This chapter surveys the literature on the economics of religion, with a particular emphasis on its association with conflict. There is a long tradition of work on the relationship between conflict and ethnic diversity culminating with Horowitz’s seminal *Ethnic Groups in Conflict*. The effect of religion on conflict has generated less attention. Recently there have been several reviews of the topic. See, for instance, Iyer (2016), Finke (2013), or Silvestri and Mayall

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J.-P. Carvalho et al. (eds.), *Advances in the Economics of Religion*, International Economic Association Series, https://doi.org/10.1007/978-3-319-98848-1_15
(2015). However, prior to 2000, few attempts tried to include religion and culture into the larger body of research and theory on social conflict. Samuel P. Huntington’s “Clash of Civilizations” (1996) thesis is the basic reference of this literature, the same way as Weber’s classic *The Protestant Ethics and the Spirit of Capitalism* (1905) is the focal point of the empirical study of the relationship between religion and economic development. Borrowing partly from an idea put forward by British-American historian, Bernard Lewis (1990), Huntington became the most prominent voice claiming that religious and cultural identities would be the main driver of international conflict in the new world order following the end of the Cold War. At the core of Huntington’s clashing civilizations lay religion. He argued that the civilization of Western Christianity is different from that of Eastern Orthodox Christianity; Eastern Christianity is distinct from Islam; Islam represents a fundamentally distinct civilization from Hindu; and so forth. The “clash of civilizations” occurs at two levels. One level points to the civilization divides across countries and regions, the other refers to the “fault lines between civilizations” within countries or territories. Thus, the civilizational fault line(s) within countries leads to conflicts just as they do across countries. Huntington recognizes that the argument is over-simplified, yet he concludes that “countries with similar cultures are coming together” while “countries with different cultures are coming apart.” He argues that civilizations compete on the international scene and that this competition can turn into violent conflict, most importantly because of the different religions that have formed these civilizations. In other words, civilization fault lines are a source of conflict; civilization homogeneity is a source of unity and peace (Huntington 1996).

Traditionally, the literature on the relationship between religion and conflict was generated by fields like politics and international relations, peace and conflict studies, theology, sociology, history, and security or terrorism studies. In many of these disciplines, the phenomenon is analyzed using a qualitative approach, usually based on case studies. More recently, there has been a flurry of data collection on religious diversity around the world, and a new body of more quantitative research has emerged. With the availability of new data, many economists examine the effect of religion in varied historical time periods and countries, drawing lessons from this experience for religious diversity in contemporary developing societies. This chapter develops a quantitative view of the relationship between religion and conflict.
The Measurement of Religious Diversity: Indices of Fractionalization and Polarization

In order to evaluate the relationship between religiosity and potential conflict in a particular geographic area, there are two basic measures of religious diversity. The index of religious fractionalization (FRAC) can be interpreted as the probability that two randomly selected individuals in a country will belong to different religious groups. The form of this indicator is the following:

$$FRAC_i = 1 - \sum_{j}^{J} \left( \frac{n_{ij}}{N_i} \right)^2$$

where $n_{ij}/N_i$ is the proportion of people affiliated to religion $j$ in country $i$.\(^1\)

By construction FRAC increases when the number of groups increases.

An alternative indicator of religious diversity is the index of religious polarization of Montalvo and Reynal-Querol (2000a, b):

$$POL_i = 1 - \sum_{j}^{J} \left( \frac{0.5 - \pi_{ij}}{0.5} \right)^2 \pi_{ij}$$

where $\pi_{ij}$ is equal to $n_{ij}/N_i$. The index POL ranges from 0 to 1. Contrary to what happens with the fragmentation index, polarization reaches its maximum when there are two religious groups of equal size. In this type of index, what matters is not only how many groups there are but also if they view other groups as a potential threat for their interests. For a given number of groups, the higher the threat is, the larger is the size of another group relative to the size of the reference group. Therefore, the polarization index can reflect potential religious conflict in a society better than the fragmentation index. There are several theoretical justifications for the discrete polarization index. Rent-seeking models point out that social costs are higher, and social tensions emerge more easily, when the population is distributed in two groups of equal size. In fact, Montalvo and Reynal-Querol (2005b) have shown that their polarization index can be derived from a simple rent-seeking model. Therefore, the index of polarization captures basically how far the distribution

