

University of Groningen

## Religious Affiliation and Attendance Among Immigrants in Eight Western Countries

Tubergen, Frank van

*Published in:*  
Journal for the Scientific Study of Religion

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2006

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*  
Tubergen, F. V. (2006). Religious Affiliation and Attendance Among Immigrants in Eight Western Countries: Individual and Contextual Effects. *Journal for the Scientific Study of Religion*, 45(1), 1.

### Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

### Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

# Religious Affiliation and Attendance Among Immigrants in Eight Western Countries: Individual and Contextual Effects

FRANK VAN TUBERGEN

*This study examines the religious affiliation and participation of immigrants from a large-scale, comparative perspective. I propose a “specific migration” framework, in which immigrants’ religiosity is an outcome of both individual characteristics and contextual properties related to immigrants’ country of origin, country of destination, and combinations of origin and destination (i.e., communities). I use notions discussed in the religion and migration literature that fit into this scheme. To test these ideas, I collected and standardized 20 existing surveys on immigrants in eight Western countries, yielding about 38,000 immigrants. Applying multilevel models, I found, among other things, that: (1) immigrants from countries with higher levels of modernization express lower levels of religious commitment; (2) immigrants in religious countries are more religious themselves; and (3) the well-documented higher levels of religious commitment among women is not generalizable to immigrants.*

Within the sociology of religion, surprisingly little large-scale empirical research has been done on immigrants. One reason for doing such a study is that immigration flows increased dramatically in many Western societies after World War II. Currently, immigrants and their offspring make up a sizable part of Western populations, and their religious practices contribute to the religious profiles of these countries (Smith 2002). However, the study of the religion of immigrants has been hampered by the availability and quality of data (Ebaugh and Chafetz 2000; Warner and Wittner 1998; Yang and Ebaugh 2001a). Several studies have focused exclusively on the religion of a single immigrant group, such as Greeks (Veglerly 1988) or Koreans (Hurl and Kim 1990) in the United States. Other studies have been restricted to immigrants within a specific religion, such as Nelsen and Allen’s (1974) study of Catholic immigrants in the United States. More recently, several small-scale studies on immigrants’ religion have been conducted in specific regions of the United States. Examples of these include the “Religion, Ethnicity, and New Immigrant Research” project carried out in Houston, Texas (Ebaugh and Chafetz 2000; Yang and Ebaugh 2001b), and the ethnographic case studies of the “New Ethnic and Immigrant Congregations” project (Warner and Wittner 1998).

In this study, I describe and explain the religiosity of immigrants from a large-scale, comparative perspective. I develop a “specific migration” framework, in which the religion of immigrants is an outcome of individual and contextual effects. I use notions discussed in the literature that fit into this scheme. Despite the apparent lack of nationally representative survey data on the religion of immigrants, I was able to collect 20 such surveys for eight Western countries: Australia, Belgium, Canada, Denmark, Great Britain, Italy, the Netherlands, and the United States. I standardized and pooled these surveys into a single cross-national data set and examined two aspects of religiosity: *religious affiliation* (whether people think of themselves as members of a religious community, denomination, or religion), and *religious participation* (the frequency with which people attend religious meetings). I test the hypotheses with multilevel techniques and control for survey effects.

*Frank van Tubergen is Assistant Professor at the Department of Sociology, Utrecht University, Heidelberglaan 2, 3584 CS, Utrecht, The Netherlands. E-mail: f.vantubergen@fss.uu.nl*

## THEORY AND HYPOTHESES

In this article, I suggest a specific migration framework, in which immigrant religiosity is an outcome of four kinds of factors. To begin with, there are correlates to religion at the individual level (“individual” factors). The religion literature has documented a number of “empirical regularities” at the individual level, including such factors as age, sex, education, and marital status. These patterns have been observed earlier among native, Western populations, and the strategy of this study is to examine theoretically and empirically whether these individual-level factors equally apply to the immigrant populations.

Next to individual factors, different kinds of contextual factors could also play a role in the religiosity of immigrants. One possibly important context is the country of origin. Immigrants originate, by definition, from a certain country, and characteristics of their home country could play an enduring role in their religious practices in the destination country. These characteristics include the degree of modernization of immigrants’ home country, and the conditions under which people migrated. I refer to these as “origin effects,” and they reflect the general impact of the country immigrants come from.

Another relevant contextual factor is receiving nation. Immigrants settle in a specific country, and host societies could play a role in their religious lives. I compare the religiosity of immigrants in eight different nations, and examine such things as the religiosity of the native population and the degree of religious pluralism. I call these “destination” factors, and they pertain to the influence of receiving countries, notwithstanding immigrants’ origins.

Fourth, there are contextual factors that refer to the specific combination of immigrants’ country of origin and country of destination. It could be that an immigrant group is more strongly religious than other groups in one destination, but less religious than the same group in another country. Factors that account for such differences relate to the immigrant community or setting, and include such things as the size of the group. I call these “community” or “setting” factors.

In the following discussion, I fit the hypotheses I have derived from notions discussed in the literature into this specific migration framework.

### Individual Effects

One important individual-level factor associated with religion is age. The general idea advanced in the religion literature is that people’s religiosity increases with age, although different interpretations of this association have been proposed. Stark and Bainbridge (1987) argue that at a higher age, people have stronger fears of death, and religion may therefore become more important in providing the promise of an afterlife. Other authors (e.g., Chaves 1991; Hout and Greeley 1990) have proposed a life course model, maintaining that “over the lifespan individuals typically marry, settle down in a community, and have children. Presumably they are more inclined to attend church at each successive stage” (Firebaugh and Harley 1991:495). Although the role of age is difficult to estimate due to associated cohort or period effects, most researchers conclude that age has a positive effect on religiosity (Argue, Johnson, and White 1999; Campbell and Curtis 1994; Firebaugh and Harley 1991). In view of these arguments and findings, I predict that age has a positive impact on the religious affiliation and participation of immigrants (H1).<sup>1</sup>

Labor-force status is another individual-level characteristic associated with religiosity. One argument made in the religion literature is that employed people have less time to be active members of a religious community, and are therefore less religious than those who are unemployed or inactive in the labor market (Iannaccone 1990). In accordance with this idea, a general population study conducted in 22 countries found that those who are employed have weaker religious beliefs and attend church less often than those who do not have a job (Campbell and Curtis 1994). Hence, I predict that employed immigrants are less religious than unemployed or inactive immigrants (H2).

A third individual-level factor is sex. In several ways, researchers have hypothesized that women are more religious than men. Some authors have maintained that, because females are more risk-averse than males, females are more religious (Miller and Hoffmann 1995). Some suggest that socialization might predispose women more toward expressive values that are congruent with religious values and practices, whereas men learn more instrumental values, which are less consonant with religion (De Vaus and McAllister 1987). In line with both arguments, studies find that women are more religious than men, irrespective of the measure of religiosity (Miller and Hoffmann 1995). Because both ideas would apply equally to immigrants, I predict that female immigrants are more religious than male immigrants (H3).

Education is another possible determinant of religiosity. One influential idea in the literature is that at schools, people are taught a mechanistic worldview, trained in critical thinking, and that this mechanistic, critical worldview is difficult to wed with the traditional, religious worldview (Bruce 1999; Lenski, Lenski, and Nolan 1991; Need and De Graaf 1996; Weber [1922] 1993). According to this idea, one would expect a negative relationship between schooling and religiosity. Although a number of studies have found such a negative association (e.g., Kelley and De Graaf 1997), some studies showed no or even a positive relationship between schooling and religiosity (e.g., Smith, Sikkink, and Bailey 1998; Te Grotenhuis and Scheepers 2001). Veglery (1988) could not find any relationship between schooling and church membership or attendance among first-generation Greek immigrants. Although the empirical support is somewhat weak for the supposed negative association between schooling and religiosity, I hypothesize such an inverse relationship for the immigrant population (H4).

A final individual-level characteristic considered in this study is marital status; more specifically, the distinction between married and unmarried people. Scholars generally argue that, while people's religiosity influences the likelihood of marriage, union formation also influences people's religiosity. Thornton, Axinn, and Hill (1992) argue that cohabiting people—as opposed to married people—attending religious services could receive sanctioning by religious leaders and other adults attending services. Furthermore, Sherkat and Wilson (1995) maintain that religious endogamy is more common than exogamy and that the partner constitutes a constraint on the choice of new religious options. Thus, although people partly choose their partner on religious grounds, they argue that religious norms of the partner also provide an enduring, independent force in an individual's religious behavior. In sum, both arguments predict that married people are more religious than unmarried people. This hypothesis has received ample empirical support in general population studies (Campbell and Curtis 1994; Iannaccone 1990; Smith, Sikkink, and Bailey 1998; Thornton, Axinn, and Hill 1992), and in a study of Greek immigrants in New York (Veglery 1988). In view of these ideas and observations, I predict that married immigrants will be more religious than unmarried immigrants (H5).

