169) notes, "largely determined by the immigrant's particular religious tradition." But the boundary between ethnic groups that hail even from the same region and who practice variants of the same religion can be quite sharp. In Pennsylvania alone, there were half a dozen ethnic groups that emigrated from Germany, each very distinct from the others in terms of the Christian denomination they adhered to [Smith (1978, p. 1170)].

Ethnic boundaries sharpen when confronted by other ethnic groups. Competition for scarce resources (jobs, public goods, political influence, etc.) tends to pit ethnic groups against each other. Competition, and the discrimination that often faces new immigrants, hardens ethnic boundaries [Barth (1969)]. This induces greater engagement with the ethnic groups by their respective members. The building of their own church to serve their needs was a common feature of immigrant communities [Hirschman (2004)]. Thus it is not by sheer chance that, historically, the practice of religion in the United States has been through ethnic groups. The churches were essentially ethnically based: they were responding to the needs of specific ethnic groups in their new environment. Ethnic churches formed the link between the life the immigrants left behind in the Old World and their lives in the New World [Handlin (1951)]. These churches could freely develop in America.

This is not to say that there was no discrimination and hostility towards newer religions in the New World. In fact, both Catholics and Jews faced considerable hostility in a predominantly Protestant America. It is not an accident that Catholicism in America, as one response, allowed variations in its practice along ethnic lines and for services to be given in ethnic languages [Liptak (1987)]. Freedom of religion allowed immigrants to practice their religion in spite of hostility. What was true of European immigrants to America continues to be true of the recent (post-1965) immigrants from the rest of the world. It was *ethnic pluralism* that led to religious pluralism in a society in which the freedom of religion was protected by the American Constitution.

That there is a link between ethnicity and religiosity is beyond question; there is ample evidence of it even in contemporary America [Putnam and Campbell (2010)]. Abrahamson (1971) has argued the formation of ethnoreligious identity requires what he called "societal competition",

that is, competition between different ethnic groups. But what explains the high level of American religiosity is ethnic *diversity*—and this is the premise of my paper. It is diversity that increases religiosity. The more homogeneous a society is, the more secure an individual's identity is; there is no compelling reason for her to establish her ethnic identity. But when there is societal competition between ethnic groups, ethnicity becomes salient. The greater this diversity, the greater is the salience. And since ethnicity and religion are linked, religion too acquires greater salience. ¹¹ In fact, the degree of people's commitments to religion and ethnicity are complementary in their effects on a person's sense of identity.

For ethnic diversity to have had the effect that it did on religiosity in America, I must mention that there is one important feature that singles out this country: it is the existence of a civil religion. This is a notion of religion, first articulated for America by Bellah (1967), in which the concept of God transcends the boundaries of traditional religions. Civil religion acknowledges the belief that the state is not the ultimate arbiter of right and wrong; that is a privilege reserved for a higher power. This view is built into the "American way of life," and it is this that gives ethnic groups the freedom to practice their religion—for the state's Constitutional guarantee is backed by a source that is acknowledged to be an even higher power. Towards the end of this paper, I bring out the importance of American civil religion.

In the model I present in this paper, people consciously invest in their sense of 'achieved', that is, strength of, ethnic identity through the actions they choose, like socializing with an ethnic group or performing rituals and other religious activities. I demonstrate that the level of religiosity increases with the extent of ethnic fractionalization in the society. Furthermore, the greater the complementarity between religion and ethnicity—and this complementarity varies between groups—the greater is the group's religiosity.

_

¹¹ As Williams (1988, p. 11) observed, "Immigrants are religious—by all accounts more religious than they were before they left home—because religion is one of the important identity markers that helps them preserve individual self-awareness and cohesion in a group."

¹² Tocqueville (1835, vol. 1, Chapter 1) had this to say: "So, it is often difficult, when perusing the first historical and legislative records of New England, to perceive the ties which connected the immigrants to the land of their forefathers. We see them at all times exercising the rights of sovereignty, appointing magistrates, declaring peace or war, establishing law and order, enacting laws as if they owed allegiance to God alone."

¹³ In the concluding section, we shall see why the absence of this feature of civil religion likely precludes the possibility of high levels of religiosity in some liberal democracies with considerable ethnic diversity.

I then provide some evidence for this view by empirically testing the prediction regarding religiosity's dependence on ethnic fractionalization using contemporary cross-sectional data for the 50 states of the U.S. I find a robust positive and statistical significant correlation between religiosity and ethnic fractionalization at the state level. Since I further show that there is no evidence that ethnic diversity is endogenous, this also establishes the causality from ethnicity to religiosity.

I then also test the theory for the rest of the world to see if the same explanation I propose for America would also apply to the rest of the world. If it were to, it would be surprising because there has been nowhere near as much immigration in other countries as in America. I find that religiosity is neither correlated with ethnic fractionalization nor with religious fractionalization. The results strongly suggest that America's exceptional religiosity by developed country standards lies in its unique historical experience with immigration, its civil religion, and the separation of church and state.

The findings of this paper are consistent with the importance of ethnicity in explaining American religiosity. I should note that the empirical work here does not support Herberg's theory because he claimed that, ultimately, ethnicity loses its significance and blends into religion. My results show, rather, that ethnic diversity has an *enduring* influence on American religiosity. The theory and evidence presented here also substantiate the arguments made by historians such as Smith (1978), and many sociologists such as Bruce (2000), Casanova (2007a, 2007b), Kurien (1998), who identified ethnicity as being crucially important for this phenomenon. My results also show that religious market competition is significantly negatively correlated with religiosity in the state-level data. ¹⁴ Religious diversity (competition) and ethnic diversity are positively correlated in my findings because, in American history, immigrants constructed their own churches or variations thereof. Because studies on the religious market hypothesis typically leave ethnic diversity out of the picture, the latter's positive effect on religiosity could get picked up by the measure of religious market competition. And this would mask market competition's true (negative) effect on religiosity.

¹⁴ This is consistent with the findings of Olson (1999) and Olson et al (2020).

2. The Model

I now move to specifying a simple theory of immigrant identity that captures the role of complementarity between ethnicity and religion and work out its consequences for determining religiosity. ¹⁵ With an eye to subsequent empirical verification in this paper, the model is deliberately kept parsimonious. It is intended only to bring out the essential points of the theory being proposed, which is one of identity formation and the security of that identity.

As noted, the sense of an immigrant's identity is determined only partly by the extent to which that ethnicity is ascribed and more significantly by the extent to which it is entrenched by her endogenous commitment. This commitment also impinges on religiosity. Since freedom of association is a fundamental right conferred by U.S. constitution, immigrants can freely join ethnic organizations. Furthermore, since the practice of one's religion without restriction is also guaranteed by the Constitution and is supported by the common understanding of American civil religion, the pursuit of religion can be freely engaged in. Importantly, religiosity and achieved ethnic identity can be jointly produced in immigrants.

We denote the extents of identity entrenchment by E and religiosity by R, respectively. I assume that they are jointly produced by the amount of time, t, devoted to this end. The sense of identity is also affected by the social environment in which the person functions. The more frequently she runs into people of different ethnicities and religions, the less secure is her own sense of identity likely to be. We may capture this social environment by n, the number of ethnicities (assumed to be equal in size, for now) that exist in the society. We can interpret n as the pluralism of the society in terms of ethnicity. Alternatively, we can interpret n as a direct measure of the ethnic fractionalization in the society.

We capture the person's degree of security of identity (or, in Herberg's rendition, the strength of her sense of "Who I am") by the function W(E, R, n), which is jointly concave in E and R. The partial derivatives (denoted by subscripts) of W are posited to be signed as follows:

(1)
$$W_E > 0$$
, $W_{EE} < 0$, $W_R > 0$, $W_{RR} < 0$, $W_n < 0$, $W_{RE} > 0$, $W_{En} > 0$, and $W_{Rn} = 0$.

¹⁵ The document called "Supplementary Material" for this paper, which I alluded to in an earlier footnote, amply illustrates this complementarity in the adaptation of various ethnic immigrant groups to America.

The first four inequalities merely say that the sense of wellbeing of identity is increasing in entrenchment in ethnicity and in religious commitment, but with diminishing returns. The partial $W_n < 0$ says that identity becomes less secure if the group size becomes smaller. The crosspartial $W_{RE} > 0$ captures the fact that ethnicity entrenchment and religious commitment are complements in generating security of identity. The cross-partial derivative $W_{En} > 0$ says that the marginal value of entrenchment in one's ethnicity increases with the pluralism that she confronts. This is because, consistent with Herberg (1955), identity becomes more salient the more frequently one encounters people from other ethnic groups. Bisin et al's (2004) finding in contemporary United States that minorities segregate in marriage more intensely than do majorities also lends support to this. As a result, greater ethnic pluralism enhances the marginal worth of ethnic identification.

The last equality in (1), that is, $W_{Rn} = 0$, requires explanation. The religious market hypothesis, which seeks to explain the high level of religiosity in America, following Adam Smith posits that religiosity increases with religious pluralism because of greater competition [Smith (1776/1981, V.i.g), Finke and Stark (1992), Iannaccone (1991), and Finke and Iannaccone (1993)]. More vigorous competition improves the performance of religious organizations and invigorates religiosity in the people. In the model here, n stands for ethnic, not religious, pluralism. Nevertheless, often ethnic pluralism is strongly correlated with religious pluralism. To keep my model distinct from that of the religious market hypothesis, I explicit shut down the latter mechanism by assuming that $W_{Rn} = 0$. Then we can be assured that religious market competition plays no role in the theoretical implications of the present model.

As I have said, entrenchment in ethnicity and in religious commitment are jointly affected by the time, t, devoted to this joint activity. I posit that

(2)
$$E'(t) > 0$$
, $E''(t) < 0$; $R'(t) > 0$, $R''(t) < 0$.

This is standard: ethnic entrenchment and religious commitment increase at a diminishing rate with the time devoted to them.

¹⁶ Eaton et al (2011) in their analysis of the origin of identity provide an evolutionary basis for the appropriateness for this assumption here; it essentially revolves around the entrenched concept of "Us and Them".