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\(^1\)The ethnolinguistic fragmentation index used in many empirical growth studies belongs to this class of indices.
of the groups is from a bimodal distribution, while the fragmentation index increases monotonically with diversity. It is also the case that potential conflict, measured by the polarization index, can reduce social capital and affects, also through this channel, economic growth.

The Measurement of Religious Diversity: Data

There are many different sources of data on religious diversity, including ad hoc surveys conducted for specific research purposes\(^2\) and standard surveys that include some questions on religious beliefs and formal religious services like the World Value Survey (WVS), the International Social Survey Program (ISSP), or the Gallup Millennium Survey. These surveys are limited by the number of countries that are included and their temporal extension. They are mostly used for microeconomic analysis of the determinants of religiosity or the relationship between religious beliefs and other socioeconomic characteristics (trust, etc.).

However, the main source of data for religious diversity at the country level comes from Barrett’s (1982, 2000) World Christian Encyclopedia (WCE). The proportion of each religion is constructed from the answer to the question “What is your religion?” in public polls. As this question does not have multiple responses, every individual is supposed to have only one possible religious affiliation.

This Encyclopedia is descended from a long series of some 40 major surveys and atlases of Christianity and missions. The genesis of this encyclopedia goes back to the World Christian Handbook, and Anglican and Protestant publication which appeared on average every five years from 1949 to 1968, and to the similar Roman Catholic publication\(^3\) which had editions in 1958 and 1964. The volume of 1982, embodies the traditions of both these former publications. This study shares with its more recent predecessors a critical, scholarly, and scientific approach to data describing the Christian world. In the main, it uses existing data collected by the churches for their own purpose.

The WCE has the advantage of being a cross section of time series, providing information for 1970, 1975, and 1980. However, this source has several shortcomings. First, and probably the most important, the data do not

\(^{2}\) Dowd (2016).

\(^{3}\) Bilan du monde: encyclopédie catholique du monde chrétien.
consider the possibility of double practice, very common in Latin American countries. Moreover, comparing these data to other sources of information, Montalvo and Reynal-Querol (2002) realize the data are biased toward the Christian religion. A clear example is the case of Zaire in which the distribution of religions is considered to be similar to Spain or Italy. This basically means that this source does not compute the followers of syncretic cults in Latin American countries and that the information on the followers of animist cults or traditional religion in sub-Saharan Africa is always lower than the percentages provided by national sources or not computed. The distribution of religious groups between 1970 and 1980 does not change in many countries. If there are changes, they usually occur in countries where there is double practice, and they usually imply an increase in the percentage of Christians and a reduction in the size of animist followers in many African countries or the syncretic cults in Latin America. Because of these reasons, the data coming from the WCE should be handled carefully.

Montalvo and Reynal-Querol (2002) notice the limitations of the WCE as a reliable source of data on religion, and they construct our dataset using essentially two sources of information. The first source is “L’Etat des Religions dans le monde” (ET), which takes the data from the “World Christian Encyclopedia” (WCE) and corrects them using national sources, providing information on the proportions of followers of animist and syncretic cults. There are two other religious sources that provide information on animist and syncretic cult followers based on national sources: the Statesman’s Yearbook (ST) and the World Factbook (WF). The proportions on animist and syncretic cults reported by these two other sources are very similar to the proportions reported by ET. ST is not as complete as the ET or WCE but is completely based on national sources. For this reason, it gives very detailed information on animist followers in African countries even though sometimes it does not provide enough information on the proportion of followers of other religions. The WF is more comprehensive than ST, but less than the ET or the WCE. It gives information on the proportions of animist and traditional religions mainly in African countries. However, it has the disadvantage, as with the WCE, that it does not consider the double practice in Latin American countries and therefore does not report the proportion of syncretic cult followers. In many cases the two basic sources coincide and they take that value to be the correct one. In some other cases, the ST does not provide enough disaggregation and it uses the information of ET. The great advantage of the
ST is the extreme detail on animist religions.⁴ The use of these sources allows Montalvo and Reynal-Querol (2002) to consider the percentages of followers of animist and traditional religions, the followers of syncretic cults, and the percentage of the different Muslim subgroups.