### **Origin Effects**

The religiosity of immigrants could also depend on factors associated with their home country, over and above their individual-level characteristics. One possibly relevant factor is the country's level of modernization. One argument made in the religion literature is that people who grow up in a modern country are less religious than those who were born in a more traditional country. With higher levels of education, technology, and more activist ideologies, principles like a spirit of free inquiry or freedom of thought are stimulated and an active, mechanistic worldview would be more dominant, leading, in turn, to a lower level of religious commitment (Bruce 1999; Lenski, Lenski, and Nolan 1991; Need and De Graaf 1996; Weber [1922] 1993). In line with this idea, a cross-national study of 15 nations showed that a country's modernization reduces people's religious orthodoxy (Kelley and De Graaf 1997). I assume that modernization has an enduring influence on people's religion, and hypothesize that immigrants who were born in a modern country have lesser religious commitment than people who grew up in a less-developed nation (H6).

I also consider immigrants' religious upbringing. Because the host countries examined in this study are all predominantly Christian, social integration in the religious community of the host society will be presumably higher among immigrants who have a Christian background.<sup>2</sup> Christian immigrants are probably stimulated in their religion by the native—Christian—majority, and also have ample opportunities for practicing their religion. By contrast, immigrants with a non-Christian background may, due to lack of groups reinforcing their religion and fewer structural opportunities, gradually lose their attachment to their religion. I therefore predict that immigrants from Christian origins are more often affiliated with a religion, and attend religious meetings more frequently, than immigrants from non-Christian origins (H7).

The conditions in the home country at the time of migration can also be important for understanding the religious commitment of immigrants. The migration literature maintains that some immigrants move for religious reasons, because of persecution and suppression in their country of origin (Chiswick 1999). In many non-Western countries, religious freedom is limited (Marshall 2000); so migrating to a Western country might be induced by the possibility of gaining religious freedom. Based on these ideas, I predict that immigrants from religiously suppressive societies are more religious and attend religious meetings more frequently than immigrants from religiously more open nations (H8).

### **Destination Effects**

Receiving countries can also play a role in the religion of immigrants, irrespective of their country of origin. One possibly relevant characteristic of host societies is the degree of religious pluralism. The religion literature suggests that, similar to other types of markets, competition among religious "firms" tends to lead to the production or supply of religious goods or services of the kind consumers demand (Stark and Bainbridge 1987). In regulated and monopolized religious economies, it is maintained, religious firms produce unattractive religious products, badly marketed. Consequently, religious consumption is expected to be higher in a free, competitive market than in a monopolistic or oligopolistic religious situation. Although the empirical support for this idea is, at present, still open to debate (Chaves and Gorski 2001; Stark and Finke 2000; Voas, Olson, and Crockett 2002), tests have been mainly based on general populations. One exception is the study by Chaves, Schraeder, and Sprindys (1994). They found that the more competitive and unregulated the religious environment in an industrialized nation, the more likely it is in that country for Muslims (many of whom are assumed to be immigrants) to undertake the *hajj* (pilgrimage) to Mecca. I assume that in more religiously competitive and pluralistic host countries, immigrants are more likely to find a religion that suits their needs, and that the religious "products" will also be of higher quality. Hence, I predict that in more religiously competitive and pluralistic host countries, immigrants will be more religious (H9).

Host societies may also be important in providing a more or less sacred canopy. In the eight countries I examine, the religiosity of the native population varies from relatively secular, as in the Netherlands (where 59 percent stated they had a belief in God in 1991), to more religious nations, such as the United States (94 percent held such a belief; De Graaf and Need 2000). In the religion literature, many argue that social groups (e.g., family, friends, school, media, neighborhood) shape one's religious environment and are therefore important for determining one's religion (Berger 1967; Durkheim [1897] 1961; Kelley and De Graaf 1997; Myers 1996; Need and De Graaf 1996; Te Grotenhuis and Scheepers 2001). Similarly, in the migration literature, studies observe that people who migrate from one region in a country to another region "accommodate" their beliefs to the religiosity of their destination (Bibby 1997; Smith, Sikkink, and Bailey 1998; Stump 1984; Welch and Baltzell 1984; Wuthnow and Christiano 1979). In view of these ideas, I assume that immigrants' religious commitment tends to adapt to the religious context of the receiving nation. Thus, I hypothesize that the religiosity of immigrants is directly related to the religiosity of the native population (H10).

The role of the political makeup of receiving societies can also be important for the religion of immigrants. Some argue that social-democratic parties have more activist and secular ideologies than Christian and liberal parties (Lenski, Lenski, and Nolan 1991). The more activist and secular ideologies of social-democratic parties are assumed to lessen people's attachment to traditional, religious worldviews. Based on these ideas, I predict that immigrants in societies with a predominantly social-democratic legacy are less religious and attend religious meetings less frequently than immigrants in societies with predominantly Christian and liberal parties in the government (H11).

### **Community Effects**

Next to the general role of immigrants' country of origin and country of destination, the interplay between origin and destination could also determine religiosity. One such community factor will be examined in this study, and that is size of the immigrant group. In a way, the size of the immigrant group is indicative of the cohesiveness of the community. Immigrants maintain their religion through interactions with other immigrants from their origin country, and the presence of a large group of co-ethnics in the direct environment strengthens religious beliefs and practices (Berger 1967; Durkheim [1897] 1961; Kelley and De Graaf 1997). Furthermore, to establish a religious community and to fund places of worship, a sufficiently large number of co-religionists in the direct environment is necessary. Based on these ideas, I predict that the larger the relative size of the immigrant community, the higher the level of their members' religiosity (H12).

## **DATA AND MEASUREMENTS**

### **Data**

As part of a larger cross-national research project on immigrants (Van Tubergen and Kalmijn 2005; Van Tubergen, Maas, and Flap 2004), existing surveys containing individual-level information on the religion of immigrants were collected and standardized. The surveys were combined into one cross-national data set: the International File of Immigration Surveys (IFIS; Van Tubergen 2004). To obtain survey data that were both high quality and comparable across countries, the surveys included in the meta-file had to fulfill three criteria. First, for a detailed analysis, the survey had to contain a sufficiently large number of immigrants (defined as having been born outside the country of residence), and the survey sample had to be (approximately) nationally representative. Second, the survey had to have been conducted face-to-face using standard questionnaires with fixed response categories. Third, the surveys had to contain independent and dependent variables that were comparable across countries.

I was able to find 20 surveys that met these criteria, for eight Western countries: three classic immigrant societies (Australia, Canada, and the United States) and five new immigrant countries in Europe (Belgium, Denmark, Great Britain, Italy, and the Netherlands). The surveys were conducted between 1974 and 2000, but most took place in the 1990s. Table 1 provides an overview of the characteristics of the surveys included in the analysis, and the Appendix gives detailed references for all the data sources used. I selected the population above the age of 18, and included both males and females. The number of immigrants in the cross-national data set is 38,244.

Two sorts of surveys were collected: some specifically of immigrants and others that were of the general population. Specific immigrant surveys are designed to study immigrant populations. They make use of bilingual interviewers and may be translated into the language of the immigrants. Immigrant groups are oversampled, and the surveys contain detailed information on issues of migration and integration. Because general population surveys are not designed to interview immigrant populations, some immigrant groups may be underrepresented. For instance,

**TABLE 1**  
**OVERVIEW OF SURVEYS**

	Country	Year	Number of Respondents	Survey id	Reference
1	Australia	1984	581	AUS84	Kelley, Cushing, and Headey (1984)
2	Australia	1988	2,200	AUS88	AOMA (1988)
3	Australia	1990	1,115	AUS90	Kelley, Bean, and Evans (1990)
4	Australia	1994	159	AUS94	Kelley, Bean, and Evans (1994)
5	Australia	1995	417	AUS95	Kelley, Bean, and Evans (1995)
6	Belgium	1993	1,327	BEL93	Lesthaeghe (1993)
7	Belgium	1996	2,370	BEL96	Lesthaeghe (1996)
8	Canada	1986	852	CAN86	Statistics Canada (1986)
9	Canada	1991	7,168	CAN91	Statistics Canada (1991)
10	Denmark	1988	755	DEN88	DNISR (1988)
11	Denmark	1999	665	DEN99	DNISR (1999)
12	Great Britain	1974	3,042	GB74	Smith (1974)
13	Great Britain	1994	3,658	GB94	Smith and Prior (1994)
14	Italy	1994	2,876	ITA94	Natale, Blangiardo, and Montanari (1994)
15	Italy	1998	1,807	ITA98	Natale and Strozza (1998)
16	The Netherlands	1994	2,735	NET94	Veenman (1994)
17	The Netherlands	1998	4,435	NET98	Veenman (1998)
18	United States	1988	967	USAns fh	Bumpass and Sweet (1997)
19	United States	1990–2000	814	USAgss	Davis, Smith, and Marsden (2000)
20	United States	1990–1998	301	USAnes	Sapiro, Rosenstone, and the National Election Studies (2002)

the General Social Survey in the United States does not make use of bilingual interviewers, and is therefore considered nationally representative only for adults who speak English well enough to understand the interview (Davis, Smith, and Marsden 2000). Because language proficiency might be associated with religiosity, I have taken the difference between specific and general surveys into account in the analysis.