Since identity is the focus of attention in this endeavor, I minimize distractions by positing that security of identity is of primary concern in the person's preferences. The consumption of goods is restricted to X, an aggregate of all other goods, with price normalized to 1. If x denotes the quantity of this aggregate good the person consumes, I posit that her utility function U(x, W(E, R, n)) is given by the form

(3)
$$U(x,W(E,R,n)) = x + W(E,R,n).$$

Assume all persons have 1 unit of time available to allocate between work and identity building. If the person devotes an amount of time t to ethnic entrenchment and religious commitment, the amount of good X that she consumes is given by x = w(1 - t), where w is the wage rate that is assumed the same for all people in the group. The person's optimization problem is to choose t to solve

(4)
$$\max_{t} w(1-t) + W(E(t), R(t), n).$$

The first order condition, assuming the solution is interior, is given by

$$(5) W_E E'(t) + W_R R'(t) = w,$$

where the primes on E and R denote derivatives with respect to their sole argument.

Because W(E(t), R(t), n) is assumed to be strictly concave in E and R, the solution to (5), which I denote by $t^*(n)$, is unique. This choice is assumed to be passed on to children, too, through socialization.¹⁷

Taking the total derivative of (5) with respect to n, and recalling that $W_{Rn} = 0$, we get

(6)
$$SOD(dt^*(n)/dn) = -W_{En}E'(t) < 0,$$

where SOD is the second derivative of W(E(t), R(t), n) with respect to t. Since SOD < 0 by the strict concavity of W(E(t), R(t), n), it follows that

$$(7) dt^*(n)/dn > 0.$$

Thus an increase in ethnic pluralism increases the amount of time devoted to ethnic entrenchment, which in turn leads to an increase in religious commitment. This implies that we

¹⁷ The cases considered in "Supplementary Material" give evidence on how this is done even in recent decades.

should observe less religiosity in ethnically homogeneous societies or less pluralistic ones than in ones in which there is a great deal of ethnic diversity and pluralism. This explains why we observe a lot less religiosity in a like Norway than in the United States. And this occurs for reasons that have nothing to do with competition in the religious marketplace.

The model can easily be reinterpreted by dropping the inessential assumption that all groups are of same size and interpreting the parameter n as an inverse measure of the relative size of the religious group to which the person belongs. So an increase in n in this case would correspond to a decrease in the relevant group's size. Then the comparative static result in (7) would say that the smaller the size of a person's ethnic group, the greater is her ethnic and religious commitment. There is evidence that supports this prediction. In a study of religious commitment in New Zealand, Hoverd et al (2012) used nationally representative data on self-reported psychological identification with their religion. They found that members of small groups identified more strongly with their religion than the average, while the opposite was the case for members of larger groups. More recently, Curtis and Olson (2019), using nationally representative samples of survey data from Germany, Poland, and the United Kingdom sought to investigate the determinants of psychological identification or attachment (as opposed to mere affiliation) with religion as an identity. They, too, found that members of smaller groups had stronger religious identification.

The Role of Complementarity between Ethnicity and Religion

To bring out the importance of complementarity between ethnicity and religiosity in cementing identity, I now assume W(E(t), R(t), n) to be linear-quadratic:

(8)
$$W(E(t), R(t), n) = \alpha(n) + \beta_E(n)E - (\gamma_E/2)E^2 + \beta_R R - (\gamma_R/2)R^2 + \varphi E R$$

where all the parameters on the right hand side are assumed positive. The parameter φ captures the complementarity that exists between ethnic entrenchment and religious commitment. In other words, when φ is larger, a greater religious commitment enhances the productivity of ethnic entrenchment in providing a person with a more secure identity, and vice versa. I posit that $\alpha'(n) < 0$ (to capture the fact that ethnic pluralism reduces the identity security felt by the person) and that $\beta_E'(n) > 0$ (to capture the fact that the identity-enhancing returns to ethnic entrenchment are higher when there is more pluralism in the society). I specifically assume that

 β_R does not depend on n, for reasons given earlier: it ensures that $W_{Rn} = 0$, which thwarts the potentially confounding religious market mechanism from functioning and muddying the theoretical results here.

Denote the solution to the first order condition (5) in this case by $t^{\dagger}(n, \varphi)$. The comparative static derivative with respect to φ of the first order condition (5) in this scenario becomes

(9)
$$SOD d(t^{\dagger}(n,\varphi)/d\varphi) = -R(t^{\dagger})E'(t^{\dagger}) - E(t^{\dagger})R'(t^{\dagger}) < 0,$$

which, because SOD < 0, yields

(10)
$$d(t^{\dagger}(n,\varphi)/d\varphi) > 0.$$

An increase in complementarity between ethnicity and religiosity increases the time spent in ethnoreligious activities. We may draw on the empirical findings of van Tubergen (2007) to illustrate the plausibility of this implication. Immigrants into a country can interact mostly with co-ethnics or choose to interact more broadly with the native population of the receiving country. Clearly, the complementarity would have more effect in the former case. Van Tubergen finds that immigrants to the Netherlands from Turkey, Morocco, Surinam, and the Dutch Antilles exhibited more religiosity when they interacted mostly with co-ethnics. Another finding of van Tubergen's—anomalous in his view because it goes against the presumption of sociological assimilation theory—is that immigrants who had been in the Netherlands longer were more religious than immigrants who have been there for shorter periods. While he offers several possible explanations for this, the finding is also consistent with the fact that the insecurities associated with immigration lead immigrants to associate mostly with co-ethnics and, through complementarity, this greater ethnic entrenchment of the earlier immigrants increases their religiosity.

We can readily verify that the sign of the comparative static derivative with respect to n (ethnic pluralism) is given by

(11)
$$sign[d(t^{\dagger}(n,\varphi)/dn)] = sign\beta'_{E}(n)E'(t^{\dagger}) > 0.$$

As before, greater ethnic pluralism in the society enhances religiosity. These forces tend to ensure that the religiosity of pluralistic societies is self-sustaining. When a new immigrant group comes into an ethnically diverse society like that of the U.S., the existing pluralism raises the

religiosity of immigrant groups. Contrariwise, immigrants to an ethnically homogeneous country will not invest as much in religiosity. This could lead to greater secularization, an outcome that would be consistent with the suggestion of Ruiter and van Thurbergen (2009, p. 888) that secularization can be self-enforcing.

Finally, we may note that if the wage rate is much higher in the new country, theoretically there could a decline in the religiosity of the immigrant group relative to the religiosity in their original home country. But the decline would be even larger if ethnicity were irrelevant. The fact that the religiosity of immigrants typically increases after immigration, as pointed out by Williams (1988, p. 11), suggests how important ethnic identity is in their adaptation to America: it typically overwhelms the greater opportunity cost of their time.

3. Some Empirical Evidence for the Theory

In this section, I present some empirical evidence that supports the theory that ethnic diversity (in an environment of a well-established civil religion) is the fundamental reason behind America's exceptional religiosity. I also test this theory against two others that have been offered to explain religiosity. The first is the religious market hypothesis, which states that competition across religions and religious denominations increases religiosity (see the references cited earlier). It also claims that government interference in the religious market by having a state religion, regulating the religious market, thwarting the freedom of religion would reduce religiosity. The empirical evidence to date on the hypothesis is mixed: there is evidence in favor of the latter aspect of it regarding state interference but not the former regarding competition (See e.g. Olson (1999), Voas et al (2002), Olson et al (2020) and the references cited therein. McCleary and Barro (2006) and Iyer (2016) offer overviews of this and the secularization literature).

The second hypothesis I wish to test the identity theory against is that of Norris and Inglehart (2004). Their theory claims that existential anxiety increases religiosity; when survival is at stake, one is more likely to have faith in a supernatural being. With increasing affluence, existential anxiety declines and so religiosity would decline, too. In their empirical work, the

¹⁸ The claim on the effects of competition from supply side theory has lacked solid theoretical foundations, however. When examined formally, the effect of religious pluralism on religiosity is theoretically ambiguous [Montgomery (2003), Eswaran (2011)].

13

authors use a country's Gini coefficient for income as a proxy of existential anxiety (since this coefficient is a measure of inequality) to test their theory and find some evidence for it. However, the Gini is a measure of relative inequality and so is not a good measure of the proportion of people who would suffer from existential anxiety. In what follows, I use a measure that speaks more directly to the anxiety regarding one's survival in order to better capture the essential idea of their hypothesis.

3.1 The Data

For a measure of religiosity, I use figures from Pew Research Center's 2014 Religious Landscape Study. This study drew a nationally representative random sample in which in excess of 35,000 people were interviewed by telephone during the period June 4-Sept. 30, 2014. The data from the study gives the proportion of the population of each state in the United States that is "highly religious". This figure is based on an aggregate index constructed from four different measures pertaining to their belief of how important religion is to them, their frequency of prayer, etc. 19 The measure goes from a minimum of 33% for New Hampshire to a maximum of 77% for Alabama. I label this variable "Highly Religious" in this section and it is one of the dependent variables. The Pew study also gives other measures of religiosity, like the percentage of the sampled population that says that they attend services at least once a week. I also use this variable, calling it "Weekly Attendance" in this paper.

The real per capita income for the states for 2016 (in 2009 dollars) is labelled "pc Income" here. Its source is the Bureau of Economic Analysis. ²⁰

State level measures of ethnic diversity are not readily available. I choose the entropy measure of ethnic and racial diversity by state for 2015, which is provided by Lee et al (2017). Suppose there are M groups of people in a society and the proportion of the population in group m is p_m . Then the entropy index, E, is defined by

¹⁹ The American data by state on Importance of Religion comes from the website "How Religious is Your State?" https://www.pewresearch.org/fact-tank/2016/02/29/how-religious-is-your-state/? (Provided by Michael Lipka and Benjamin Wormald from the 2014 Pew Religious Landscape Study.) The question on the Importance of Religion in the 2014 PEW Landscape Study is Q.F2: How important is religion in your life -- very important, somewhat important, not too important, or not at all important? The construction of the high religiosity index from four aggregates is described in detail by Lipka and Wormald.

