

Erasmus University Rotterdam  
Erasmus School of Economics  
Master Thesis

July 2013

# Entrepreneurship among Christians

Are religious values associated with the decision  
of Christians to become an entrepreneur?



M.H. den Dekker BSc.  
334581

Supervisor:  
C.A. Rietveld MSc.

Co-reader:  
Dr. B. Hoogendoorn



## ABSTRACT

Recent research shows an effect of religion on economic growth. The aim of this research is to study the impact of religion on a specific contributor to economic growth, entrepreneurship. Relatively much research is done to prove a possible effect of religion on entrepreneurship. However, less is known how religion influences the decision to become an entrepreneur. Based on a survey among Christian entrepreneurs and employees, this study investigates the effect of Christian values on the decision to become an entrepreneur. Three values are considered: vocation by the will of God, the duty to add value to the society by sustainable and social entrepreneurship and the preference to work in a Christian workplace (or a workplace with freedom for religion). The results of logistic regressions show that at least two Christian values are positively associated with the decision to become an entrepreneur. Especially the part about vocation shows strong association. A Christian entrepreneur sees his work as a vocation of God, more than a Christian employee. Besides that a Christian entrepreneur has more drive to add value to the society through his job, compared to a Christian employee. The results show that it is not possible to state that a Christian entrepreneur will prefer a Christian workplace, more than a Christian employee. The main finding is that religious values seem to be associated with the decision of Christians to become an entrepreneur.

## I. INTRODUCTION

The research area of the impact of religion on economic welfare and growth is relative well covered. The conjecture of the study of Barro and Robert (2003) is that higher religious beliefs drive growth because these beliefs help to sustain enduring aspects of individual behavior that expand productivity. Guiso, Sapienza and Zingales (2003) find that religious beliefs are associated with higher per capita income and growth. Research on income as an indicator of economic welfare and growth, shows negative (Heath et al., 1995; Steen, 1996; Barro and McCleary, 2003; Lipford and Tollison, 2003; Mangeloja, 2005; Bettendorf and Dijkgraaf, 2010) but also positive (Chiswick, 1983; Tomes, 1985; Chiswick, 1993; Grier, 1995; Heath et al., 1995; Steen, 1996; Barro and McCleary, 2003; Cornwell et al., 2005; Mangeloja, 2005; Bettendorf and Dijkgraaf, 2010) effects of religion on economic welfare and growth. These divergent findings are the result of the use of different levels of the data (men, women, etc.), various countries, different measures of religion, and a varying focus on different denominations (Jewish, Protestant, Catholic, etc.). The purpose of this paper is to study the impact of religion on a specific contributor of economic growth, entrepreneurship. Recent studies state that entrepreneurship is a key driver of economic growth (Audretsch et al., 2006; Carree and Thurik, 2003). According to Wennekers and Thurik (1999) entrepreneurship is in 'modern open economies more important for economic growth than it has ever been'.

Relative little is known about the impact of religion on the process of economic decision making of individuals. One part of this underexposed research area is the decision of an individual to become an entrepreneur. Economic scholars regard this decision in the terms of the occupational choice model with a comparison between the income of being an entrepreneur and the income of being an employee (Kihlstrom and Laffont, 1979). Various other factors like risk aversion, age, education, unemployment, and entrepreneurial parents influence this decision (Parker, 2004). This research investigates whether also religious values may play a role in the decision to become an entrepreneur.

Audretsch et al. (2007), which have a focus on the Indian Context, find empirical evidence that suggests that both religion and the tradition of the caste system influence entrepreneurship. However, Dana (2009) shows, by reviewing previous literature, positive as well as negative effects of religion on entrepreneurship. Possibly this is due to the findings of Dodd and Gotsis (2007) that interrelationships between religion and entrepreneurship 'are

highly context-specific, and will vary markedly over time and social setting, mediated by other socio-cultural variables such as political structures and ideologies, and religious symbolism in the workplace'. Despite of the mentioned papers of Audretsch et al. (2007), Dana (2009) and Dodd and Gotsis (2007), little is known about the relation between religion and entrepreneurship and especially about which factors influence a possible positive or negative association. Therefore, this research investigates which religious values are (negative or positive) associated with the decision of Christians to become an entrepreneur.

In particular, this paper looks to the decision of Christians in the Netherlands to become an entrepreneur and start a new business. This country has a large Christian history and a large part of the culture, traditions, and the way of living is based on Christianity.