Using the previous methodology, Montalvo and Reynal-Querol (2002) consider the following religious groups: Jews, Christians, Muslims, Buddhism, Hinduism, Taoism, Confucianism, Chinese Religion, Bahais, syncretic cults, animist religions, other religions, and no religion. They also have information on the different Christian subgroups (Catholics, Protestants, Orthodox, and other Christians) and also on the different Muslim subgroups (Sunnites and Shiites). The animists are followers of traditional religions which practice magic and the veneration of a large number of gods and spirits. Finally, other religions include small collectives as “black church” or “spiritual groups.” The following table summarizes the basic differences among these sources of religious data:

<table>
<thead>
<tr>
<th>Source</th>
<th>Traditional religions</th>
<th>Syncretic cults</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Christian Encyclopedia (WCE)</td>
<td>Some countries</td>
<td>No</td>
</tr>
<tr>
<td>État des Religions dans le Monde (ET)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Statesman (ST)</td>
<td>Yes</td>
<td>Sometimes</td>
</tr>
<tr>
<td>World Factbook (WF)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>National sources</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Some examples illustrate the main differences among these data sources: Following the WCE, in Angola 80.5% of the population are Christians and only 19.4% animist. However, following ET and ST Angola has 64% of Christian followers and 34% of animists. The WCE reports that in Bolivia 95.3% of the population are Christians, while ET and ST report that only 43% of the population are Christians and 44% are followers of syncretic traditional religions. In Burundi, the WCE reports that 74% are Christians and 25% animist, and ET and ST report that only 60% are Christians and 39% are animist. In Central African Republic, the WCE reports that 76.5% are Christians and only 20.3% are animist, while ET and ST report that 35% are Christians and 57% animist. In Congo the WCE reports that 92% are Christians, and ET and ST report that only 78% are Christians and 19% are animist. In Zaire, the WCE reports that 90.3% are Christians, while the ET and ST report that only 69% are Christians and that 30% of the population follow animist cults. In the Dominican Republic, the WCE reports that 98.9%

⁴Montalvo and Reynal-Querol (2002) confronted the data with national sources in order to improve the reliability of this information.
of the population are Christians, while ET and ST report that only 48.9% are Christians and the 51% follow syncretic cults. In Guatemala the WCE reports that 99.3% are Christians, while the ET and ST report that 73.9% are Christian, while 25.2% follow syncretic cults.5

### Economics, Religion, and Conflict

Economists have considered religion as a determining factor of democracy and economic development (Barro 1997; Sala-i-Martin 1997; Tavares and Wacziarg 2001). In these early attempts to evaluate the impact of religion on development, the authors use simple indicators like a dichotomous variable for the majority religion in a country or the proportion of each religious group among the population of a country.