(12)
$$E = \sum_{m=1}^{M} p_m \ln(1/p_m).$$

This index acquires a maximum value of $\ln(M)$, when all groups are of identical size. Lee et al (2017) scale this number appropriately so that it goes from 0 (complete homogeneity) to 100 (complete heterogeneity with each of the M groups has an equal share of the population). The authors construct the index for each state using the population shares in 5 broad groups: Hispanics, non-Hispanic whites, blacks, Asians, and all others. The authors, who describe the construction of this index, claim that it is highly correlated with the more familiar complement of the Herfindahl index (the correlation coefficient being ≥ 0.98). The entropy index, therefore, is essentially also a measure of the probability that two individuals picked at random from the society will not belong to the same group. I use the entropy numbers that Lee et al (2017) provide for state-level ethnic diversity, which I label "E-Diversity" here.

Earlier on, I had drawn a distinction between what in the literatures are referred to as the 'ascribed' and 'achieved' aspects of ethnicity. The former is exogenous, while the latter is endogenous. Ethnic diversity indexes are computed largely from the ascribed aspect of ethnicity. That a person belongs to an ethnic group by itself gives no information on the intensity of her commitment or the effort she applies for achieving that ethnicity. In the theory of the previous section, it is the endogenous component of ethnicity that determines and is determined by religiosity. Thus we may confidently take the computed ethnic diversity measures as exogenous to religiosity in the empirical work that follows.

It should be noted that E-Diversity is a measure of contemporary ethnic diversity and not of ethnic diversity in America's history. Therefore, my empirical tests cannot examine Herberg's hypothesis as such; rather, they examine the continuing relevance of ethnic diversity to contemporary religiosity, as set out in the theory of the previous section. Furthermore, I note that the E-Diversity measure does not embody the richness or the fine-gradations in the ethnicities that we see in contemporary America. Nevertheless, since it is available, I use this measure because if even this relatively coarse-grained measure of ethnic diversity shows promise, a tentative acceptance of the proffered theory may be warranted.

To allow for the possibility that religiosity depends on existential anxiety, I use a measure that directly pertains to such anxiety: the percentage of the population of each state that has no health

coverage. I think this has an advantage over using the Gini index for wealth or income inequality because, as mentioned, the Gini is only a measure of relative inequality. Absence of health insurance, by contrast, directly impinges on concern for one's survival. This percentage of uninsured population, which I label "Uninsured", is available for 2013 from the U.S. Census Bureau, the 1-year American Community Survey. The figure goes from a minimum of 3.7% for Massachusetts to a maximum of 22.1% for Texas.

I need a measure of religious competition, which ideally would be a measure like the complement of the Herfindahl index for religious market concentration. No such index is available state-wise as far as I know. Instead, what is available is a measure of religious diversity, what I dub "R-Diversity" here. This is provided by PRRI for 2016.²² The R-diversity index is the complement of the Herfindahl index and goes from 0 (religious homogeneity) to 100 (maximum heterogeneity). On this scale, the R-Diversity index is the lowest for the state of Mississippi (45.4) and the highest for New York State (82.7).

It is well known that religiosity may depend on the level of education of the society. University educated people are less likely to be religious because they find it less necessary to invoke the existence or the intervention of a supernatural being to explain the phenomena of this world. To account for this, I include as a control variable the proportion of the state's population with a Bachelor's degree or higher. This variable, which I call "≥ Bachelors", is available from the U.S. Census Bureau, American Community Survey (ACS), 5-Year Estimates, averaged for 2014-18.

Included in the control variables of all the regressions in this section are regional dummies (Northeast, Midwest, South, and West, with South as the omitted category). This is to control for the possibility that ethnic diversity may pick up the effect of inherently more religious groups like Blacks in the south or of Hispanics.

The state-wide summary statistics for the above variables are shown in Table 1.

²¹ In their cross-country study, Norris and Inglehart (2015) use a measure called the Lived Poverty Index, which is highly correlated with per capita GDP and the Human Development Index. I prefer to explicitly control for education and per capita income, instead.

²² America's Changing Religious Identity: Findings from the 2016 American values Atlas, by R.P. Jones and D. Cox, Figure 3, p. 13. These numbers have been multiplied by 100 here.

Table 1: Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Highly Religious	50	54.7	10.74	33	77
Weekly Attendance	50	35.7	7.58	21	53
E-Diversity (Entropy 2015)	50	54.49	16.24	19.95	82.61
R-Diversity	50	69.33	9.57	45.4	82.7
Uninsured	50	13.37	3.86	3.7	22.1
pc Income	50	57796	9598	41754	78945
≥ Bachelors	50	27.17	4.73	17.3	38.2

By way of preliminaries, the pairwise correlations between the above variables are shown in Table 2, with asterisks indicating significance at less than the 5% level. We see that the proportion of people who are highly religious is significantly correlated negatively with religious diversity, positively with the proportion who are not covered by health insurance, negatively correlated with per capita income, and negatively with the proportion of the population who have a Bachelor's degree or higher.

Table 2: Pairwise Correlations

	Highly	Attend	E-	R-	Uninsured	рс	<u> </u>
	Religious	Weekly	Diversity	Diversity		Income	Bachelors
Highly							
Religious	1.0000						
Attend Weekly	0.9431*	1.0000					
E-Diversity	0.1501	0.0859	1.0000				
R-Diversity	-0.8111^*	-0.7877*	0.2545	1.0000			
Uninsured	0.4669*	0.4221*	0.3350^*	-0.3075^*	1.0000		
pc Income	-0.6103^*	-0.5228*	0.3220^{*}	0.6343*	-0.4316^*	1.0000	
≥ Bachelors	-0.6457^*	-0.5658*	0.2419	0.6676*	-0.4875^*	0.8314*	1.0000

The negative correlation of both measures of religiosity with religious diversity, if robust when we move to multivariate analysis, goes against the religious market hypothesis. But note also the positive correlation between E-Diversity and R-Diversity, though it seems insignificant. This suggests that, consistent with the theory that has been presented, religious diversity may stem from ethnic diversity. If so, the pairwise correlation between religiosity and ethnic diversity may also have embedded in it the (negative) correlation of the former with religious diversity. This

will become apparent in the regression results to follow. It may explain the lack of significance of the positive correlation between religiosity and ethnic diversity, which appears to not support the theory being presented here. However, the test of the theory will come from the multivariate regressions where other controls are in place.

Notice that the proportion of uninsured people in a state is positively correlated with ethnic diversity but negatively with religious diversity. States with more ethnically diverse populations have higher proportions of uninsured people. The pairwise correlations of per capita income with all other variables and those of the proportion of the population with at least bachelor's degrees hold no surprises.

3.2 Main Empirical Results

The essential regression equation I estimate is:

(13)
$$Religiosity_s = \alpha + \beta \; EDiversity_s + \gamma \; RDiversity_s + \delta \; Uninsured_s + \theta \; X_s + \varepsilon$$
,

where the outcome variable *Religiosity* can either be *Highly Religious* or *Weekly Attendance*, s denotes the state, X_s denotes the controls for state s, and ε is the error term. Before I present the results, I make three preliminary and important observations about the regressions. All pertain to the issues of what should be included as right hand side variables.

First, it is well-documented that Black and Hispanic religiosity are high relative to that of non-Hispanic whites in America. So, it may be thought that we should include the percentage of Blacks and Hispanics in a state as explanatory variables. I argue below that this is unwarranted because these variables themselves will capture, in large measure, the endogenously determined responses of the religiosity of these groups to ethnic diversity.

The Hispanics in America are really a very diverse group in terms of country of origin, ethnicity, and historical experience. A Pew survey of Hispanics in 2011 shows that most of the people labeled as "Hispanics" by the U.S. Census Bureau reject that identity and prefer a pan-ethnic identity referring to their country of origin (Mexican, Cuban, Dominican,...). ²³ Neither do most

18

²³ See Taylor et al , "When Labels Don't Fit: Hispanics and Their Views of Identity", https://www.pewresearch.org/hispanic/2012/04/04/when-labels-dont-fit-hispanics-and-their-views-of-identity/

of them see a shared culture among the Hispanics. The Hispanic immigrants from various countries each used religion (mostly Catholicism), suitably adapted for their needs, to empower them in the hostile environment they experienced in the U.S [Nabhan-Warren (2016)]. The Mexican Hispanics, the Latinos from Central and South America, the Puerto Ricans, the Cubans, and numerous other diverse groups lumped as "Hispanic" each adapted differently to America, holding on to their religion and only lately switching between Christian denominations. Even Hispanic Catholics were discriminated by non-Hispanic white American Catholics and had to set up their own Catholic churches to serve their needs. The religiosity of each group was a response to the ethnic mix they found themselves in after immigration to America. The high religiosity of Hispanics as a group, therefore, *already embodies* the effects of ethnic diversity in America. Including the % of Hispanics in a state as an explanatory variable will borrow its explanatory power from the crucial ethnic diversity variable while robbing the latter of its more fundamental explanatory power.

Regarding Blacks, the millions of Africans who were enslaved during the Atlantic slave trade came to America from diverse areas such as West, Central, East and Southern Africa. Countless tribes, linguistic groups, and kinship systems were broken up and these contributed to America's slave population. Back in Africa, these peoples had very different religions, belief systems, and gods. While these beliefs and practices did not survive in their original forms when the population was gradually Christianized in America, the innumerable ethnic religions nevertheless informed the adaptation of Christianity in the hostile environment they found themselves in [Raboteau (1978)]. Black Christianity, to a large measure, owes its multifaceted uniqueness to the blend of ethnic Africans plunged involuntarily into a world of slavery and, even after emancipation, of continued oppression and discrimination. From post-Civil War 19th Century onward, Blacks had to contend with societal competition from the increasingly numerous white ethnic groups that were peopling America. The religiosity of American Blacks is substantially a result of the responses of their ethnicities to the diverse white ethnicities in America. Black religiosity was bolstered by their perceived lack of power and the constant need to invoke God's help with their daily problems in the here-and-now [Shelton and Emerson

²⁴ As Johnson (2010, p. 148) put it, "The consequences of racial hatred, state-sanctioned inequality, and exclusion from national belonging were brutal realities rooted in the social texture of American racial, imperial power; this was the abyss from which black ethnic religions sought redemption."