Based on the clarification above, this paper asks the question: *Are religious values associated with the decision of Christians to become an entrepreneur?*

This paper consists of five sections. The next section reviews the literature about entrepreneurship, economic growth, religion, the entrepreneurial choice and possible factors that influence a Christian in making the decision to become an entrepreneur. In this section the literature is linked to three specific and testable hypotheses with four sub hypotheses each. The third section describes the dataset and is followed with a section about the used methods. The fifth section presents the results of the empirical analyses and outlines which hypotheses are confirmed. The final part consists of a conclusion and a discussion about some conceivable limitations.

## II. LITERATURE REVIEW

This chapter covers previous research about religion and entrepreneurship. First the relation between religion and economic growth is explained. Afterwards this review continues with entrepreneurship as an important contributor of economic growth and also with the concept of the entrepreneurial choice. Subsequently this chapter clarifies the link between religion and entrepreneurship, with a specific focus on the possible association between religious values of Christians and their choice to become an entrepreneur.

### **Religion and economic growth**

Economic growth is a research area which is studied in a very broad sense. This is partially due to the fact that economic growth is an indicator of national welfare of countries (Firebaugh and Beck, 1994). To come to a better understanding of economic growth and possible benefits of an increase in welfare, much research is done to discover factors that influence economic growth. One part of this research investigates the relation between social and cultural factors, like the availability of social capital (Whiteley, 2000) and the degree of economic freedom (Johnson and Lenartowicz, 1998), and economic growth. Also analyses about the relation between religion and economic growth belong to this part. Weber (1930) argues, in his famous book ‘The Protestant Ethic and the Spirit of Capitalism’, that Protestantism positively affected economic development and the birth of modern economic life in Western Europe. The religious doctrines of Lutheranism and Calvinism have pushed to capital accumulation and economic development due to the propagation of the earthly calling and an avoidance of unimportant pleasures (Weber, 1930). With this hypothesis of Weber, a large discussion about the effect of religion on economic growth is started. Some of the most important researches are reviewed in the next part.

The effect of religion on economic growth is a specific subject that is covered by several papers. Polanyi, Arensberg and Pearson (1957) state that ‘religion may be as important to the structure and the functioning of the economy as monetary institutions or the availability of tools and machines’. Heath, Waters and Watson (1995) find that religion, measured as church membership, significantly influences per capita income at a state level in the USA. The effect of religion differs between the forms of religion. Their findings also show a number of interrelationships between religion variables and economic performance. Because of these different effects and this paragraph of the literature review gives a summary of the

conclusions of previous research on the effect of religion on different measures of economic growth.

Chiswick (1983) examines the returns from investments of American Jews and found that membership of the Jewish community has a positive effect on the returns from investments (based on an individual level). In 1993 he further analyzes the schooling, occupational status levels, and earnings of American Jews. Again he finds that members of the Jewish community have, on an individual level, significantly higher levels of schooling, occupational status levels, and earnings (Chiswick, 1983). Tomes (1984) examines in his first relevant paper about religion and economic growth, the effect of religious and denominational background on earnings and the returns to human capital (defined as education and experience). The results do not show clear significant results and are therefore not able to prove a possible effect of religion on economic growth. In 1985 he summarizes recent theoretical models and empirical research by regarding the 'influence of religion on earnings and the rate of return to human capital'. Briefly, for the Jewish category he finds a positive and the other religions an insignificant effect. In both papers Tomes measures religion by asking in which religion the questioned individual is raised and he mainly uses data from Canada. Also Steen (1996) provides an examination of the impact of religion on the earnings and human capital of American men over ten years. Like Chiswick (1983) he finds positive effects for Americans that are raised as Jews, but also for Catholics. However the effects for the Protestant category are negative.

Barro and McCleary (2003) investigate the effects of church attendance and religious beliefs in hell and heaven on economic growth. They find that 'economic growth responds positively to the extent of religious beliefs, notably those in hell and heaven, but negatively to church attendance'.

Grier (1995) starts his empirical research because of the fact that, after the writing of Weber (1930) about the relationship between Protestantism and economic development, a lot of scientists argues without solid empirical tests that the relation between Protestantism and economic growth is negative (Morse, 1964; Harrison, 1985). Despite of these books he verifies, based on some previous literature, the hypothesis that Protestantism is positively associated with economic growth. His dataset exists of data from chiefly British, French, and Spanish ex-colonies. As religion variable he uses the growth rates of the number of Protestant

adherents. The results of his research show that Protestantism is positively and significantly correlated with (real) income per capita.