### Dependent Variables

I have analyzed two aspects of religiosity: religious affiliation and religious participation. Religious affiliation was standardized into a dichotomous variable:

- (1) Affiliated with a religion (88.8 percent)
- (0) Not affiliated with a religion (11.2 percent).

Out of the 8 countries and 20 surveys in the meta-file, 7 countries and 14 surveys contained information on religious participation (the surveys for Denmark did not have questions on religious attendance). To render the results as comparable as possible, I standardized the detailed answer categories in these surveys into two more-general categories:

- (1) Attending religious meetings once a week or more (29.7 percent)
- (0) Attending religious meetings less than once a week (70.3 percent).

I did not detect problems in comparing the *answer* categories of both variables because all surveys in the meta-file contain a fixed response category for no religious affiliation and for

**TABLE 2**  
**OVERVIEW OF SURVEY QUESTIONS REGARDING RELIGIOUS AFFILIATION**  
**AND RELIGIOUS ATTENDANCE**

Survey	Religious Affiliation	Religious Attendance
AUS84	What is your religious denomination? Is it Protestant, Catholic, some other religion, no religion, or what?	How often do you attend religious services?
AUS88	Do you think of yourself as having a religion or faith?	n.a.
AUS90	What is your religious denomination now?	How often do you attend religious services?
AUS94	What is your religious denomination now?	How often do you attend religious services now?
AUS95	What is your religious denomination now?	How often do you attend religious services now?
BEL93	What is your religious affiliation?	Do you attend the mosque sometimes?
BEL96	What is your religious affiliation?	Do you attend the mosque sometimes?
CAN86	What if any is your religion?	How often do you attend services?
CAN91	What is this person's religion?	n.a.
DEN88	What is your religion?	n.a.
DEN99	What is your religion?	n.a.
GB74	What is your religion or church?	How often do you go to church/mosque/temple?
GB94	Do you have a religion or church?	How often do you attend services or prayer meetings or go to a place of worship?
ITA94	What is your religion?	n.a.
ITA98	What is your religion?	Do you practice your religion in a place of worship (church, mosque, synagogue)?
NET94	Do you think of yourself as part of a particular religious community, church, or religion?	n.a.
NET98	Do you think of yourself as part of a particular religious community, church, or religion?	How often do you attend religious services now?
USAgss	What is your religious preference? Is it Protestant, Catholic, Jewish, some other religion, or no religion?	How often do you attend religious services?
USAns fh	What is your religious preference?	How often do you attend religious services? (number of times per year)
USAnes	Do you ever think of yourself as part of a particular church or denomination?	Do you ever attend religious services, apart from occasional weddings, baptisms, or funerals?

*Note:* Questions have been translated into English where necessary.

attending religious meetings once a week or more. Some difficulties, however, arose in regard to the comparability of *question* formulations. Table 2 provides an overview of the wording of the survey questions regarding religious affiliation and participation (translated into English, if necessary). It shows that there are no apparent differences that might systematically affect the comparability of responses in regard to religious participation.<sup>3</sup> It also shows that the more or less standard way of asking immigrants about their religious affiliation was "What is your religion?" However, there are two differences in the wording of the question that deviate from this standard and that might affect the reliability of making cross-national comparisons.



First of all, in most of the surveys, the question tends to assume that people have a religion (“*What is your religion?*”), but there are surveys in which the questions do not assume this (“*Do you have a religion?*”). The first kind of survey uses a so-called one-step method to ask directly for religious affiliation (e.g., Catholic, Protestant, Muslim, other religion, no religion). The second uses a “two-step method”: first, respondents are asked if they have a religion, and only if they answer affirmatively are they asked to specify what their religion is. Although both kinds of surveys provide a fixed answer category for having “no religious affiliation,” the wording of the question could have a systematic effect on the response. It is possible that one-step questions yield higher levels of religious affiliation than two-step questions. In order to deal with this bias when comparing surveys, I included a dummy variable in the analysis that exactly represents this difference.

A second possible source of bias is related to the difference between “religion” vis-à-vis “religious denomination.” In most surveys, respondents were asked for their religion, but in some surveys, respondents were asked for their religious denomination. While questions regarding religion are more of an indication of self-identified religious affiliation, questions in respect of denomination are more directed toward actual membership. Although people who identify with a religion are likely to be members of a certain religious community and people who are members of a religious community are likely to consider themselves religiously affiliated, these variables are not necessarily the same. I have therefore included a dummy variable that represents this difference.

## Independent Variables

The data set contains independent variables related to individuals, origins, destinations, and communities. I discuss each variable briefly, below.

*Schooling.* Total years of full-time education. For surveys that had no direct measure of years of schooling, I relied on educational level and computed the average number of years needed to obtain that level, using the International Standard Classification of Education (ISCED-97; OECD 1999).

*Labor-force status.* I constructed a dummy variable for employed versus all other (unemployed and inactive).

*Sex.* Females are the reference category.

*Age.* I measured age in years and estimated midpoints for surveys using broader categories.

*Marital status.* I constructed two categories: married and unmarried (divorced, separated, single).

*Modernization in the country of origin.* I relied on gross domestic product (GDP) as a measure of economic development and modernization. It was measured in constant dollars per capita for 1980 and was obtained from OECD (2000).

*Christian origin.* As a measure of religious background, I set up a dummy variable to indicate countries of origin with more than 50 percent Christian adherents at the end of the 20th century (Brierley 1997).

*Religious affiliation.* In addition to a contextual-level variable of religious upbringing, I constructed a variable at the individual level that measures whether people are affiliated to Christian religion, a non-Christian religion, or not affiliated to a religion. Note that this variable will be used only in the analyses of religious attendance.

*Religious suppression.* As a proxy for religious suppression in the country of origin, I relied on information collected by Freedom House on political rights and civil liberties (Karatnycky and Piano 2002). Political rights varied from 1 (free and fair elections, power for opposition parties, etc.) to 7 (oppressive regime, civil war). Civil liberties varied from 1 (freedom of expression and religion, free economic activity) to 7 (no religious freedom, political terror, and no free association). I used the sum score for each country (2–14) and computed averages for the 1972–1980 period.

*Religious concentration.* I measured religious competition and diversity with the Herfindahl index of religious concentration:  $H_j = \sum P_{ij}^2$ , where  $P$  represents each religious family (or specific denomination) divided by the total number of church members in a country,  $i$  represents the index of summation that runs over all religious categories in country  $j$ .  $H$  equals the probability that any two randomly selected persons belong to the same religion. The index was multiplied by 100, and ranges (theoretically) from 0 to 100. The measure and the country scores were taken from Iannaccone (1991) and refer to the religious situation in the 1970s and the beginning of the 1980s.<sup>4</sup>

*Religiosity of the host society.* To measure the religiosity of the native population, I have used figures on religious attendance, obtained from the European and World Values Studies, conducted in the period 1981–1984 and 1990 (Barker, Halman, and Vloet 1992; Inglehart et al. 2000). I used the question: “Apart from weddings, funerals and christenings, about how often do you attend religious services these days?” and averaged the percentages that participate once a week or more for the two study periods.

*Social democracy.* As a measure of the political makeup of a country, I counted the number of years in which social-democratic parties were present in the government. The annual presence of social-democratic parties in the government was rated as 1 when they formed a one-party government, 0.5 when they joined a coalition, and 0 when they were absent from the government. Information on the presence of social-democratic parties in the government was obtained from various Internet sources. Because most of the surveys included in the analysis were conducted in the 1990s, I considered the political situation in the 1980s. An exception to this is the situation of immigrants who were interviewed in Great Britain in 1974, where I computed averages for the 1970–1980 period.

*Relative group size.* I constructed a variable for the size of an immigrant group relative to the total population of the host society in the 1980s and 1990s. I used the 1981 census of Australia (Australian Bureau of Statistics 1981), the 1991 and 1996 census of Canada (Statistics Canada 1991, 1996), the 1980 and 1990 census of the United States (United States Census Bureau 1980, 1990), and the European Union Labour Force Surveys (Eurostat 2002) to compute aggregate-level information on group size.