Initially academic economists used religion as a control variable in the analysis of the determinants of economic growth. Barro (1997) uses the WCE and distinguishes nine religious groups: Catholics, Protestants, Muslims, Hindus (include Jains and Sikhs), Buddhists, miscellaneous eastern religions (Chinese folk religions, Confucianism, and new religionists), no professed religion, and other religious groups. Barro (1997) shows, with some cross tabulations, that religions are correlated with the democratic stance of the countries, although the regression analysis shows less support for this association. Sala-i-Martin (1997) studies the robustness of the determinants of economic growth using the religious variables of Barro (1997). Sala-i-Martin (1997) concludes that the religious indicators belong to the group of variables that are strongly correlated with growth: the fraction of Confucius, Buddhist, and Muslim positively and the fraction of Protestant and Catholic negatively. It is unclear if the interpretation of these variables has to do with the implication of religion in those countries or if they represent specific geographical areas. Sala-i-Martin et al. (2004), using Bayesian averaging of models, conclude that the only religious variable that is strongly and robustly related (positively) with growth is the fraction of Confucians although its high correlation with Hong Kong and the Asian Tigers may explain its high explanatory power for growth. Sala-i-Martin et al. (2004) find that the fraction of protestants is robustly related with growth, showing a negative effect. Montalvo and Reynal-Querol (2003) use the growth equation specification of Mankiw et

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5 More recently, Grim and Finke (2007) have used data collected by the Association of Religion Data Archives (ARDA, www.theARDA.com).
al. (1992), and they find that religious polarization has a negative effect on economic development. Barro and McCleary (2003, 2006), using three cross sections of countries, find that monthly attendance at religious services and belief in hell are statistically significant (negatively and positively, respectively) in the explanation of economic growth. Other religious variables such as belief in God or whether people self-identify as religious do not have any statistical power. They also find that the religious population shares are jointly statistically significant.

Religious Diversity and Polarization as the Source of Conflict

Montalvo and Reynal-Querol (2002) argue that one of the most important causes of conflict are characteristics and differences that are relatively immutable. Therefore while it may be possible to reach an agreement in political or economic issues, it is much more difficult, for instance, to compromise in religious matters. More than other dimensions, religion discriminates and differentiates humans in a sharp and exclusive way. A person can be half French and half Saudi Arab and, at the same time, be a citizen of both countries. However, it is not possible to be half Catholic and half Muslim. In the old Soviet Union, communists could become democrats or poor people could become rich. However, it is unlikely that Muslim will become Christian or vice versa. In the class and ideological conflicts, the key question is, “which side are you fighting with?” and people can decide and can change sides. In the conflict between religions, the question is “who are you?” and you cannot change sides easily.

Horowitz (1985) points out that in plural societies in Asia, Africa, and the Caribbean, parties tend to be organized along ethnic lines. In Western Europe and North America, religion, social class, and language are the basic dimensions of the situation of a political party. Lijphart (1984) found, in a sample of 22 democratic regimes, that the two dimensions that most frequently differentiate systems are the socioeconomic and the religious.

These authors, among others, claim that religious differences are more important than language differences as a social cleavage that can develop into a conflict. There are two basic reasons why religious differences can generate more violence than other social cleavages. First, there is no doubt about the exclusivity of religion. One can speak two or more languages, but you usually have one religion. Religion can be used as a sign of identity, stronger than language in the sense that you exclude absolutely the ones from other religion,
while speaking two languages diffuses the division line among groups. Second, religious differences, which are the base of the differences among civilizations, imply different ways of understanding the world, social relationships, and so on. Even if different groups speak different languages, they could share the same way of understanding the world and the relationships if they belong to the same civilization. This is more difficult for people of different religions.

However, from a theoretical perspective, using the proportion of people professing a particular religion as the literature on religion and economic development has done implies that what matters for economic development is the identity and size of each religious group and not the potential conflictual relationship among them. If we want to analyze the effect of religion on conflict, it is unclear why any of these two quantitative indices (majority religion and proportion of believers) can be a good indicator of conflict.