Cornwell (2005) analyzes 'the separate effects of childhood religious affiliation and participation on both the labor supply and wages of young adult women'. The effect of religious affiliation and participation of women on their wages (payment per hour), the most relevant variable for this paper, is insignificant and does not give a clear effect. The data is based on the USA. Lipford and Tollison (2003) argue that religious participation reduces the income of the participants. In their paper they state that religion 'can have an important effect on the level of income of its adherents by altering their preferences towards afterlife consumption and by requiring time and monetary commitments that discourage the acquisition of material wealth'. The empirical part of their research shows a negative effect of religious participation on income (and vice versa), by using US data on income per capita and church membership.

As opposed to the already mentioned studies, Mangeloja (2005) uses the religious production efficiency variable. This variable measures the relation between believing and attending. The data includes time series for eight OECD countries (USA, Germany, Japan, Spain, Finland, Sweden, Norway and Denmark), from 1971 to 2001. The effect of religious production efficiency on economic growth is only significant for Finland, the other countries do not show significant results. This can be explained by Finland's 'unique religious market properties, as the level of religious beliefs have historically been unusually high and continue to be'.

Bettendorf and Dijkgraaf (2005) estimate separately a religion and an income equation, but mention that a 'joint regression is preferred since this generally yields more efficient estimates'. Consequently they also engage a joint regression. The separate estimation shows a negative effect of income on religion (and vice versa). However, this effect becomes insignificant in the case of joint regression. They measure religion by religious membership and participation and use data of 27.908 Dutch households. Another research of Bettendorf and Dijkgraaf (2010) is focused on a dataset of the European World Values Survey and consists of a wide variety of religious measures and respondent characteristics. Despite of the findings of Mangeloja (2005), who does not show a clear effect of religion on economic growth (in eight different countries), their aim is to test 'whether the behavior of households in different countries is homogeneous'. They find that the effects of religion on income are different for low-income and high-income countries. Religion has a positive effect on income



high-income countries and the effect is negative in the case of low-income countries. This result is confirmed by all the different religious measures (church membership, participation, etc.).

Nearly all of the (empirical) research above show an effect of religion on economic growth. However, they show contradictory results. Some studies show a negative and other studies a positive result. Like mentioned in the introduction, this contradiction is due to the use of different data levels (men, women, etc.), various countries, different measures of religion, and a varying focus on different denominations (Jewish, Protestant, Catholic, etc.). However, previous research indicates an (context specific) effect of religion on economic growth. This effect may be an indicator of a possible effect of religion on entrepreneurship, a key driver of economic growth. In the next paragraph the relation between economic growth and entrepreneurship is discussed first.

### **Entrepreneurship and the effect on economic growth**

Drivers of economic growth are important research subjects. One subject that becomes increasingly important is entrepreneurship. Before giving attention to the effect of entrepreneurship on economic growth, the concept of entrepreneurship is reviewed.

The value of entrepreneurship is researched during hundreds of years. Cantillon (1755) sees the entrepreneur as somebody who is responsible for the exchange and circulation in the economy. Knight (1921) highlights the importance of risk (calculable uncertainty) and uncertainty (outcome of a unique event) in the process of arbitrage. In this process of arbitrage the entrepreneur is responsible for direction and control whenever uncertainty is involved. Kirzner (1973) sees an entrepreneur as an arbitrageur who is alert to profitable opportunities. This entrepreneur is not necessarily a risk taker and is not always innovative. Say (1803) has a broader view on the entrepreneur and attributed a managerial role in production and distribution. He states that entrepreneurs create utility (or wealth) by giving existing factors of production an utility they did not possess before. As opposed to Kirzner (1973), Schumpeter (1934) sees the entrepreneur as an innovator. Entrepreneurial behavior disturbs the status quo and creates a disequilibrium (by introducing new products and services and combining existing production factors in a renewing way).

Based on his questionnaire, Gartner (1988) lists the most important elements that should be included in the definition of an entrepreneurship. The most important ones are ‘the creation of

a new business', 'new venture development', 'the creation of a new business that adds value', 'integrates opportunities with resources to create product or service', 'brings resources to bear on a perceived opportunity', 'refines a creative idea and adapts it to a market opportunity' and 'innovative'. Two years later Gartner (1990) comes with the broad definition of 'the process of new business creation'. According to Shane and Venkatraman (2000) entrepreneurship has firstly something to do with the entrepreneur and who he or she is. Nevertheless, the elements of 'lucrative opportunities' and 'enterprising individuals' may not be absent. They come to the definition of entrepreneurship as 'the scholarly examination of how, by whom and with what effects opportunities to create future goods and services are discovered, evaluated and exploited'.