Descriptive statistics for the independent variables are presented in Table 3.<sup>5</sup>

## Methods

I used multilevel techniques to test the hypotheses. At the “lowest,” or micro, level, religious affiliation and religious participation are affected by individual characteristics such as age and education. Immigrants are then nested in the macro-level components of both an origin and a destination, which affect the odds of religious affiliation and weekly religious attendance at the same level. In other words, the multilevel structure is nonhierarchical and the so-called cross-classified models have been used (Raudenbush and Bryk 2002; Snijders and Bosker 1999). Because the variance of communities is tapped by the variance of origins and the variance of destinations, it is not independently assessed; however, I estimate community effects at the appropriate origin-by-destination level. I made use of Markov Chain Monte Carlo estimation procedures provided in the software program MlwiN (Browne 2002). Because I have included survey characteristics, and I have multiple surveys within destination countries, I have used country of origin as the origin level and surveys as the destination level.

## RESULTS

### Descriptive Analyses

I start with a descriptive overview of immigrants’ religiosity. Table 4 presents the results for religious affiliation, and Table 5 for religious participation. Note that in these descriptive analyses,

**TABLE 3**  
**DESCRIPTIVE STATISTICS OF INDEPENDENT VARIABLES**

	Range	Mean	Standard Deviation
<b>Individual</b>			
Age	19–97	40.52	15.05
Employed	0/1	0.56	0.50
Male	0/1	0.57	0.49
Schooling	0–24	9.66	5.30
Married	0/1	0.65	0.48
Religious affiliation <sup>a</sup>			
No religious affiliation	0/1	0.11	0.32
Christian	0/1	0.42	0.49
Other religion	0/1	0.47	0.50
<b>Origin</b>			
GDP per capita (in 1,000 USD)	0.10–29.10	5.04	6.33
Predominantly Christian	0/1	0.56	0.50
Political and religious suppression	2–14	8.65	3.96
<b>Destination (surveys)</b>			
Religious concentration	12–98	48.65	32.74
Religiosity (% religious attendance at least once a week)	3–43	25.70	11.59
Social-democratic history (past 10 years)	0–6	2.90	2.43
<b>Community</b>			
Relative group size (%)	0.00–9.71	0.18	0.67
<b>Survey characteristics</b>			
Migration survey	0/1	0.55	0.51
Two-step question	0/1	0.30	0.47
Denomination	0/1	0.25	0.44

<sup>a</sup>Variable used in subset for analysis of religious attendance.

*Note:* Statistics computed at corresponding level.

survey differences (e.g., sampling, questioning) are not taken into account. Hence, the results need to be interpreted with some caution.

Both tables suggest pronounced differences in religiosity among immigrants of different countries of origin. For example, Table 4 shows that the percent affiliated with a religion is above 95 for immigrants from India, Italy, Morocco, Poland, and Turkey. Religious affiliation is much lower among immigrants from Germany (83 percent), Great Britain (81 percent), and the former Yugoslavia (84 percent). Origin differences are also found with regard to religious participation (Table 5). Among immigrants from Poland, 51 percent attend religious meetings at least once a week. In contrast, only 13 percent of immigrants from Great Britain attend religious meetings once a week or more. Except for immigrants from Italy, the five origin groups with high religious affiliation (India, Morocco, Poland, Turkey) also attend religious meetings frequently.

The descriptive figures also give evidence to suggest that immigrants' religiosity differs between host societies. Religious affiliation among immigrants is particularly high in Belgium (98 percent), Denmark (93 percent), Italy (94 percent), and Great Britain (95 percent). It is much lower in Australia (80 percent) and Canada (81 percent). In Australia, levels of religious participation among immigrants are also much lower. Of all immigrants in that country, only 13 percent attend religious meetings at least once a week. Much higher levels of religious participation are observed in the Netherlands (33 percent), Great Britain (34 percent), and the United States (35 percent).

**TABLE 4**  
**RELIGIOUS AFFILIATION AMONG IMMIGRANTS IN EIGHT WESTERN**  
**COUNTRIES, 1974–2000 (%)**

Country of Destination	Country of Origin								Mean All Groups
	Germany	Great Britain	India	Italy	Morocco	Poland	Turkey	Yugoslavia (ex-)	
Australia	70	77	91	93	.	93	.	86	80
Belgium	–	–	–	–	98	–	99	–	98
Canada	87	85	.	98	–	94	–	–	81
Denmark	–	–	–	–	–	–	96	83	93
Italy	–	–	–	–	96	98	–	83	94
The Netherlands	–	–	–	–	98	–	97	–	87
Great Britain	–	–	98	–	–	–	–	–	95
United States	85	82	87	87	–	96	–	–	89
Mean	83	81	98	96	97	96	98	84	89

Note: “.” = less than 50 respondents.

**TABLE 5**  
**RELIGIOUS PARTICIPATION AMONG IMMIGRANTS IN SEVEN WESTERN**  
**COUNTRIES, 1974–2000 (% ATTENDING RELIGIOUS MEETINGS AT LEAST**  
**ONCE A WEEK)**

Country of Destination	Country of Origin								Mean All Groups
	Great Britain	India	Italy	Morocco	Poland	Turkey	Yugoslavia (ex-)		
Australia	12	–	–	11	–	–	–	8	13
Belgium	–	–	–	–	31	–	28	–	29
Canada	30	20	–	29	–	–	–	–	25
Italy	–	–	–	–	20	54	–	26	29
The Netherlands	–	–	–	–	49	–	49	–	33
Great Britain	–	–	35	–	–	–	–	–	34
United States	20	21	24	35	–	38	–	–	35
Mean	21	13	34	22	34	51	35	22	30

Note: “.” = less than 50 respondents.

Next to the role of origins and destinations, Tables 4 and 5 also provide some clues to the influence of the immigrant community. With respect to religious affiliation, an example is the German community in Australia. Of the Germans who migrated to Australia, 70 percent are affiliated with a religion. This is below the average religious affiliation of Germans across all destinations (which is 83 percent), and also below the average religious affiliation of all immigrants in Australia (which is 80 percent). Thus, the religiosity of the German community in Australia deviates from the general differences among origin countries and destination countries. To give another illustration, consider the Moroccan and Turkish immigrant communities in the Netherlands. In both communities, 49 percent attend religious meetings at least once a week. This is clearly above the mean attendance of these origin groups across all destinations (which is about 34–35 percent), and also above the average attendance of all immigrant groups in the Netherlands (33 percent).

## Decomposition of Variance

Table 6 presents the variance components, obtained from cross-classified multilevel logistic models with random intercepts for immigrants' origin and destination. I computed two different models: one in which countries are treated as destinations, and another in which surveys make up the destination level. Note that these are *empty models*, that is, without the inclusion of explanatory variables. Furthermore, I note that the logistic distribution for the level-one residual implies a variance of  $\pi^2/3 = 3.29$  (Snijders and Bosker 1999:224). The total variance is therefore composed of variance between individuals  $\sigma^2$ , variance between countries of origin  $\tau_{b00}$ , and variance between destinations (i.e., countries or surveys)  $\tau_{c00}$ . Although it is possible to examine the random interaction  $\tau_{d00}$  between country of origin and country of destination (i.e., community effects), Raudenbush and Bryk (2002) show that the cell sample sizes in these kinds of model specifications are often not sufficient to distinguish the variance attributable to the random interaction effect  $\tau_{d00}$  from the within-cell variance  $\sigma^2$ . Hence, I refrained from estimating the variance at the community level.

It is tempting to assess the variation at the macro level for both religious affiliation and religious attendance. This can be obtained by computing the intra-unit correlation coefficient  $\rho_{bc} = (\tau_{b00} + \tau_{c00})/(\tau_{b00} + \tau_{c00} + \sigma^2)$ , where  $\sigma^2$  is fixed to 3.29. In the case where countries make up the destination component,  $\rho_{bc}$  is 0.31 (i.e.,  $(1.311 + 0.158)/(1.311 + 0.158 + 3.29)$ ) for religious affiliation, and 0.21 for religious attendance. This implies that almost a third of the individual differences in religious affiliation, and almost a quarter of the individual differences in religious attendance, can be attributed to the country of origin and the country of destination. More technically formulated, it means that the correlations between outcomes of two (randomly chosen) immigrants who are from the same country of origin and who live in the same country of destination are 0.31 (religious affiliation) and 0.21 (religious attendance). When surveys make up the destination level, the figures are 0.33 and 0.26, respectively. This suggests that macro factors are important for understanding the religiosity of immigrants, and somewhat more important for religious affiliation than for religious attendance.