(2012)]. To explain an American state's religiosity today by the proportion of Blacks in the state begs the question of *what* contributes to their high religiosity of Blacks. High Black religiosity in America, in large measure, was a response to the particularly hostile and multiethnic environment it evolved in. Thus, these two variables (% Blacks and % Hispanics in a state) do not belong on the right hand side of the regression equation which seeks to identify the effects of ethnic diversity on religiosity. The ethnic diversity measure I use already includes, but is not restricted to, the proportions of Blacks and Hispanics in the state.

The second observation I make is that ethnic diversity and religious diversity should always be included together on the right hand side. The reason has to do with the fact these are positively correlated—indeed, the theory posits that this should be so because they are complementary. The correlation coefficient between the two in Table 2 is 0.2545. Therefore, if only one of them is included on the right hand side, it will pick up the effect of the other and its coefficient will reflect the net effect of the two (and the other estimates can also be biased). That is, there will be a serious omitted variable bias when only one of them is included.

The final preliminary observation I make pertains to the issue of a possible mechanical correlation between the dependent variable and the measure of religious competition (here religious diversity) that mars the findings of many of the previous studies. It was pointed out by Voas et al (2002), and the argument is reviewed by Olson et al (2020), that when the two variables are essentially constructed as different measures of the same data, it naturally induces a correlation between them which arises merely by definition and is not causal in any meaningful sense. However, the dependent variable used here—Highly Religious (and also Weekly Attendance)—and Religious Diversity on the right hand side are constructed from very different data, and so the possibility of a spurious mechanical correlation does not arise here.

With these important preliminaries addressed, I present the results. In Table 3 I present the OLS regression results for the outcome *Highly Religious*. Analogous results for the outcome *Weekly Attendance* are very similar and so are relegated to the Appendix.

Table 3: OLS Regression Results

Dependent Variable: Highly Religious						
	(1)	(2)	(3)	(4)		
E-Diversity	0.1924***	0.1729***	0.2293***	0.2341***		
	(0.0482)	(0.0493)	(0.0535)	(0.0539)		
R-Diversity	-0.7763^{***}	-0.7426^{***}	-0.6911***	-0.6710^{***}		
	(0.0999)	(0.1010)	(0.0994)	(0.1022)		
Uninsured		0.3330	0.0391	0.000671		
		(0.2215)	(0.2495)	(0.2540)		
pc Income			-0.000229**	-0.000162		
			(0.000103)	(0.000129)		
≥ Bachelors				-0.2305		
				(0.2352)		
Regional						
Dummies?	Yes	Yes	Yes	Yes		
Observations	50	50	50	50		
R^2	0.8433	0.8511	0.8669	0.8693		

Notes: Std. errors in brackets. Also, the notation *** indicates significance at less than 1% level and ** at the 5% level.

Column (1) of Table 3 has only two independent variables: E-Diversity and R-Diversity. The coefficients of both these variables are extremely significant, that of the former being positive while that of the latter being negative. This explains the insignificance of the pairwise correlation in Table 2 between "highly religious" and "E-Diversity". Since R-Diversity is positively correlated with E-Diversity and the two have opposing effects on being highly religious, in the said pairwise correlation the two effects more or less cancelled out, giving insignificance. But when we parse out the two separate effects on "highly religious" in a multiple regression, the opposing effects are seen separately with each being significant.

In column (2), I simultaneously test all three hypotheses by adding Uninsured as an explanatory variable so as to include the existential anxiety hypothesis of Norris and Inglehart (2004). The coefficient of E-Diversity is positive and significant; that of R-Diversity is negative and significant; and that of Uninsured is not significant. The reason for the lack of significance in the last coefficient is likely because states with large ethnic diversity are also those with high percentage of uninsured people. So, it is likely that the effect of having no health insurance is partly absorbed by the ethnic diversity index.

In column (3), I control for the per capita income in the state. As expected, the coefficient of this variable is negative and significant, while the coefficients of E-Diversity and R-Diversity retain their signs and significance. The only study I am aware of that uses a nationally representative sample from the U.S. to estimate the causal effect of income on religiosity (weekly attendance) is that by Silveus (2017). He finds, after instrumenting for the possibly endogenous income variable, that an increase in income significantly lowers the weekly church attendance of the poor. The result I obtain in column (3) is consistent with this. It is also consistent with the results of McCleary and Barro (2006) with their international panel data comprising 68 countries, where they find that per capita income causally reduces religiosity. A higher income presumably increases the opportunity cost of time and reduces religious activities. However, it may also be capturing the fact that existential anxiety declines with income, and so religion may be deemed to be less important in one's life.

Finally, in column (4) I add the percentage of the state's population that has at least a Bachelor's degree. The coefficient of this variable, as expected, is negative but is not significant. And the coefficient of per capita income loses significance, presumably because this variable and the proportion with at least a Bachelor's are correlated. In summary, the results in Table 3 offer support of the ethnic diversity theory and contradict the religious market competition and the existential anxiety theories of religiosity (the latter possibly through the effect of income).²⁵

Endogeneity Concerns

Given the support that the regressions seem to lend to the ethnic diversity hypothesis on American religiosity, we might wonder if an endogeneity issue with the crucial explanatory variable, E-Diversity, is giving biased estimates. I had argued that the quantified ethnicity of an individual is exogenous to the religiosity of the individual. Is it possible, however, that the ethnic diversity in a state is endogenous because that diversity changes with immigration and the latter may also affect the proportion of the population that is religious? To investigate the possible endogeneity of E-Diversity, I perform the Durbin-Wu-Hausman test [Davidson and McKinnon (1993)]. For this I choose the entropy figure for 1980 as an instrument. The correlation between

-

²⁵ Although the coefficients of the dummy variables are not reported, I mention that the coefficients for Northeast, Midwest and West are invariably negative (relative to South) in all the regressions but not always significant. The negative signs are to be expected; the southern states are known to exhibit more religiosity because of the greater concentration of Blacks, who tend to be among the most religious of ethnic groups.

E-Diversity (Entropy2015) and the lagged value, Entropy1980, that I am using as the instrument is 0.95. The instrument is not weak (F-statistic is 148.) Presumably a 35 year lag is sufficient to correct for the problem. The Durbin-Wu-Hausman test does not reject the null hypothesis that E-Diversity is exogenous.

Using the estimates from Table 3 with the numbers in Table 1, one finds that a 1 standard deviation increase in a state's ethnic diversity is correlated with an *increase* of a little more than a third of the standard deviation in the proportion of the state's highly religious people. And since there is no evidence suggesting possible endogeneity of ethnic diversity, we may interpret this effect as causal. In contrast, a 1 standard deviation increase in religious diversity at the state level is associated with a *decrease* of about 0.6 of a standard deviation in the proportion of the state population that is highly religious. These are very sizable effects.

When religious competition seems to increase, it can be simultaneously accompanied by an increase in ethnic diversity. The increase in religious denominations may be a response to increased ethnic diversity—with demand increasing supply, as Bruce (2000) argued. The effect of increased competition on religiosity is negative and that of increased ethnic diversity is positive. Their net effect on religiosity could be either positive or negative. But when the two effects are isolated, we see that any manifest increase in religiosity (as seen in some studies) must be due to ethnic diversity, not religious market competition per se. This explanation accords with Olson's (1999) summary of the findings of his careful work on the correlation between religiosity and U.S. church membership: "Taken together, these results suggest that high rates of church membership in the US persist *in spite of, not because of*, religious pluralism." (p. 171, emphasis added)

4. Does Ethnic Diversity Impinge on Religiosity in the Rest of the World?

The theoretical claim here on the role of ethnic diversity in determining religiosity in the United States is premised on the particular demographic history of the country. It is the pitting of one group of immigrants against others in "societal competition" à la Abramson (1971) that throws immigrants back on themselves and forces them to define themselves in terms of an ethnic group, and religion facilitates this process in a mutually reinforcing manner. This is certainly not the history of almost all other countries in the world. Therefore, if this theoretical story which

draws on but goes well beyond Herberg (1955) in emphasizing the continued importance of ethnicity is correct, we would not expect ethnic diversity to have much of an effect on religiosity in the world at large. If it turns out that it does, then it would follow that some other link between ethnic diversity and religiosity is universally at work and that the theory of America's exceptional religiosity offered here has little merit. This section presents a preliminary investigation of the evidence on this issue.

4.1 The Data

As a measure of the aggregate religiosity in a country, I use the data of Pew Research Center, as reported in their publication *The Age Gap in Religion Across the World*. Based on their surveys over the period 2008-2018, they report the percentage of a country's population that affirmatively answered a question on whether religion was very important to them. I call this variable "Religion Very Important" here. This percentage went from a minimum of 3% (China) to a maximum of 98% (Ethiopia and Senegal) in my final sample of 100 countries.

For ethnic and religious diversity measures, I use the figures provided by Alesina et al (2003). These are the complements of Herfindahl indices which range between 0 (homogeneity) to 1 (maximum heterogeneity). For ethnicity, I use their fractionalization measure based on ethnicity (the analogue of E-Diversity of the previous section) but which also goes here from 0 to 1. In my sample of countries this number goes from a minimum of 0.002 (South Korea) to a maximum of 0.930 (Uganda). For religious diversity, I use their fractionalization measure based on religion (the analogue of R-Diversity of the previous section). This variable may also be construed as a measure of competition in the religious market. This figure goes from a minimum of 0.004 (Morocco) to a maximum of 0.860 (South Africa).

For per capita income ("pc Income" as before), I use the figures from the *CIA Factbook* for 2017, expressed in PPP\$. The per capita income in my sample goes from a minimum of \$800 (Democratic Republic of Congo) to a maximum of \$69,400 (Ireland).

The next three variables I use are all dummy variables to indicate whether the country is communist, ex-communist, or has a state religion. I draw these figures from Barro and McCleary (2005). In my sample, around 2% are communist, 22% are ex-Communist, and 44% have State Religions.

Table 4: Summary Statistics for International Sample

Variable	Obs.	Mean	Std. Dev.	Min	Max
Religion Very Important	101	54.180	31.20	3	98
Ethnic Fractionalization	101	0.426	0.259	0.002	0.930
Religious Fractionalization	101	0.419	0.226	0.004	0.860
pc Income	101	19,383	16,659	800	69,400
Communist	101	0.020	0.141	0	1
Ex-Communist	101	0.220	0.416	0	1
State Religion	101	0.440	0.499	0	1

The summary statistics for these variables are shown in Table 4. I use the absolute value latitude (not shown) of the capital of a country as an instrumental variable for per capita income, which is well-known to be positively correlated with per capita income but arguably does not directly affect religiosity. This is one of the instruments used by Barro and McCleary (2005) to address the fact that there could be a reverse causality between religiosity and per capita income, as Max Weber (1930) famously argued.