Sternberg and Wennekers (2005) add two important notions to the view on entrepreneurship and moreover the entrepreneur: the 'occupational notion' and the 'behavioral notion'. The first one refers to the individuals that are owning and managing a business for their own account and risk and the second one to the entrepreneurial behavior in the sense of seizing an economic opportunity (Sternberg and Wennekers, 2005). Also these two notions emphasize the importance of the two elements of 'simply' starting a business and seeking and exploiting opportunities as a real entrepreneur. Despite of rich literature on the definition of entrepreneurship, there is no clear and common definition. The short summary of the literature above gives just a small view on some elements of the definition of entrepreneurship.

A lot of researchers signify the positive effect of entrepreneurship on economic growth (Audretsch et al., 2006; Carree and Thurik, 2003; Wennekers and Thurik, 1999). Van Praag and Versloot (2007) review recent research about the value of entrepreneurship. They look at four parts of contribution: employment, innovation, productivity and growth, utility. They find that entrepreneurs create, relative to their counterparts, more employment in a dynamic way (less job security and volatile process of job creation). Entrepreneurs do not spend more on R&D than their counterparts, but the expenditures are more efficient. The contribution of entrepreneurs to labor an total factor productivity is relative low, but the growth rates are high. Finally they found that the absolute wage of an entrepreneur is relatively low. However, entrepreneurs have higher levels of job satisfaction.

Scientific research seems to be unambiguous about the question whether entrepreneurship is a contributor of economic growth. Entrepreneurship does have a positive effect on economic growth through different channels, that are summarized by van Praag and Versloot (2007).

### **Entrepreneurship and the entrepreneurial choice**

Like mentioned in the introduction, the comparison between the income of being an entrepreneur and the income of being an employee influences the decision of individuals to become an entrepreneur (Kihlstrom and Laffont, 1979). A lot of other factors influence this decision too. Despite of studies of researchers like Evans and Jovanovic (1989), which show that wealthier individuals are more inclined to make the choice to become an entrepreneur because capital is essential for starting up a business, Douglas and Shepherd (2000) argue, based on the research of Baumol (2000), that further (empirical) research on entrepreneurship and especially the entrepreneurial intention is required. Further research has to answer the question why an individual makes the choice to become an entrepreneur.

Douglas and Shepherd (2000) claim that individuals will become an entrepreneur when the total utility they expect to derive (via income, independence, risk bearing, work effort, and perquisites associated with self-employment) is greater than the expected utility from the best employment alternative. Two years later Douglas and Shepherd (2002) confirm, without using the assumptions of rationality, that individuals really consider risk, independence, and income when they evaluate their different career opportunities. Income is the most important consideration, followed by risk and independence (Douglas and Shepherd, 2002). ‘The intention to be an entrepreneur is stronger for those with more positive attitudes to risk and independence. That is, the higher the individual’s tolerance for risk, and the more positive their attitude to decision making autonomy, the stronger is their stated intention to be an entrepreneur (Douglas and Shepherd, 2002).’ Also Cramer et al. (2002) find support in their data that risk aversion of a certain individual negatively affects the choice to become an entrepreneur. Income and expected work effort do not influence the entrepreneurial intention in a significant way (Douglas and Shepherd, 2002). An individual does not become an entrepreneur to ‘get rich’.

Parker (2004) reports that a ‘broad consensus has now been reached on the impact of many determinants of entrepreneurship’. He makes a clear summary of these determinants. The most obvious positive influences on measures of entrepreneurship (often the likelihood and/or the extent of entrepreneurship) are age, labor market experience, marital status, having a self-

employed parent and average rates of income tax. Negative influences are greater levels of risk and higher interest rates.

Also Parker (2004) suggests that more research is required to extend the knowledge about the individual and environmental determinants of entrepreneurship. The individual determinants are based on the motivation of the individual. This motivation can be divided into two categories: intrinsic motivation, that arises from the intrinsic value of entrepreneurship for the individual, and extrinsic motivation, that arises from the desire to obtain some outcomes (such as rewards) that are apart from entrepreneurship itself (Amabile, 1997). The intrinsic motivation to become an entrepreneur arises from the individual himself. Studies about the effect of religion on entrepreneurship are mainly looking at this phenomenon as initial concept and try to explain if and/or how religion affects the choice to become an entrepreneur through intrinsic motivation (based on a certain religion). In this way these studies add more knowledge to the research area about the determinants of entrepreneurship. The three most important studies of this field are discussed in the next paragraph.

### **Religion and entrepreneurship**

The paper of Dana (2009) reviews previous literature about religion and entrepreneurship. Based on previous research there is considerable empirical support for the statement that religion influences entrepreneurship. This is explained and extended with seven conclusions. Religions value entrepreneurship differently, yield various patterns of entrepreneurship, have their own 'specialization along religious lines' and therefore shape entrepreneurship, possess their own networks that affect entrepreneurship, provide opportunities for entrepreneurship, may restrict entrepreneurial enthusiasm and have their own valuation mechanisms. Finally, each individual, religious or not, will be influenced by the values that the local religions carry out.