Decomposing the macro variation into two components results in a proportion of the total variation that is due to the country of origin  $\rho_b$  (i.e.,  $\tau_{b00}/(\tau_{b00} + \tau_{c00} + \sigma^2)$ ), and a proportion of the total variation that is due to the country of destination  $\rho_c$  (i.e.,  $\tau_{c00}/(\tau_{b00} + \tau_{c00} + \sigma^2)$ ). Interestingly, when countries make up the destination level,  $\rho_b$  (0.28) is much higher than  $\rho_c$  (0.03) with respect to religious affiliation, but  $\rho_b$  (0.10) is slightly smaller than  $\rho_c$  (0.11) for religious participation. When surveys are used as destinations, the difference with respect to religious participation is more pronounced (i.e.,  $\rho_b = 0.09$ ,  $\rho_c = 0.17$ ). This suggests that the country of origin is more important than the country of destination for understanding immigrants' religious affiliation, but that the opposite is true for understanding the religious attendance of immigrants. Note, finally, that the total variation is somewhat larger (and the standard error somewhat smaller) when surveys make up the destination level than when countries are used. This is an additional argument to test the hypotheses with models in which surveys make up the destination level.

## Hypotheses Testing

Table 7 presents the results of the multivariate multilevel logistic regression analyses of religion. Model 1 shows the results for religious affiliation and Model 2 and Model 3 pertain to religious attendance.<sup>6</sup> In Model 3, religious affiliation is included, for two reasons. First, in addition to examining the role of having a Christian background at the contextual level (i.e., predominantly Christian origin country vis-à-vis mainly non-Christian origin country), this additional model allows us to assess the influence of a Christian background at the individual level (i.e., Christian affiliation vis-à-vis non-Christian). This is important because the macro-level concept does not consider patterns of selective emigration: it is possible that minorities having a non-Christian

**TABLE 6**  
**VARIANCE COMPONENTS FROM RANDOM INTERCEPT MODELS WITHOUT EXPLANATORY VARIABLES, CROSS-CLASSIFIED MULTILEVEL LOGISTIC REGRESSION OF RELIGIOUS AFFILIATION AND RELIGIOUS ATTENDANCE**

	Religious Affiliation		Religious Attendance	
	Variance Component	Standard Error	Variance Component	Standard Error
Countries as destinations				
Country of origin	1.311	(0.231)	0.402	(0.089)
Country of destination	0.158	(0.150)	0.448	(0.379)
Individual	3.290		3.290	
Total	4.759		4.140	
Surveys as destinations				
Country of origin	1.286	(0.227)	0.392	(0.085)
Surveys	0.343	(0.145)	0.738	(0.328)
Individual	3.290		3.290	
Total	4.919		4.357	

religion are migrating from predominantly Christian countries (or vice versa). Second, Model 3 provides the opportunity to examine whether the effects presented in Model 2 persist after religious affiliation is taken into account (i.e., affiliated with a religion vis-à-vis not affiliated with a religion). In other words, the model assesses whether the effects are either indirect (i.e., influencing the religious affiliation of immigrants) or direct (i.e., influencing the religious attendance of immigrants).

I discuss the findings under five different headings below: individual effects; origin effects; destination effects; community effects; and survey effects.

### *Individual Effects*

What about the impact of individual characteristics? First of all, I predicted that age has a positive impact on the religiosity of immigrants (H1). My analysis supports this hypothesis. Age has a significant positive effect on the chance of religious affiliation, and on the likelihood of attending a religious meeting once a week or more. The magnitude of the effect is 0.018 (Model 1) for religious affiliation, and 0.026 (Model 2) or 0.025 (Model 3) for religious attendance. In other words, with each successive year, the expected odds of religious affiliation increases by 1.8 percent (i.e.,  $1 - e^{0.018}$ ), and the odds of weekly religious attendance by 2.5–2.6 percent.

The second hypothesis stated that employed immigrants are less religious than immigrants who are unemployed or inactive (H2). The analyses of religious affiliation and religious attendance are in line with this prediction. Thus, employed immigrants are significantly less often affiliated with a religion, and attend religious meetings significantly less often than immigrants who are unemployed or inactive.

The differences observed by sex are intriguing. I predicted that male immigrants would be less often affiliated with a religion and would attend religious meetings less often than female immigrants (H3). In line with this prediction, I find that religious affiliation is indeed considerably lower among males. The odds that female immigrants are affiliated with a religion are 53 percent higher than the comparable odds for male immigrants. However, the supposed lower levels of attendance among males cannot be supported. According to Model 2, male and female immigrants participate in weekly meetings at an equal rate. Moreover, Model 3 shows that immigrant men

**TABLE 7**  
**CROSS-CLASSIFIED MULTILEVEL LOGISTIC REGRESSION OF RELIGIOUS**  
**AFFILIATION AND RELIGIOUS ATTENDANCE AMONG IMMIGRANTS IN EIGHT**  
**WESTERN COUNTRIES, 1974–2000**

	Religious Affiliation		Religious Attendance			
	Model 1		Model 2		Model 3	
	Coefficients	S.E.	Coefficients	S.E.	Coefficients	S.E.
Constant	2.606**	(0.207)	−2.922**	(0.287)	−5.877**	(0.385)
Individual effects						
Age	0.018**	(0.002)	0.026**	(0.001)	0.025**	(0.002)
Employed	−0.233**	(0.040)	−0.228**	(0.041)	−0.220**	(0.040)
Male	−0.423**	(0.040)	0.067	(0.043)	0.123**	(0.043)
Schooling	−0.028**	(0.004)	−0.017**	(0.004)	−0.015**	(0.004)
Married	0.340**	(0.043)	0.380**	(0.040)	0.363**	(0.044)
Religious affiliation						
No religion					Ref.	
Christian					3.476**	(0.145)
Other religion					3.143**	(0.161)
Origin effects						
GDP per capita (in 1,000 USD)	−0.065**	(0.023)	−0.046**	(0.017)	−0.023	(0.018)
Predominantly Christian	−0.030	(0.179)	0.514**	(0.172)	0.215	(0.150)
Political and religious suppression	−0.021	(0.019)	−0.001	(0.023)	0.023	(0.028)
Destination effects						
Religious concentration	−0.002	(0.006)	0.002	(0.008)	−0.017**	(0.006)
Religiosity (% religious attendance at least once a week)	0.015*	(0.007)	0.025*	(0.011)	0.025	(0.013)
Social-democratic history (past 10 years)	−0.108*	(0.049)	−0.146**	(0.043)	−0.090	(0.090)
Community effects						
Relative group size (%)	−0.030	(0.021)	0.008	(0.028)	0.008	(0.028)
Survey effects						
Migration survey (vs. general survey)	0.851	(0.527)	0.582	(0.367)	1.104**	(0.250)
Two-step question (vs. one-step)	−0.613*	(0.264)				
Denomination (vs. religion)	0.086	(0.339)				
Number of observations						
Origin		140		113		113
Destination (surveys)		20		14		14
Community		272		189		189
Individual		38,244		19,548		19,548

\* $p < 0.05$ ; \*\* $p < 0.01$  (two-tailed tests).

more often attend religious meetings than immigrant women. Combined together, these results show that religious attendance among immigrant men is higher than that of immigrant women, once the higher percentage unaffiliated to a religion of immigrant men is taken into account.

Another individual-level factor examined is schooling. H4 predicted that schooling has a negative impact on religious affiliation and religious participation. This study indeed finds a significant inverse relationship between schooling and religiosity. This means that immigrants with a higher education are less often affiliated with a religion, and attend religious meetings less often, than less-educated immigrants. Note that the magnitude of the effect is somewhat larger with respect to religious affiliation than with respect to religious attendance, and that the effect of schooling on attendance persists even after religious affiliation is taken into account.

A final individual-level factor considered in this article is marital status. I predicted that immigrants who are married are more religious than those who are unmarried (H5). In accordance with this hypothesis, I find significantly higher levels of religious affiliation and participation among married immigrants.

### *Origin Effects*

In regard to the role of the country of origin, I first of all hypothesized that immigrants who were born in a modern country would be less religious than immigrants born in a less-modern nation (H6). In line with this idea, I find that immigrants from countries with a higher GDP per capita are less often affiliated with a religion. The magnitude of the effect is substantial. For instance, the odds that immigrants from the least economically developed country (i.e., \$100 in 1980; Table 3) are affiliated with a religion are almost seven times larger than the comparable odds for immigrants from the most developed country (i.e., \$29,100). Model 2 shows that GDP per capita also has a significantly negative influence on religious attendance. Interestingly, when taking religious affiliation into account, the effect halves and becomes insignificant (Model 3). This suggests that GDP per capita has no direct influence on attendance; rather, the effect is indirect: immigrants from more modern nations are more often affiliated to a religion, and for that reason attend religious meetings more frequently.