The pairwise correlations between the above variables are shown in Table 5. This Table reveals that the variable "Religion Very Important" is significantly correlated with ethnic diversity but not religious diversity. Ethnic fractionalization is also negatively correlated with per capita income, a fact that is well known in the economics literature (see Alesina and La Ferrara (2005) for a review of this literature). Of course, these correlations in Table 5 do not take account of the impacts of other variables. The next subsection presents the results of multiple regressions.

Table 5: Pairwise Correlations

	Relig. V.	Ethnic	Religious	pc	Comm.	Ex-	State
	Imp.	Frac.	Frac.	Income		Comm.	Relig.
Relig. V. Imp.	1.000						
Ethnic Frac.	0.600**	1.0000					
Relig. Frac.	-0.131	0.210**	1.000				
pc Income	-0.740**	-0.546**	0.038	1.000			
Comm.	-0.201**	-0.127	0.106	-0.073	1.000		
Ex-Comm.	-0.404**	-0.081	0.145	-0.053	-0.076	1.000	
State Relig.	0.070	-0.155	-0.390**	-0.098	-0.127	0.064	1.000

Asterisks ** indicate significance at less than 5% level

4.2 Regression Results for the International Sample

The main results of this section are presented in Table 6.

Table 6: Main Regression for International Sample of Countries

Dependent Variable: Religion Very Important (%)					
	(1)	(2)			
	OLS	IV Reg.			
Ethnic Frac.	14.763**	-0.148			
Etillic Frac.	(6.802)	(9.935)			
Polic Free	-14.687**	-0.0688			
Relig. Frac.	(7.234)	(10.381)			
pc Income	-0.00111***	-0.00228***			
pe meome	(0.00016)	(0.00043)			
Communist	-57.658***	-81.592***			
Communist	(10.441)	(15.412)			
Ex-Communist	-21.214^{***}	-51.866***			
Ex-Communist	(5.897)	(12.372)			
State Religion	2.356	-4.105			
State Religion	(3.025)	(4.392)			
Regional Dummies?	Yes	Yes			
Obs.	100	100			
\mathbb{R}^2	0.867	0.7816			

Notes: Std. errors are in brackets. Also, the notation ** indicates significance at less than 5% level and *** at less than 1% level.

Column (1) presents the OLS results and column (2) presents the corresponding results when I attempt to take care of the endogeneity of per capita income and instrument it with latitude of the country's capital. ²⁶ In these regressions, I include dummies for the standard geographical regions used by the World Bank (East Asia and the Pacific, Europe and Central Asia, Latin America & the Caribbean, the Middle East and North Africa, North America, South Asia, and sub-Saharan Africa, where the first of these is excluded).

In these regression results, per capita income negatively (and causally) affects religiosity, as in McCleary and Barro (2006). This standard effect has been interpreted in the past as the basis of secularization (though here only cross-sectional data is being used). It could also be consistent

²⁶ The instrument is not weak; the F-test statistic is 25.03.

with Norris and Inglehart's (2004) view that, because existential anxiety declines with higher income so does religiosity.

Communism and ex-Communism significantly and negatively impinge on religiosity, also in accord with the findings of McCleary and Barro (2006). This is consistent with that aspect of the religious market hypothesis which claims government involvement in the religious market is inimical to religiosity. However, that aspect of this hypothesis which claims greater competition should positively affect religiosity finds no support: the coefficient of fractionalization by religion is consistently insignificant here.

Most importantly for the purpose of this paper, the coefficient of ethnic fractionalization is consistently insignificant in the instrumental variable regressions.²⁷ In other words, ethnic diversity is not correlated with religiosity in the world at large. This is sharply in contrast to what was found in the previous section for the United States, where there was a robust positive effect. Ethnicity does not seem to matter elsewhere in the world but it definitely matters in the United States. We may infer that the unique experience of America with massive and sustained immigration (into an environment with a civil religion) is very plausibly the reason for the high level of religiosity in the country relative to other OECD countries.

5. Discussion

This paper has provided a simple theoretical framework based on identity to understand the exceptional religiosity in America, a land of immigrants. The theoretical model is premised on the complementarity between the "achievement" (that is, the endogenous component) of ethnic identity and religious behavior. Intense societal competition between various immigrant ethnic groups in America leads to a sharpening of the achieved aspect of ethnic identity, and this promotes religious behavior through complementarity. Since freedom of religion is guaranteed by the American Constitution, and is bolstered by a civil religion [Bellah (1967)], religion is

_

²⁷ In case we wonder whether ethnic diversity is endogenous, I instrumented for that also, following Ahlerup and Olsson (2012), who used the time since the arrival of modern humans ("origin time") in the area. There is considerable variation in origin time across countries because of the time taken for migration from East Africa to different parts of the world. This origin time variable is highly correlated (positively) with contemporary ethnic diversity (since ethnic diversity increases with geological time) and it arguably does not directly influence religiosity. The results on the insignificance of ethnic and religious diversity remain unchanged.

practiced with the facilitating aid of ethnicity. It is through ethnicity and religion that immigrants adapt themselves to American society; they assimilate, but without shedding their ethnic identity. At least, this seems to have been the case historically.

The preliminary empirical evidence I have presented using state-wise data from America is consistent with the view that ethnic diversity positively and significantly impinges on religiosity. Religious diversity, by contrast, does the opposite: it dilutes religiosity. Ethnic competition, not religious competition, seems to drive American religiosity to its high levels. These results explain why an ethnically diverse country like the United States has a very high level of religiosity, while ethnically homogeneous countries like the Scandinavian ones have very low levels.

It must be emphasized that increasing the amount of time devoted to identity formation in my model leads to greater entrenchment towards one's ethic identity but it does not mean that it will necessarily mean greater bonding with co-ethnics. The nature of identity-formation here is that of cementing a more concrete "self-concept". The set-theoretic complement of the concept "self" is "other", for the one cannot be defined without the other. Therefore, greater adherence to self necessarily implies greater separation from others. True, a person would perceive a smaller "distance" between herself and co-ethnics than between herself and non-co-ethnics. But greater entrenchment in self means greater distance not only from non-co-ethnics but also from co-ethnics.

This observation allows us to make sense of the findings on the social capital correlates of diversity in America reported by Putnam (2007). Using a nationwide survey in year 2000 in the U.S. with embedded, detailed, data from 41 neighborhoods, Putnam finds that in areas of greater ethnic diversity, there is less trust not only across different ethnic groups but also within ethnic groups. In fact, the difference between the trust levels across and within groups—what Putnam calls "ethnocentric trust"—is invariant with respect to ethnic diversity. So an increase in ethnic diversity in neighborhoods reduces trust across members of different ethnic groups but also reduces trust between members of the same ethnic group so that the difference remains the same. To use Putnam's characterization of his empirical finding, people "hunker down" in the face of greater ethnic diversity. This is precisely what would be predicted by my model in which greater ethnic diversity induces a greater investment in "self," thereby increasing the distance from all

"others," equally from co-ethnics and non-co-ethnics. In more diverse neighborhoods, people would spend more time by themselves, doing things like watching more TV rather than socializing—exactly as Putnam finds. This is not to suggest that ethnic groups will not get together to lobby for their common political interests; only that it will be more difficult in areas of greater ethnic diversity.

The consistently negative effect of religious diversity on religiosity in America is interesting, especially since religious competition has been argued in the literature cited earlier to be what separates America from European and other OECD countries. The theory and the evidence presented here indicate that it is not religious competition but, rather "societal competition" through ethnicity that bolsters religiosity. Ethnicity is a much more fine-grained distinction than religion because a given religion like Christianity is practiced by myriads of ethnic groups. So the misattribution of the effects of ethnicity to religion is revealed only when the empirical work explicitly accounts for ethnicity.

Glazer (1954) has pointed out that many immigrants to America came from states that were not yet nations, and many from nations that were not yet states. Arguably, German immigrants were an example of the latter and the later Italian immigrants were an example of the former. As a result, there were a lot of immigrants who did not really possess an identity until after they arrived in America; that identity had to be given form and strengthened. It follows that many immigrants who hailed from a geographical region in Europe that later became a country were really ethnically fragmented. Therefore, the manifest ethnic diversity in America of immigrants from a given region was likely far greater than what prevailed in that region.

This brings us to an important question: Why does religious diversity exert a negative influence on religiosity, contrary to the original claim of Adam Smith [Smith (1776/1981, V.i.g)] and the more recent supply-side theory? Theoretically, the case for the effect of religious market competition on religiosity is actually ambiguous. Adam Smith's contemporary, the philosopher David Hume, held the view that monopoly in religion may be better than competition [Hume

²⁸ Hungerman (2011) reports the findings of a survey he conducted in Ft. Wayne, Indiana, on the concerns of congregations regarding competition from other congregations and from secular sources. The answers he received from pastors suggested that there was little concern about competition from other congregations (but a lot about competition from secular sources). An increase in religiosity driven by pastoral fear of losing members to the competition, then, does not appear to be important.

(1762)]. His reason was essentially that, when the suppliers of information (here priests) are also the providers of the service, there is scope for moral hazard on their part and so they may bias their religious message so as to favor their own interests. This stark contrast in views was analyzed by Eswaran (2011) by taking into account both the demand side of the religious market coming from laypersons and the supply side coming from the providers of the service (churches). This showed that an increase in competition does not necessarily lead to greater religiosity in the face of greater (endogenous) dilution of the religious message when competition increases.

There are other reasons why religious diversity and religiosity are negatively correlated. For a given level of ethnic diversity, if religious diversity increases, it means that each ethnic group is now diversifying into more religions. In other words, religion is no longer an aspect that is unique to an ethnic group and so may be less relied on as a vehicle to entrench ethnic identity. If the complementarity between religion and ethnicity is diluted, less investment in ethnic entrenchment will be undertaken, as we saw in the theoretical section, and this will manifest as less religiosity.