The empirical studies of the relationship between conflict and religion started almost simultaneously to the analysis of the effect of religion on development. However, many authors have found that even though religious fractionalization seems to have some explanatory power, although not very robust, for economic growth, it is not significant in the explanation of civil wars and other kinds of conflicts. These results led many authors to disregard ethnicity as a source of conflict and civil wars. Fearon and Laitin (2003) and Collier and Hoeffler (2004) find that neither ethnic fractionalization nor religious fractionalization had any statistically significant effect on the onset of a civil war. Collier and Hoeffler (2004) conclude that ethnic dominance has a significant impact on the probability of the onset of a civil war, but they also find any significant effect of religious fractionalization. Collier and Hoeffler (2004) conclude also that religious fractionalization does not have a significant effect on the duration of civil wars.

Reynal-Querol (2002) uses the same dataset to show that religious polarization is the most important ethnic dimension in explaining ethnic civil wars. Fox (2001) specifically examines the role of religion in conflicts in the Middle East and their resulting characteristics, based on the Minorities at Risk dataset (which contains information on 267 politically active ethnic minorities throughout the world) and religious factors. This study uses an empirical method to provide a perspective on the issue different from the comparative approach commonly used in the literature. The author finds that religion plays a disproportionately important role in ethno-religious conflicts in the region,

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6They use the same classification of Barro (1997).
7Collier and Hoeffler (1998) include an index of ethnolinguistic fractionalization in their study of the causes of civil wars but do not consider any religious indicator.
more so than in the non-middle Eastern states with Muslim majorities. States in the Middle East are also disproportionately more autocratic than in other regions. However, despite the unique importance of religion, Fox argues that the prevalence of religious conflict is not explained by either the Islamic or autocratic character of the states, and in reality the ethno-religious conflicts in the Middle East are not significantly different from similar ethnic struggles around the world.

In a further study also based on the Minorities at Risk dataset, Fox (2004) analyzes the role of religious ties in the spread of ethnic conflict across borders. The findings show that religious conflict is more contagious than nonreligious conflict; however, only violent conflicts cross borders, while non-violent ones do not. The author argues that one possible explanation for this is the argument that violence is an intrinsic element of religion. This can explain why religious contagion is stronger than nonreligious contagion and why religious conflicts cross borders only when they are violent ones.

Fox (2003) focuses on the nature of grievances and demands in a conflict. He argues that “when religious issues are important, they will change the dynamics of the conflict.” This can be attributed both to the role of religious institutions within the state and to the way in which religion influences international intervention in ethnic conflict. Internally, religious institutions tend to facilitate a reaction if the grievances have religious importance; however, if they have no religious importance, the religious institutions often inhibit protest. Svensson (2007) explores the conditions for negotiated settlements. The study develops Toft’s (2007) distinction between whether religion plays a peripheral or central role in armed conflicts. However, whereas Toft measures religious dimensions of civil wars on the level of analysis of conflict, this study disaggregates the analysis to the dyadic level. Svensson argues that across religions, where the grievances or demands are based on explicit religious claims, the negotiated settlement of conflict is less likely to succeed than if there are no religious claims. He demonstrates that the chances for negotiated settlement are not affected if the conflicting parties are from different religious traditions.

Montalvo and Reynal-Querol (2005a) find that when ethnonational polarization is included as an explanatory variable, neither religious polarization nor religious fractionalization has a significant effect on the incidence of civil wars. However, Montalvo and Reynal-Querol (2005b) use a system of equations to analyze the direct and indirect effect of religion in the economy. The first equation is a traditional growth regression “a la Barro.” The systems add three additional equations for investment, civil war incidence, and government expenditure. Montalvo and Reynal-Querol (2005b) find that neither religious
fractionalization nor religious polarization has a direct impact on growth. However, they find that religious polarization has an indirect negative impact on growth due to its positive effect on public expenditure and civil wars and its negative impact on investment.

Finally, there appears to be a strong correlation between the emergence of religious conflict and situations of state failure or collapse. Fox (2007), for instance, tracks state failures between 1960 and 2004, identifying the shifts in the role of religion and state failure. Using data from the state failure dataset, he identifies an increase in state failure related to religion as a proportion of all state failures during this period and finds that it became the most common kind of state failure in 2002, after which he identifies religion as an element in the majority of all conflicts that relate directly to state failure.