I further predicted that immigrants with a Christian background would be more religious than non-Christian immigrants (H7). This hypothesis is partly confirmed in the analysis. I do not find that immigrants from predominantly Christian countries are significantly more often affiliated with a religion. However, Model 2 shows the predicted effect on religious attendance. Immigrants from predominantly Christian countries attend religious meetings significantly more frequently than immigrants from non-Christian societies. Emigration flows can be selective, with non-Christian people emigrating from predominantly Christian countries (and vice versa); thus it is important to compare the results of Model 2 and Model 3. It appears that the effect of religious origin becomes insignificant once religious affiliation at the individual level is taken into account. The reason for this is that immigrants from predominantly Christian countries are mainly Christians, and Christian immigrants participate more often than non-Christian immigrants. This finding is in line with theoretical expectations.

A final origin factor I consider is the condition under which people migrated. H8 predicted that religious suppression in the sending nation varies directly with immigrants' religiosity. There is no evidence to support this hypothesis, however.

### *Destination Effects*

Another set of hypotheses pertained to the role of host societies. I hypothesized that the religious concentration in the receiving country has a negative effect on immigrants' religion (H9). I find support for this hypothesis with respect to religious attendance, but not for religious affiliation. The significantly inverse relationship between religious concentration and attendance



appears after religious affiliation is taken into account. In sum, I find that in more pluralistic and religiously competitive host societies, immigrants are not more often affiliated with a religion, but, once religious affiliation is controlled, immigrants participate more frequently than do immigrants in religiously monopolized countries. Note that it is not surprising that religious concentration has no effect on affiliation, since it is less constrained by structural forces.

The hypotheses also predicted that the more religious the native population, the higher will be the religiosity of immigrants (H10). I find positive evidence for this hypothesis, although the evidence is not strong. Model 1 shows that the higher the percentage of natives in a country attending religious meetings once a week or more, the more often immigrants in that country are affiliated to a religion. The religious participation of the native population also has the predicted positive effect on religious attendance of immigrants, although the effect is marginally significant in Model 3 ( $t = 1.92$ ).

The final characteristic of destination countries examined here is their political makeup. It was hypothesized that the presence of social-democratic parties in the government negatively affects the religiosity of immigrants. I find that immigrants in countries with a social-democratic legacy are indeed less often affiliated to a religion than immigrants in countries with a dominant Christian or liberal history. In addition, Model 2 shows that the presence of social-democratic parties in the government reduces the religious attendance of immigrants. However, on close inspection, it appears that political parties influence the attendance of immigrants only indirectly, by decreasing the rate affiliated to a religion. Model 3 shows that, once religious affiliation is controlled, social-democratic legacy has no direct effect on religious attendance of immigrants.

### *Community Effects*

Besides contextual factors that relate either to the country of origin or to the country of destination, I also hypothesized the effects of a combination of these (i.e., community effects). I predicted that the size of the immigrant community would be positively related to the religiosity of immigrants in that community (H12). However, my analysis does not support this idea. I do not find a significant effect of the relative size of the immigrant group on religious affiliation or on weekly church participation. In various other models (not presented here), I examined quadratic specifications of group size as well as the bivariate relationship between group size and religion. None of these models showed a significant effect, however.

### *Survey Effects*

A final note on survey effects: it appears that surveys that are specially designed to examine immigrant populations show somewhat higher levels of religiosity among immigrants than do surveys of general populations. In addition, I find that surveys that use a one-step question to ask for religious affiliation have higher levels of affiliation than surveys using a two-step method. According to my analysis, asking for denomination or religion does not play a role. In additional analyses, not presented here, I left out these survey variables. This did not change the substantive interpretations, which suggests that although survey effects play a role in “predicting” the degree of religiosity, the regression effects, which are relevant for testing the hypotheses, are quite stable.

## CONCLUSIONS AND DISCUSSION

I started this article by arguing that in the sociology of religion, little attention has been paid to the study of immigrants. I developed a specific migration framework, in which the religiosity of immigrants is an outcome of individual characteristics (individual effects), the country of origin (origin effects), the country of destination (destination effects), and the combination of origin and destination (community or setting effects). Using notions discussed in the religion and

immigration literature, I proposed a number of factors that fit this conceptual apparatus. Making use of 20 surveys conducted in eight Western countries, I tested the hypotheses with multilevel techniques and controlled for survey effects.

In contrast to case studies that focus on a single immigrant group in a single country, the specific migration framework adopted here looks at multiple groups in multiple countries. In this way, the religious experience of such diverse groups as the Mexicans in the United States, Turks in the Netherlands, or Pakistanis in Great Britain can be compared. One valuable insight that came out of this comparison is that immigrants' country of origin is more important than the country of destination for understanding immigrants' religious affiliation, but that the opposite is true for understanding the religious attendance of immigrants.

Another conclusion of this study is that across the different immigrants, ethnic groups, and countries, several general patterns of immigrants' religiosity emerge. It is important to confront these observations with ideas proposed in the existing literature. One way of assessing theories in the sociology of religion is to apply them to a new research area or population and examine their empirical success (Jelen 2002). Whereas the sociology of religion has focused mainly on Judeo-Christian beliefs in Western nations (Turner 1983), immigrants originate from all over the world, including both highly religious and more secular nations, poor and rich, Christian and non-Christian. The patterns observed in my study generally concur with accepted insights of the sociology of religion, and these insights therefore have a broad empirical scope. On the other hand, some findings of my study contradict earlier observations in the sociology of religion and thereby challenge the generalizability of well-known ideas.

To start with the confirmations, I find that a number of individual-level factors are important. It appears that immigrants' religiosity increases with age and decreases with schooling. I also find that religiosity is lower among employed immigrants than among inactive and unemployed immigrants, and that married immigrants are more religious than unmarried immigrants. Because these relationships have been documented in previous studies on general populations, one could argue that they reflect certain "general" mechanisms at the individual level. Thus, while these patterns have been observed earlier among native, Western populations (i.e., predominantly Christian, wealthy) this study finds that they can be extended theoretically and empirically to the immigrant population (i.e., including non-Christian, poorer groups).

Also in line with theories proposed in the sociology of religion, I find that the religion of immigrants is an outcome of several contextual factors. Modernization theory (Bruce 1999; Lenski, Lenski, and Nolan 1991; Need and De Graaf 1996; Weber [1922] 1993) received support in my study with the observation that religiosity is lower among immigrants who were born in modern countries, and among immigrants who live in receiving countries with a stronger presence of social-democratic parties in the government. In accordance with social-integration theory (Berger 1967; Durkheim [1897] 1961; Kelley and De Graaf 1997; Myers 1996; Need and De Graaf 1996; Te Grotenhuis and Scheepers 2001), Christian immigrants more often attend religious services than non-Christian immigrants, and the religiosity of the receiving context positively affects the religiosity of immigrants. Finally, I find some support for the religious market theory (Iannaccone 1991; Stark and Bainbridge 1987; Stark and Finke 2000): the religious concentration of the receiving nation is inversely related with immigrants' religiosity.

This study finds some unexpected results that challenge theoretical insights in the sociology of religion. Perhaps the most important finding of this study that contradicts theoretical considerations is the male-female pattern. In general population studies, it is well known and consistently found that women are more religious than men, *irrespective* of the measure of religiosity. Although I find that female immigrants are indeed more often affiliated with a religion than male immigrants, immigrant women did not attend religious services more often than immigrant men. On the contrary, once the higher percentage of immigrant men not affiliated to a religion is taken into account, I find that immigrant men more frequently attend religious meetings than immigrant women. One explanation for this unexpected finding is that in my study all religions were

taken together without considering differences between them. It is possible that specific religious practices and prescriptions are relevant here. For instance, some studies suggest that in Muslim communities, males attend religious services more often than females (Horrie and Chippindale 1990). Further research that examines the impact of these and other theological differences on the religious practices of immigrants is therefore to be encouraged.

I could not find significant effects for several contextual factors. Contrary to expectations, I found no effect of the size of the ethnic community on immigrants' religiosity. Although this observation challenges social-integration theory, methodological explanations for not finding such an effect are more plausible. The reason is that group size is only indirectly related to the more relevant idea of the cohesiveness of the immigrant community. In more close-knit communities, religious behavior can be better controlled and sanctioned. Although the cohesiveness is partly influenced by the size of the immigrant group, it is also strongly determined by spatial segregation. In a similar way, another observation not in line with theory can be explained. Contrary to expectations, my study finds that religious suppression in the sending nation has no effect on immigrants' religiosity. However, I had to rely on a rather indirect measure of religious suppression (i.e., violation of political rights and civil liberties). Because of these methodological problems, not finding the predicted patterns at the contextual level does not imply that they are not there.