Yet another reason may be that people can and do marry across ethnic boundaries. As a result, even if they nominally belong to the same ethnic group and nominally adhere to their religion (and so R-diversity is the same), their commitment to that ethnic group and religion may decline. This, in turn, especially given the complementarity between ethnicity and religion, would correspondingly reduce religiosity. We may conjecture that American states with higher proportions of interethnic marriages will likely exhibit less religiosity, all else constant.

Finally, Berger (1967) famously argued that religious pluralism leads to secularization because it results in a "crisis of plausibility" in the religious view of the world. He also pointed out that there can be a reverse causality from secularization to pluralism. The relaxing of religious authority puts the onus on each individual to form their own opinion about religious truths. That is, there can be pluralism in religious views as a consequence of secularization.

Evangelicals, who do not emphasize ethnicity but who nevertheless are highly religious, do not seem to fit my theory that the high level of American religiosity is largely driven by ethnic diversity. If the complementarity between ethnicity and religion is not the driver of their high level of religiosity, what is? Evangelicals rely more heavily on emotional involvement and on the

absolute certainty of their beliefs than do Catholics and mainline Protestants.²⁹ I tentatively suggest it is possible that this could substitute for the benefits conferred by ethnicity in religious practice. This question warrants further research.

There are other avenues through which religiosity may part ways with ethnicity. ³⁰ I have mentioned that the major religions are concerned with the timeless aspect of reality whereas ethnicity, which can aid the practice of religion, is necessarily localized and time-bound. The two can be separated in principle, and this is possibly becoming increasingly manifest even in practice in contemporary America. The proportion of the population that claims to be unaffiliated with any religion is now 26%. ³¹ This does not, imply, of course, that the "Nones" (those who say they are not affiliated with any religion) are all agnostics or atheists. In fact, many of them are deeply spiritual, seeking to understand the truths of religion while attempting to be free of the shackles of ethnic identity. If this is true, the higher proportion of Nones may be signaling a transition to what Luckmann (1967) called "invisible religion" rather than suggesting a transition away from religion altogether. Indeed, some of the Eastern religions like Hinduism and Buddhism that facilitate this sort of invisible religion have been making serious inroads into the United States. ³²

Despite the exceptions of the Nones and Evangelicals, the tentative statistical evidence I have presented in this paper does point to the causal influence of ethnicity in America's contemporary religiosity. These exceptions are evidently not yet influential enough to purge the effects of ethnicity in the aggregate. And it does not seem likely that this will happen in the near future.

6. The Importance of Civil Religion

The Introduction to this paper briefly alluded to the role of civil religion, which I claim historically played a role in facilitating America's religiosity. In the section that followed, I

³¹ Pew, *In U.S.*, *Decline of Christianity Continues at Rapid Pace*, available at: https://www.pewforum.org/2019/10/17/in-u-s-decline-of-christianity-continues-at-rapid-pace/

²⁹ The Economist, November 9, 2017, offers this explanation in the context of developing countries: "It is a bootstrapping, forward-looking faith and its cultural malleability, with no requirement for clergy, makes it suitable to populations on the move, seeking new social identities and communities."

³⁰ See e.g. Kurien (2012) for an example.

Those who practice Zen and Advaita Vedanta—which have become increasingly popular in Western spiritual circles—are examples of people who are spiritual but would likely claim no religious affiliation.

modeled the endogenous investment in ethnicity and religiosity, given the freedom to practice one's religion assured by civil religion and the American Constitution. In this section, I elaborate on the importance of civil religion in America by comparing it with those in two other OECD countries, Canada and Australia. I choose these two countries because they are culturally similar to the U.S. and have had comparable flows of immigrants but yet do not exhibit America's exceptionally high religiosity. The relative paucity of quantitative research in the area of civil religion somewhat hampers this discussion, but enough can be said to highlight the unique role of civil religion in America.

Bellah (1967) identified America's civil religion as a phenomenon that lies between traditional religion and politics. Though it has no accompanying organizations, it is nevertheless subscribed to by the population through its beliefs. Among these are the prominent ones of belief in a Supreme (nondenominational) God and America's manifest destiny under God's care. Ultimate authority rests not with the government but with God, to whom government is answerable. This non-denominational character of the Supreme Being, despite the religious composition of the country historically being Judeo-Christian (the Blacks and Native Americans were discounted), I argue, supports religious faiths regardless of their denominations and promotes the practice of preferred religions with the guarantee of the U.S. Constitution.³³ While the lack of concrete organizations embodying civil religion makes it difficult to verify its existence, nevertheless there is evidence on the existence of civil religion in America. For example, Wimberley and his coauthors (1976a, 1976b) gathered data from a sample of responses to ten questions pertaining to the issue—such as Americans being God's chosen people; the sacredness of the American flag; God being known through the experiences of the American people; etc. Through factor analysis, they concluded that Americans subscribe to beliefs attributable to a civil religion that is distinct from their (Judeo-Christian) religious commitments. In other words, we can take civil religion in America as a conceptual device that *does* have actual referents in reality.

This is not to suggest that the causality from civil religion to pluralism and religiosity is only one way. It is possible that pluralism may also impinge on the adherence to civil religion. See Moser (2018) for some evidence on the correlation between adherence to civil religion and pluralism in contemporary America. It is conceivable that the very success of civil religion may, over time, lead to its dilution because of the pluralism it engenders.

Civil religion has been posited in this paper as a facilitating condition for America's exceptional religiosity. However, it is not sufficient.³⁴ When civil religion is present, it sets the stage for immigrants to freely pursue the religions of their home countries or of their choice. Ethnic diversity, too, in this view, is necessary but not sufficient for high religiosity. In this milieu, it is ethnic diversity that then bolsters religiosity through the search for identity in a myriad of vastly different ethnic groups. Unless both conditions are present—civil religion and ethnic diversity—other countries cannot replicate the American experience. I argue below that other OECD countries do not share America's exceptional religiosity even though they may share its diversity of immigrants because they do not have the facilitating help of a civil religion.

Few countries in the world have experienced the kind of immigration in the past two centuries that the U.S. has. At around 1850, the percentage of foreign-born people residing in the United States was 9.7% [Gibson and Lennon (1999)]. Since then this proportion has steadily grown, except for a hiatus between the 1920s and the 1960s. In 2018, the proportion of foreign-born people residing in the United States stood at 13.7%. There are countries that have even higher ratios of immigrants to native born people—like Canada and Australia, for example—and in terms of the diversity of ethnicities, if not in absolute numbers. But neither Canada nor Australia has had anything approaching an effective civil religion or equivalent that helps separate church and state.

In Canada, not only ethnic diversity is not very different from America's but religious diversity is somewhat less. Importantly, the separation of church and state is not written into the Canadian constitution. The *Charter of Rights and Freedoms* (the Canadian equivalent of the American *Bill of Rights*) that addresses freedom of religion was enacted in Parliament only in 1960. But it was a weak bill that could be changed by another vote with a simple majority in parliament and which bound only the federal government but not the provinces. It was only in 1982 that the *Charter* was incorporated into the Canadian Constitution. For most of Canadian history since confederation in 1867, and even a hundred years before, the freedom to practice one's religion of choice did not carry unquestionable assurance.

_

³⁴ Strictly speaking, civil religion may not even be a necessary condition because, theoretically, any expedient that facilitates the strict enforcement of the separation of church and state would do as well. But examples of other such facilitating conditions, however, are very hard to come by.

³⁵ This percentage refers to the proportion of people residing in the United States who were not U.S. citizens at birth.

Bellah and Hammond (1980, Ch. 1) allude to the absence of civil religion in Canada. In an indepth analysis, Kim (1993) has argued that the emergence of a civil religion was precluded in Canada by antagonism between its two founding cultures (English and French). The English were Protestants and the French predominantly Catholic. When the English defeated the French and the Dominion of Canada was formed in 1867, Canada swore allegiance to the English monarch, which the French resisted. Besides, though Canada did not have an established religion, England had an established Protestant church (Anglican)—very different from the American republic, where the U.S. Constitution also required the separation of church and state. The vast difference between the two founding cultures has been a constant source of antagonism between English Canada and Quebec, the province with the largest (French) minority. ³⁶ The absence of shared experiences, language, and history has prevented convergence to common values and the emergence of a "Canadian Way of Life" analogous to the "American Way of Life" (which was Herberg's (1955) characterization of America's civil religion). Canada lacks the facilitating aid of a civil religion to separate church and state.

Turning to Australia, the Australian constitution does not guarantee separation of church and state. The relevant section (s. 116) of the constitution is the equivalent of the American *Bill of Rights*, but the wording has been altered. Where the American Constitution states, "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof..." the Constitution of the Commonwealth of Australia states, "The Commonwealth shall not make any law *for* establishing any religion, or *for* imposing any religious observance, or *for* prohibiting the free exercise of any religion..." (emphasis added) The crucial difference is in the introduction of the word 'for' in the Australian case, which gives the Australian courts the latitude to gauge intent—which is unnecessary in the American case. This arguably leaves open the possibility of the state treating different religions differently, as for example when it comes to federal funding of religious schools. In any case, the individual states in Australia are not bound by the Commonwealth's constitution.

In Australia, Anzac Day comes closest to a civil religion. This day (April 25), which is a national holiday, celebrates the sacrifice of Anzacs (Australian and New Zealand Army Corps) in

³⁶ In fact, in a referendum in 1995, Quebec came within a hair's breadth of seceding from Canada.

³⁷ See e.g. Puls (1998).

Gallipoli in the First War, just a few years after Federation. Though respect for Anzacs is motivated by honoring the military for its sacrifices for the country, it is said to induce some sense of national identity even today. Donoghue and Tranter (2015) presents evidence that, in contemporary Australia, Anzacs are a source of national identity, more so for older citizens than younger ones; more so for the less-educated than for the more; and more so for Australian-born citizens than foreign-born ones. Nevertheless, national identity by itself is a far cry from the American counterpart of civil religion that acknowledges an overarching concept of God that supersedes the state and to whom the state is answerable.³⁸

Among the OECD countries, America seems unique in the role played by its civil religion. Bellah's (1967) original paper stirred up a great deal of excitement among academics in the immediately following decades, but that excitement has waned somewhat because it was unclear whether the concept of civil religion had any explanatory power. I believe that my paper, by identifying the pivotal role of civil religion, provides a case for its usefulness: along with ethnic diversity, it helps explain America's exceptional religiosity among OECD countries.