Religious Restrictions as the Source of Conflict

Finke (2013) challenges Huntington’s theory. Finke claims that restrictions placed on religions, and not religious or cultural pluralism, are far more important in understanding violence closely tied to religion. The author focuses on the causes and consequences of religious restrictions and on their non-trivial relationship with social conflict. Finke (2013) argues that the motives for states restricting or supporting religious freedoms are many and varied. States can restrict freedoms in an effort to support the religion(s) that hold an alliance with the state. Or the state might impose restrictions because religions are perceived challenging the state’s ideology, threatening government stability, and being a potential harm to public order and the welfare of local citizens. Finally, states can have economic and political motives for supporting such freedoms. Also, even when the state has few motives for denying freedom and holds no strategy for restricting religious freedoms, the inaction of the state can lead to high levels of restrictions. When the state is weak and the judiciary is embedded within other government or religious institutions, the tyranny of the majority and the actions of religious, political, and social movements can quickly deny the religious freedoms of others. At the individual level, these restrictions change the incentives and opportunities both for religious producers and consumers. At the organizational and market level, the restrictions change how organizations operate and alter the structure of the market.

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8 Barro and McCleary (2005) provide a discussion of the importance of state religions.
Fox and Tabory (2008) study the impact of religious competition on religiosity by looking at state support for religion as a structural factor affecting religious pluralism. Their dependent variables include measures of attendance at religious services, religious beliefs, and self-categorization as a religious person (World Values Survey and the International Social Survey Program). The independent variable consists of a series of six measures that deal with state support for religion from the Religion and State (RAS) database for the 1990–2002 period. The results indicate that state regulation of religion is significantly and negatively correlated with religiosity. This is consistent with predictions that religious monopolies will reduce participation but not belief.

As Finke (2013) notes, religious restrictions, as well as subsidies, have consequences that go far beyond the religious institutions and activities being targeted. Although restrictions are most frequently targeted at religious minorities, they alter the entire market structure and revise both how religious institutions operate and whom they serve. More specifically, Grim and Finke (2007) bring new evidence on the effects of civilizational homogeneity within countries when applied to religious persecution. Building on a theory of religious economies and using a new source of data collected by the Association of Religion Data Archives, the paper finds that the cultural and religious pluralism of a country is far less important than the state’s response to this heterogeneity. Theoretically, they argue that not only does less regulation reduce the grievances of religions, it also decreases the ability of any single religion to wield undue political power. When a religious group achieves a monopoly and holds access to the temporal power and privileges of the state, the ever-present temptation is to openly persecute religious competitors. Empirically, the authors find that civilizational divides have only an indirect relationship with religious persecution, whereas the coefficient from government regulation was direct, powerful, and highly significant. They conclude that to the extent that governments ensure religious freedoms for all, religious persecution is reduced.

Conclusions

In the light of the research presented in this chapter, the consensus seems to be that while religion should not be taken for granted as the main driving force of violence and conflict, it cannot be excluded from accounts of international relations, impacting both interstate relations and domestic politics. In addition, Dowd (2016) has argued, using the case of Nigeria, that religious diversity, tolerance, and conflict have important subnational
variation. Montalvo and Reynal-Querol (2017) have shown that the lack of explanatory power of ethnic diversity on economic development is due to the fact that at high levels of aggregation (country level) the positive effects of diversity are less important than its negative consequences. This is an example of the well-known modifiable areal unit problem (MAUP). Essentially, MAUP implies that the relationship between variables at one scale may be distorted when analyzed using another scale. This could be also the case in the analysis of the effect of religion on conflict. Further research should evaluate the potential impact of MAUP in the relationship between religious diversity, polarization, and conflict.

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