Further research could improve the present study in at least two different ways. Methodologically, subsequent studies could include more precise measures of the cohesiveness of the immigrant community and of religious suppression in the country of origin. In addition, it is important to overcome problems associated with "Small N's and Big Conclusions" (Lieberman 1991), and to expand the number of receiving countries examined. Theoretically, it would be important to theorize about and empirically examine the role of individual-level factors that are immigrant-specific. These are factors such as age at migration, length of residence, ethnic intermarriage, and language proficiency. Although the importance of these factors is well established in studies on immigrants' economic incorporation, little is known if they affect immigrants' religiosity as well, and thereby provide a valuable supplement to the specific migration framework developed here.

#### ACKNOWLEDGMENTS

I am grateful for comments from Henk Flap, Ineke Maas, Loredana Ivan, Nan Dirk de Graaf, and anonymous reviewers and the editor of the *Journal for the Scientific Study of Religion* on earlier drafts of this article.

#### NOTES

1. For the sake of simplicity, I assume that religious affiliation and religious participation are affected in a similar way by the individual and contextual factors proposed here.
2. Note that this idea is theoretically a community factor. When, for instance, predominantly Muslim destinations are considered, Christian immigrants would be expected to have a lower religious commitment than Muslim immigrants. However, because I only examine Christian destination countries in this article, I treat this idea as an origin effect instead of a community effect.
3. The surveys used for Belgium asked for mosque attendance, because only Muslims participated in that survey.
4. It is important to emphasize that the use of the Herfindahl index in this article does not involve the problems addressed by Voas, Olson, and Crockett (2002). They argued that relationships between measures of pluralism (such as the Herfindahl index) and religious involvement are due to a mathematical artifact, rendering a nonzero correlation by chance alone. Because I use the religious pluralism of the *total* population (immigrants are only a small part of the population) and in a time period *before* most immigrants entered the receiving nation, the religious behavior of immigrants is unaffected by this mathematical artifact. Note, further, that the religious concentration measure I use strongly correlates ( $r = 0.91$ ) with an alternative measure of competition suggested by Chaves and Cann (1992), which indicates the degree to which states regulate religion.

5. I computed bivariate correlations at the macro level to examine the association between macro-level predictors. Correlations are below 0.50, and the results are therefore not severely biased by multicollinearity.
6. I did not inspect changes in the effects of macro-level variables or changes in variance components after adding micro- and macro-level variables, nor did I inspect deviance statistics. The reason is that in multilevel models with dichotomous outcomes, the residual level-one variance is fixed and the coefficients of the macro-level variables, as well as the variance at the macro level, tend to increase after micro-level variables with strong effects have been included. Multilevel models are appropriate, however, for testing micro- and macro-level hypotheses (Snijders and Bosker 1999).

## REFERENCES

- Argue, A., D. R. Johnson, and L. K. White. 1999. Age and religiosity: Evidence from a three-wave panel analysis. *Journal for the Scientific Study of Religion* 38:423–35.
- Barker, D., L. Halman, and A. Vloet. 1992. *The European values study 1981–1990: Summary report*. London: Gordon Cook Company.
- Berger, P. 1967. *The sacred canopy*. New York: Doubleday.
- Bibby, R. W. 1997. Going, going, gone: The impact of geographical mobility on religious involvement. *Review of Religious Research* 38:289–307.
- Brierley, P. 1997. *World churches handbook*. Exeter: BPC Wheaton Ltd.
- Browne, W. J. 2002. *MCMC estimation in MLwiN*. Available at <http://multilevel.ioe.ac.uk>.
- Bruce, S. 1999. *Choice and religion: A critique of rational choice*. New York: Oxford University Press.
- Campbell, R. A. and J. E. Curtis. 1994. Religious involvement across societies: Analyses for alternative measures in national surveys. *Journal for the Scientific Study of Religion* 33:215–29.
- Chaves, M. 1991. Family structure and Protestant church attendance: The sociological basis of cohort and age effects. *Journal for the Scientific Study of Religion* 30:501–14.
- Chaves, M. and D. E. Cann. 1992. Regulation, pluralism, and religious market structure: Explaining religion's vitality. *Rationality and Society* 4:272–90.
- Chaves, M. and P. S. Gorski. 2001. Religious pluralism and religious participation. *Annual Review of Sociology* 27:261–81.
- Chaves, M., P. J. Schraeder, and M. Sprindys. 1994. State regulation of religion and Muslim religious vitality in the industrialized west. *Journal of Politics* 56:1087–97.
- Chiswick, B. R. 1999. Are immigrants favorably self-selected? *American Economic Review* 89:181–85.
- Davis, J. A., T. W. Smith, and P. V. Marsden. 2000. *General social surveys, 1972–2000: Cumulative codebook*. Chicago: National Opinion Research Center.
- De Graaf, N. D. and A. Need. 2000. Losing faith: Is Britain alone? In *British social attitudes: The 17th report: Focusing on diversity*, edited by R. Jowell, J. Curtice, A. Parrk, K. Thomson, L. Jarvis, C. Bromley, and N. Stratford, pp. 119–36. London: Sage.
- De Vaus, D. and I. McAllister. 1987. Gender differences in religion: A test of the structural location theory. *American Sociological Review* 52:472–81.
- Durkheim, E. [1897] 1961. *Suicide*. New York: Free Press.
- Ebaugh, H. R. and J. S. Chafetz. 2000. *Religion and the new immigrants. Continuities and adaptations in immigrants congregations*. Walnut Creek: AltaMira Press.
- Firebaugh, G. and B. Harley. 1991. Trends in U.S. church attendance: Secularization and revival, or merely lifecycle effects? *Journal for the Scientific Study of Religion* 30:487–500.
- Horrie, C. and P. Chippindale. 1990. *What is Islam?* London: Allen & Co.
- Hout, M. and A. Greeley. 1990. The cohort doesn't hold: Comment on Chaves (1989). *Journal for the Scientific Study of Religion* 29:519–24.
- Hurh, W. M. and K. C. Kim. 1990. Religious participation of Korean immigrants in the United States. *Journal for the Scientific Study of Religion* 29:19–34.
- Iannaccone, L. R. 1990. Religious practice: A human capital approach. *Journal for the Scientific Study of Religion* 29:297–314.
- . 1991. The consequences of religious market structure: Adam Smith and the economics of religion. *Rationality and Society* 3:156–77.
- Jelen, T. G. 2002. Reflections on the “new paradigm”: Unfinished business and an agenda for research. In *Sacred markets, sacred canopies: Essays on religious markets and religious pluralism*, edited by T. G. Jelen. Lanham: Littlefield Publishers.
- Karatnycky, A. and A. Piano, eds. 2002. *Freedom in the world: The annual survey of political rights and civil liberties, 2001–2002*. New Jersey: Transaction Publishers.
- Kelley, J. and N. D. De Graaf. 1997. National context, parental socialization, and religious belief: Results from 15 nations. *American Sociological Review* 62:639–59.