7. Concluding Remarks

The investigations, arguments, and findings of Kennedy (1944), Handlin (1951), Herberg (1955), Marty (1972), Hammond and Warner (1973), Stout (1975), and numerous others down till Putnam and Campbell (2010) have provided strong arguments and evidence for the link between America's ethnicity and religiosity. Building on these studies, in this paper I have presented a theory and some preliminary evidence suggesting that there is thus good reason to suspect that the unique immigration history of America makes it exceptional in terms of religiosity.

Following in this line of investigation, I have proposed a formal ethnicity-based identity model of the religious behavior of immigrants in an ethnically heterogeneous country. The model incorporates a complementarity between ethnic entrenchment and religiosity and generates

³⁸ The Canadian and Australian religious markets are dominated by a few denominations. The top 4 Canadian (Australian) denominations in 2011 constituted 70.4% (50.2%) of the general Canadian (Australian) population. Among those who subscribe to a religion, the 4-firm concentration index in Canada (Australia) works out to 91% (65%), which is quite substantial. What is more, an anonymous referee points out that many of the other denominations are not very distinct from the main ones. This suggests an alternative explanation, namely, despite the ethnic diversity, religious diversity is suppressed because of the dominant effect of the large denominations—what the referee dubs the 'big sister' effect—which undermines the mechanism operating in America.

testable implications. The tentative statistical evidence I have presented here is consistent with the view that ethnicity is a causal driver of the exceptional American religiosity. Furthermore, the evidence also suggests that the same model does *not* apply to the rest of the world—which supports that view that what makes American religiosity stand out is, ultimately, its ethnic mix when accompanied by a civil religion.

Five decades ago, Marty (1972, p. 9) remarked that "Ethnicity is the skeleton of religion in America," in stark contradiction to Herberg's (1955) thesis that ethnicity gives way to assimilation by the three religions, Protestantism, Catholicism, and Judaism. Marty suggests that his statement could be interpreted in two ways: either as "the skeleton in the banquet," a secret source of shame or pain or as providing the "supporting frame...the bare outlines or the main features of American religion." Herberg could not have anticipated the massive inflow of non-European immigrants of numerous ethnicities after the Immigration Act of 1965, which would make ethnicity a continuing reality of the American religious landscape. Warner (1993), who was keenly aware of the role of immigrants in contemporary American religiosity, made the acute observation "[R]eligion in the United States has typically expressed not the culture of the society as a whole but the subcultures of its many constituents..." (p. 1047)

This paper has little to say about secularization, except insofar as ethnicity impinges on the phenomenon. America may be secularizing, albeit at a slower pace than Europe, as the recent literature demonstrates. As noted earlier, if people intermarry across ethnic groups, ethnic ties can naturally be expected to become somewhat weakened. To the extent that ethnicity does not need to be defended or invested in, religiosity would also decrease because the two are complementary. A recent Pew Report shows that interethnic/interracial marriages increased substantively in the US since the 1980s. ⁴⁰ The most dramatic increase has been among Blacks. Similarly, there is a considerable increase among Hispanics. Since Blacks and Hispanics are among the most religious ethnic groups in America, this trend would suggest that a decline in religiosity in the future would not be surprising.

-

³⁹ Putnam and Campbell (2010, Ch.9), quoting Martin Luther King's famous remark in the 1950s that America is the most segregated at 11 AM on Sundays, ask if this observation is still true four decades later. They conclude that it is still largely true, though they point to some important exceptions like megachurches that are multiethnic.

Intermarriage in the U.S. 50 Years After Loving v. Virginia, May 2017, available at: https://www.pewsocialtrends.org/2017/05/18/intermarriage-in-the-u-s-50-years-after-loving-v-virginia/

My paper is essentially about why the level of religiosity in America is so much higher than in the OECD countries. This does not seem to be because of the difference in religious market competition. Rather, the struggle of immigrants to adapt to an alien environment and the societal competition between myriads of ethnic groups, which compel the consolidation (and sometimes creation) of identity, seem to be the drivers. The evidence presented here is provisional, to be sure, but strongly suggestive. Ethnic diversity is America's open secret, the source that powers its formidable religiosity. Because ethnic groups that immigrated to America in its history built their own churches in their neighborhoods, what appeared to be an increase in religious competition masked the more fundamental determinant of religiosity: an underlying attachment to ethnic roots. Ethnicity facilitated the adaptation of immigrants to America and also promoted the cultivation of religious belief and practice, a right enshrined in the American Constitution and supported by its unique civil religion. This and, along with it, was the largely unhindered openness of the country to immigrants from the world over.

Bibliography

- Abramson, H.J. (1971), "Ethnic Diversity within Catholicism: A Comparative Analysis of Contemporary and Historical Religion," *Journal of Social History*, 4(4), pp. 359-388.
- Ahlerup, P. and O. Olsson (2012), "The Roots of Ethnic Diversity," *Journal of Economic Growth*, 17 (2), pp. 71-102.
- Akerlof, G.A. and R. Kranton (2000), "Economics and identity," *Quarterly Journal of Economics*, 115, pp. 715–753.
- Alesina, A., A. Devleeschauwer, W. Easterly, S. Kurlat, and R. Wacziarg (2003), "Fractionalization," *Journal of Economic Growth*, 8, pp. 155-194.
- Alesina, A. and E. La Ferrara (2005), "Ethnic Diversity and Economic Performance," *Journal of Economic Literature*, 43(3), pp. 762-800.
- Barth, F. (1969) (ed.), *Ethnic Groups and Boundaries: The Social Organization of Cultural Difference*, Little, Brown and Co., Boston.
- Barro, R.J. and R.M. McCleary (2005), "Which Countries Have State Religions?" *Quarterly Journal of Economics*, 120(4), pp. 1331-1370.
- Baumeister, R.F. and M.R. Leary (1995), "The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation," *Psychological Bulletin*, 117(3), pp. 497-529.
- Black, A.W. (1990), "The Sociology of Religion in Australia," *Sociological Analysis*, 51, pp. S27-S41.
- Bellah, R.N. (1967), "Civil Religion in America," Daedalus, 96 (1), pp. 1-21.
- Bellah, R.N. and P.E. Hammond (1980), Varieties of Civil Religion, Harper & Row, New York.
- Berger, P. (1967), *The Sacred Canopy: Elements of a Sociological Theory of Religion*, Doubleday, New York.
- Bisin, A., G. Topa, and T. Verdier (2004), Religious Intermarriage and Socialization in the United States, *Journal of Political Economy*, 112(3), pp. 615-664.
- Bruce, S. (2000), "The Supply-Side Model of Religion: The Nordic and Baltic States," *Journal for the Scientific Study of Religion*, 39(1), pp. 32-46.
- Cadge, W. and L. Davidman (2006), "Ascription, Choice, and the Construction of Religious Identities in the Contemporary United States," *Journal for the Scientific Study of Religion*, 45(1), pp. 23-38.
- Casanova, J. (2007a), "Immigration and the New Religious Pluralism: An EU/US Comparison," in *Democracy and the New Religious Pluralism*, (ed.) T. Banchoff, Oxford Scholarship Online, DOI: 10.1093/acprof:oso/9780195307221.001.0001
- Casanova, J. (2007b), "Rethinking Secularization: A Global Comparative Perspective," in *Religion, Globalization, and Culture*, (eds.) P. Beyer and L. Beaman, Brill, Leiden, pp. 101-120.
- Chaves, M. and P.S. Gorski (2001), "Religious Pluralism and Religious Participation," *Annual Review of Sociology*, 27, pp. 261-281.

- Curtis, K.A. and L.R. Olson (2019), "Identification with Religion: Cross-National Evidence from a Social Psychological Perspective," *Journal for the Scientific Study of Religion*, 58(4), pp. 790--812.
- Davidson, R. and J. G. MacKinnon (1993), *Estimation and Inference in Econometrics*, Oxford University Press, New York.
- Donoghue, J. and B. Tranter (2015), "The Anzacs: Military influences on Australian identity," *Journal of Sociology*, 51(3), pp. 449-463.
- Eaton, B.C., M. Eswaran, and R. Oxoby (2011), "'Us' and 'Them': The Origin of Identity, and its Economic Implications," *Canadian Journal of Economics*, 44(3), pp. 719-748.
- Ebaugh, H.R. and J.S. Chafetz (2000), *Religion and the New Immigrants*, Rowman & Littlefield, New York.
- Eswaran, M. (2011), "Competition and Performance in the Marketplace for Religion: A Theoretical Perspective," *The B.E. Journal of Economic Analysis & Policy*, 11(1), Article 14.
- Finke, R. and L. R. Iannaccone (1993), "Supply-Side Explanations for Religious Change," *Annals of the American Academy of Political and Social Sciences*, 527, pp. 27-39.
- Finke, R. and R. Stark (1992), *The Churching of America, 1776-1990*, Rutgers University Press, New Brunswick, NJ.
- Finke, R. and R. Stark (1986), "Turning Pews into People: Estimating 19th Century Church Membership," *Journal for the Scientific Study of Religion*, 25(2), pp. 180-192.
- Gibson, C. and E. Lennon (1999), "Historical Census Statistics on the Foreign-Born Population of the United States: 1850 to 1990," U.S. Census Bureau, Working Paper No. 29, Washington D.C.
- Glazer, N. (1954), "Ethnic Groups in America: From National Culture to Ideology," in *Freedom and Control in Modern Society*, M. Berger (ed.), D. Van Nostrand Company, Inc., Toronto.
- Glazer, N. and D. Moynihan (1970), Beyond the Melting Pot; the Negroes, Puerto Ricans, Jews, Italians, and Irish of New York City, MIT Press, Cambridge.
- Greeley, A.M. (1971), Why Can't They be Like Us? America's White Ethnic Groups, Dutton, New York.
- Hammond, P.E. (1988), "Religion and the Persistence of Identity," *Journal for the Scientific Study of Religion*, 27(1), pp. 1-11.
- Hammond, P.E. and K. Warner (1993), "Religion and Ethnicity in Late-Twentieth-Century America," *Annals of the American Academy of Political and Social Science*, 527, pp. 55-66.
- Handlin, O. (1951), *The Uprooted: The Epic Story of the Great Migration That Made the American People*, Little, Brown and Co., Boston.
- Herberg, W. (1955), *Protestant, Catholic, Jew: An Essay in American Religious Sociology*, University of Chicago Press, Chicago.
- Hirschman, C. (2004) "The Role of Religion in the Origins and Adaptation of Immigrant Groups in the United States," *International Migration Review*, 38(3), pp. 1206-1233.
- Hoverd, W.J, Q.D. Atkinson, and C.G. Sibley (2012), "Group Size and the Trajectory of Religious Identification," *Journal for the Scientific Study of Religion*, 51(2), pp. 286-303.