- Lenski, G., J. Lenski, and P. Nolan. 1991. *Human societies: An introduction to macrosociology*. New York: McGraw-Hill.
- Liebersohn, S. 1991. Small N's and big conclusions: An examination of the reasoning in comparative studies based on a small number of cases. *Social Forces* 70:307–20.
- Marshall, P. 2000. *Religious freedom: A global report on freedom and persecution*. Nashville: Broadman and Holman Publishers.
- Miller, A. S. and J. P. Hoffmann. 1995. Risk and religion: An explanation of gender differences in religiosity. *Journal for the Scientific Study of Religion* 34:63–75.
- Myers, S. M. 1996. An interactive model of religiosity inheritance: The importance of family context. *American Sociological Review* 61:858–66.
- Need, A. and N. D. De Graaf. 1996. "Losing my religion": A dynamic analysis of leaving the church in the Netherlands. *European Sociological Review* 12:87–99.
- Nelsen, H. M. and H. D. Allen. 1974. Ethnicity, Americanization, and religious attendance. *American Journal of Sociology* 79:906–22.
- OECD. 1999. *Classifying educational programmes: Manual for ISCED-97 implementation in OECD countries*. Paris: Organisation for Economic Co-Operation and Development.
- . 2000. *International Migration Statistics*. Internet: <http://www.sourceoecd.org>.
- Raudenbush, S. W. and A. S. Bryk. 2002. *Hierarchical linear models: Applications and data analysis methods*, 2nd ed. Newbury Park: Sage.
- Sherkat, D. E. and J. Wilson. 1995. Preferences, constraints, and choices in religious markets: An examination of religious switching and apostasy. *Social Forces* 73:993–1026.
- Smith, C., D. Sikkink, and J. Bailey. 1998. Devotion in Dixie and beyond: A test of the "shibley thesis" on the effects of regional origin and migration on individual religiosity. *Journal for the Scientific Study of Religion* 37:494–506.
- Smith, T. W. 2002. Religious diversity in America: The emergence of Muslims, Buddhists, Hindus, and others. *Journal for the Scientific Study of Religion* 41:577–85.
- Snijders, T. and R. Bosker. 1999. *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. London: Sage Publications.
- Stark, R. and W. S. Bainbridge. 1987. *A theory of religion*. New York: Peter Lang Publishing.
- Stark, R. and R. Finke. 2000. *Acts of faith: Explaining the human side of religion*. California: University of California Press.
- Stump, R. W. 1984. Regional migration and religious commitment in the United States. *Journal for the Scientific Study of Religion* 23:292–303.
- Te Grotenhuis, M. and P. Scheepers. 2001. Churches in Dutch: Causes of religious disaffiliation in the Netherlands, 1937–1995. *Journal for the Scientific Study of Religion* 40:591–606.
- Thornton, A., W. G. Axinn, and D. H. Hill. 1992. Reciprocal effects of religiosity, cohabitation, and marriage. *American Journal of Sociology* 98:628–51.
- Turner, B. S. 1983. *Religion and social theory: A materialist perspective*. London: Heinemann.
- Van Tubergen, F. 2004. *International file of immigration surveys*. [Codebook and machine readable data file.] Utrecht, Netherlands: Department of Sociology/ICS.
- Van Tubergen, F. and M. Kalmijn. 2005. Immigrants' language proficiency in comparative perspective: A study of immigrant groups in eight Western societies. *American Journal of Sociology* 110:1412–57.
- Van Tubergen, F., I. Maas, and H. Flap. 2004. The economic incorporation of immigrants in 18 Western societies: Origin, destination, and community effects. *American Sociological Review* 69:701–24.
- Vegler, A. 1988. Differential social integration among first generation Greeks in New York. *International Migration Review* 22:627–57.
- Voas, D., D. V. A. Olson, and A. Crockett. 2002. Religious pluralism and participation: Why previous research is wrong. *American Sociological Review* 67:212–30.
- Warner, R. S. and J. G. Wittner. 1998. *Gatherings in diaspora. Religious communities and the new immigration*. Philadelphia: Temple University Press.
- Weber, M. [1922] 1993. *The sociology of religion*. Boston: Beacon Press.
- Welch, M. R. and J. Baltzell. 1984. Geographic mobility, social integration, and church attendance. *Journal for the Scientific Study of Religion* 23:75–91.
- Wuthnow, R. and K. Christiano. 1979. The effects of residential migration on church attendance in the United States. In *The religious dimension: New directions in quantitative research*, edited by R. Wuthnow, pp. 257–76. New York: Academic Press.
- Yang, F. and H. R. Ebaugh. 2001a. Transformations in new immigrant religions and their global implications. *American Sociological Review* 66:269–88.
- . 2001b. Religion and ethnicity among new immigrants: The impact of majority/minority status in home and host countries. *Journal for the Scientific study of religion* 40:367–78.

## APPENDIX: DATA SOURCES

- Australian Bureau of Statistics. 1981. *Australian Census 1981 Matrix Files—Table M048*. Canberra, Australia: Australian Social Science Data Archive [distributor]. [AUS81]
- Australian Office of Multicultural Affairs. 1988. *Issues in Multicultural Australia*. Canberra, Australia: Australian Social Science Data Archive [distributor]. [AUS88]
- Bumpass, L. L. and J. A. Sweet. 1997. *National Survey of Families and Households: Wave 1, 1987–1988*. Madison, WI: University of Wisconsin, Center of Demography and Ecology [producer]. Ann Arbor, MI: Interuniversity Consortium for Political and Social Research [distributor]. [USAns fh]
- Danish National Institute of Social Research 1988. *Second Generation Immigrants 1988*. Odense, Denmark: Danish Data Archive [distributor]. [DEN88]
- Danish National Institute of Social Research. 1999. *Second Generation Immigrants 1999*. Odense, Denmark: Danish Data Archive [distributor]. [DEN99]
- Davis, James A., Tom W. Smith, and Peter M. Marsden. 2000. *General Social Surveys, 1972–2000*. Chicago, IL: National Opinion Research Center [producer]. Ann Arbor, MI: Interuniversity Consortium for Political and Social Research [distributor]. [USAgss]
- Eurostat. 2002. *European Union Labour Force Survey, 1992–2001*. Luxembourg: Eurostat [distributor]. (Data available upon request.)
- Inglehart, R. et al. 2000. *World Values Surveys and European Values Surveys, 1981–1984, 1990–1993*. Ann Arbor, MI: Institute for Social Research. Distributed by Interuniversity Consortium for Political and Social Research, Ann Arbor, USA 2000.
- Kelley, J., C. Bean, and M. D. R. Evans. 1990. *Australian National Social Science Survey 1989–1990*. Canberra, Australia: Social Science Data Archives [distributor]. [AUS90]
- Kelley, J., C. Bean, and M. D. R. Evans. 1994. *Australian National Social Science Survey 1994*. Canberra, Australia: Social Science Data Archives [distributor]. [AUS94]
- Kelley, J., C. Bean, and M. D. R. Evans. 1995. *Australian National Social Science Survey 1995*. Canberra, Australia: Social Science Data Archives [distributor]. [AUS95]
- Kelley, J., R. G. Cushing, and B. Headey. 1984. *Australian National Social Science Survey 1984*. Canberra, Australia: Social Science Data Archives [distributor]. [AUS84]
- Lesthaeghe, R. 1993. *Family Formation and Values Patterns for Turkish and Moroccan Women*. Brussel, Gent, Belgium: Steunpunt Demografie, Vakgroep Sociaal Onderzoek, Vrije Universiteit Brussel; Vakgroep Bevolkingswetenschappen Universiteit Gent [producer and distributor]. [BEL93]
- Lesthaeghe, R. 1996. *MHSM Surveys Turkish and Moroccan Men in Belgium*. Brussels, Gent, Belgium: Vakgroep Sociaal Onderzoek, Vrije Universiteit Brussel; Vakgroep Bevolkingswetenschappen, Universiteit Gent [producer and distributor]. [BEL96]
- Natale, M., G. C. Blangiardo, and A. Montanari. 1994. *La presenza straniera in Italia*. Rome, Italy: Dipartimento di Scienze Demografiche, l'universita di Roma 'La Sapienza.' [producer and distributor]. [ITA94]
- Natale, M., and S. Strozza. 1998. *Indagine statistica sulle caratteristiche e sul comportamento economico degli stranieri immigrati*. Italy: Dipartimento di Scienze Demografiche, l'università di Roma 'La Sapienza.' [producer and distributor]. [ITA98]
- Sapiro, Virginia, Steven J., Rosenstone, and the National Election Studies. (2002) *American National Election Studies Cumulative Data File, 1948–2000*. Ann Arbor, MI: Center for Political Studies [distributor]. [USAnes]
- Smith, D. J. 1974. *Survey of Racial Minorities*. Colchester, England: UK Data Archive [distributor]. [GB74]
- Smith, P., and G. Prior. 1994. *The Fourth National Survey of Ethnic Minorities 1993–94*. Policy Studies Institute [producer]. Colchester, England: UK Data Archive [distributor]. [GB94]

- Statistics Canada. 1986. *General Social Survey Cycle 2: Time Use, Social Mobility and Language Use*. Ottawa, Canada: Statistics Canada [producer and distributor] [CAN86]
- Statistics Canada. 1991. *1991 Census Public Use Microdata File*. Ottawa, Canada: Statistics Canada [producer and distributor]. [CAN91]
- Statistics Canada. 1996. *1996 Census Public Use Microdata File*. Ottawa, Canada: Statistics Canada [producer and distributor]. [CAN96]
- United States Census Bureau. 1980. *1980 US Census 1 Percent Public Use Microdata Sample*. Ann Arbor, MI: Interuniversity Consortium for Political and Social Research [distributor]. [USA80]
- United States Census Bureau. 1990. *1990 US Census 1 Percent Public Use Microdata Sample*. Ann Arbor, MI: Interuniversity Consortium for Political and Social Research [distributor]. [USA90]
- Veenman, J. 1994. *Sociaal-economische Positie en Voorzieningengebruik van Allochtonen en Autochtonen 1994*. Instituut voor Sociologisch-Economisch Onderzoek [producer]. Amsterdam, Netherlands: Steinmetz Archive [distributor]. [NET94]
- Veenman, J. 1998. *Sociaal-economische Positie en Voorzieningengebruik van Allochtonen en Autochtonen 1998*. Instituut voor Sociologisch-Economisch Onderzoek and Sociaal en Cultureel Planbureau [producer]. Amsterdam, Netherlands: Steinmetz Archive [distributor]. [NET98]