- Hume, D. (1762), *The History of England from the Invasion of Julius Caesar to the Revolution in 1688*, Jones & Co., London, 1828.
- Hungerman, D.M. (2011), "Rethinking the Study of Religious Markets," Ch. 6 in *The Oxford Handbook of the Economics of Religion*, (ed.) R.M. McCleary, Oxford University Press, New York.
- Iannaccone, L.R. (1991), "The Consequences of Religious Market Structures: Adam Smith and the Economics of Religion," *Rationality and Society*, 3, 156-177.
- Iyer, S. (2016), "The New Economics of Religion," *Journal of Economic Literature*, 54(2), pp. 395-441.
- James, W. (1890), The Principles of Psychology, Holt, New York.
- Johnson, S.A. (2010), "The Rise of Black Ethnics: The Ethnic Turn in African American Religions, 1916--1945," *Religion and American Culture: A Journal of Interpretation*, 20 (2), pp. 125-163.
- Kennedy, R.J.R. (1944), "Single or Triple Melting-Pot? Intermarriage Trends in New Haven, 1870-1940," *American Journal of Sociology*, 49(4), pp. 331-339.
- Kim, A.E. (1993), "The Absence of Pan-Canadian Civil Religion: Plurality, Duality, and Conflict of Symbols in Canadian Culture," *Sociology of Religion*, 54 (3), pp. 257-275.
- Kurien, P. (1998), "Becoming American by Becoming Hindu: Indian Americans Take their Place at the Multicultural Table," in *Gatherings in Diaspora: Religious Communities and the New Immigration*, (eds.) R. S. Warner and J. G. Wittner, Temple University Press, pp. 37-70.
- Kurien, P. (2012), "Decoupling Religion and Ethnicity: Second-Generation Indian American Christians," *Qualitative Sociology*, 35, pp. 447-468.
- Lee, B.A. et al (2017), State-Level Changes in US Racial and Ethnic Diversity, 1980 to 2015: A Universal Trend? *Demographic Research*, 37, pp. 1031-1048.
- Liptak, D.A. (1987), "Ethnic Catholicism," in *European Immigrants and the Catholic Church in Connecticut*, Center for Migration Studies, Special Issues, Wiley Online Library, pp. 7-27.
- Luckmann, T. (1967), *The Invisible Religion; The Problem of Religion in Modern Society*, Macmillan, New York.
- Marty, M.E. (1972), "Ethnicity: The Skeleton of Religion in America," *Church History*, 41(1), pp. 5-21.
- McCleary, R.M. and R.J. Barro (2006), "Religion and Political Economy in an International Panel," *Journal for the Scientific Study of Religion*, 45(2), pp. 149-175.
- Mol, H. (1976), Identity and the Sacred, Free Press, New York.
- Mol, H. (1979), "The Identity Model of Religion: How It Compares with Nine Other Theories of Religion and How It Might Apply to Japan," *Japanese Journal of Religious Studies*, 6 (1/2), pp. 11-38.
- Montgomery, J. (2003), "A Formalization and Test of the Religious Economies Model," *American Sociological Review*, 68, pp. 782-809.
- Moser, M.R. (2018), "Uncommon Unity: The Promise of American Civil Religion, Post-Pluralism," M.A. Thesis, Harvard University.

- Nabhan-Warren, K. (2016), "Hispanics and Religion in America," Oxford Research Encyclopedia of Religion, Oxford University Press, https://doi.org/10.1093/acrefore/9780199340378.013.79
- Norris, P. and R. Inglehart (2004), *Sacred and Secular: Religion and Politics Worldwide*, Cambridge University Press, Cambridge.
- Norris, P. and R. Inglehart (2015), "Are High Levels of Existential Security Conducive to Secularization? A Response to Our Critics," in *The Changing World Religion Map*, (ed. S. Brunn, Springer, Dordrecht. https://doi.org/10.1007/978-94-017-9376-6 177
- Olson, D.A.V. (1999), "Religious Pluralism and US Church Membership: A Reassessment," *Sociology of Religion*, 60(2), pp. 149-173.
- Olson, D.A.V. et al (2020), "Sacred Canopies or Religious Markets? The Effect of County-Level Religious Diversity on Later Changes in Religious Involvement," *Journal for the Scientific Study of Religion*, 59(2), pp. 227-246.
- Puls, J. (1998), "The Wall of Separation: Section 116, the First Amendment and Constitutional Religious Guarantees," *Federal Law Review*, 26(1), pp. 139-163.
- Putnam, R.D. (2007), "E Pluribus Unum: Diversity and Community in the Twenty-first Century," *Scandinavian Political Studies*, 30(2), pp. 137-174.
- Putnam, R.D. and D.E. Campbell (2010), *American Grace: How Religion Divides and Unites Us*, Simon and Schuster, New York.
- Raboteau, A. J. (1978), *Slave Religion: the "Invisible Institution" in the Antebellum South*, Oxford University Press, New York.
- Ruiter, S. and F. van Thurbergen (2009), "Religious Attendance in Cross-National Perspective: A Multilevel Analysis of 60 Countries," *American Journal of Sociology*, 115(3), pp. 863-895.
- Shelton, J.E. and M.O. Emerson (2012), *Blacks and Whites in Christian America: How Racial Discrimination Shapes Religious Conviction*, NYU Press.
- Silveus, N.A. (2017), "The Causal Effect of Income on Religious Participation", Unpublished, https://scholarworks.montana.edu/xmlui/bitstream/handle/1/13104/SilveusN0817.pdf
- Smith, A. (1776/1981), An Inquiry into the Nature and Causes of the Wealth of Nations, Liberty Classics, Indianapolis.
- Smith, T.L. (1978), "Religion and Ethnicity in America," *American Historical Review*, 83(5), pp. 1155-1185.
- Stark, R. and W.S. Bainbridge (1987), A Theory of Religion, Lang, New York.
- Stout, H.S. (1975), "Ethnicity: The Vital Center of Religion in America," *Ethnicity*, 2, pp. 204-224.
- Tajfel, H. (1982), "Social Psychology of Intergroup Relations," *Annual Review of Psychology*, 33, pp. 1–39.
- Tajfel, H., and J. Turner (1979), "The Social Identity Theory of Intergroup Behavior," in *Psychology of Intergroup Relations*, (eds.) S. Worchel and L. Austin, Nelson-Hall, Chicago.
- Tocqueville, A. de (1835), Democracy in America, Saunders and Otley, London.
- van Tubergen, F. (2007), "Religious Affiliation and Participation among Immigrants in a Secular

- Society: A Study of Immigrants in The Netherlands," *Journal of Ethnic and Migration Studies*, 33(5), pp. 747-765.
- Voas, D., A. Crickett, and D.V. A. Olson (2002), "Religious Pluralism and Participation: Why Previous Research is Wrong," *American Sociological Review*, 67(2), pp. 212-230.
- Voas, D. and M. Chaves (2016), "Is the United States a Counterexample to the Secularization Thesis?", *American Journal of Sociology*, 121(5), pp 1517–1556.
- Warner, R.S. (1993), "Work in Progress toward a New Paradigm for the Sociological Study of Religion in the United States, *American Journal of Sociology*, 98(50, pp. 1044-93.
- Warner, R. S. (1998), Introduction in *Gatherings In Diaspora: Religious Communities and the New Immigration*, eds. R.S. Warner and J. Wittner, Temple University Press, Philadelphia.
- Weber, M. (1930), The Protestant Ethic and the Spirit of Capitalism, Allen & Unwin, London.
- Williams, R.B. (1988), *Religions of Immigrants from India and Pakistan*, Cambridge University Press, New York.
- Wimberley, R.C. (1976a), "Testing the Civil Religion Hypothesis," *Sociological Analysis*, 37 (4), pp. 341-352.
- Wimberley, R.C., et al (1976b), "The Civil Religious Dimension: Is It There?" *Social Forces*, 54(4), pp. 890-900.

APPENDIX

Here I present the regression results for *Weekly Attendance* as the dependent variable for the U.S. case. The Table below is the analogue of Tables 3 in the text.

Table 3a: OLS Regression Results

Dependent Variable: Weekly Attendance						
	(1)	(2)	(3)	(4)		
E-Diversity	0.1444***	0.1040**	0. 1136**	0. 1145**		
	(0.0450)	(0.0468)	(0.0537)	(0.0546)		
R-Diversity	-0.5791***	-0.5612***	-0.5524^{***}	-0.5484***		
-	(0.0933)	(0.0960)	(0.0997)	(0.1035)		
Uninsured		0.1772	0. 1275	0. 1198		
		(0.2015)	(0.2504)	(0. 2572)		
pc Income			-0.000039	-0. 000025		
			(0.000103)	(0. 000130)		
≥ Bachelors				-0. 0462		
				(0. 2661)		
Regional Dummies?	Yes	Yes	Yes	Yes		
Observations	50	50	50	50		
R^2	0.7255	0.7299	0.7308	0.7310		

Notes: Std. errors in brackets. Also, the notation *** indicates significance at less than 1% level and ** at less than 5% level.

From the last column of Table 3a and the information in Table 1, a 1 standard deviation increase in E-Diversity *increases* weekly attendance by about 0.25 of a standard deviation, and a 1 standard deviation increase in R-Diversity *decreases* weekly attendance by 0.69 of a standard deviation. These are sizeable effects on weekly attendance.