Audretsch et al. (2007) do some more specific analyses with a focus on data of the National Sample Survey Organization (NSSO) from India. Their survey, based on a household level, is used to research if religion matters in the decision to become an entrepreneur. They find that religion in India influences this decision. India contains diverse religions. Some of the religions positively affect the entrepreneurial decision, such as Islam and Christianity, while others, especially Hinduism, inhibit entrepreneurship. When an individual belongs to a backward caste, also the caste system has a negative effect on entrepreneurship. This can be explained by the limits of freedom of occupational choice in the backward classes. In the case

of India the insight of Weber (1930), that religion has an important influence on economic behavior, holds. Actually they only show that religion has a negative as well as a positive influence.

As opposed to Dana (2009) and Audretsch et al. (2007) does the paper of Dodd and Gotsis (2007) give attention to the interrelationship of religion and entrepreneurship. Previous research only covers the single effect of religion on entrepreneurship. The interrelationship is very context specific and will mainly differ over time and between social settings. Although the fact that entrepreneurship is different than economic growth, this finding seems to be in line with the presumption of Bettendorf and Dijkgraaf (2005) and their findings five years later that the effect of religion on economic growth (and vice versa) differs across countries (Bettendorf and Dijkgraaf, 2010). Another considerable important finding is that 'the individual elements making up an entrepreneur's belief matrix influence the entrepreneurial process'. The individual perception of religion plays a significant role in the choice of becoming an entrepreneur. Especially when 'religious salience' is high, a religious background is more important in the decision making process. Which elements of this religious perception exactly shape the entrepreneurial choice, is unclear. In line with the study of Dana (2009) religious groups can provide a network and the resources for the creation of entrepreneurial (social) capital (Dodd and Gotsis, 2007).

The papers of Audretsch et al. (2007) and Dodd and Gotsis (2007) do not investigate how religion exactly affects the choice to become an entrepreneur. Dana (2009) studies the effect of religion on entrepreneurship and finds that religions value entrepreneurship differently and have their own valuation mechanisms. Despite of his paper it is not possible to give a clear view on the effect of religious values on the intrinsic motivation of an individual to become an entrepreneur. This research is the first study that gives information about the effect of some specific religious values on the choice to become an entrepreneur. More detailed, this research investigates the effect of three Christian values on the choice of a Christian to become an entrepreneur. Through this way the question whether religion and especially religious values influence entrepreneurship is extended.

### **Christian entrepreneurship**

One of the religions that may influence entrepreneurship is Christianity, a religion with a history of many centuries. Christianity in Europe exists since approximately two thousand years and therefore a lot of societies have Christian roots. Especially the Netherlands have a

large Christian history and the influence of Christianity on the society is relative high. Therefore, this Christian history of the Netherlands may also influence Dutch entrepreneurship.

In the next three paragraphs three Christian aspects, that may influence entrepreneurship, will be explained. First the concept of vocation, based on literature about this phenomenon of Badcock (1998) and Goossens (2006). Afterwards the duty to add value to the society, following literature about social and sustainable entrepreneurship and literature about the effect of religious values on facing dilemmas and the intensity of attaching weight to socially responsible business conduct. The final aspect is about the preference of a Christian to work in a Christian workplace, originating from literature about spirituality and religion at the workplace.

### **Vocation**

For many Christians the Bible is their directory for their daily life. According to the Bible, the word 'vocation' means 'calling', translating the Latin word 'vocare', and refers to a personal or collective summons by God (Badcock, 1998; Goossens, 2006). Based on this vocation many Christians see their work as more than just a natural necessity. Their behavior during and after their work is based on their perception of the will of God. The will of God is revealed in the Bible and will be served by doing this will in an everyday sense, in action and deed (Badcock, 1998).

Entrepreneurship may be a sufficient way to serve the vocation of a Christian, more than only being an employee and serving the management. An entrepreneur has the possibility to make his own choices and follow his vocation and serve the will of God. This is less possible in the case of a wage worker who has to follow the choices of the managers.

Christian entrepreneurs constantly consider how their marketplace activities fit within the context of their life's calling or vocation (Goossens, 2006). This calling or vocation may provide the underlying motivation of the entrepreneurial choice and actions of the Christian entrepreneur.

To test the role of vocation in the life of a Christian entrepreneur, a hypothesis is formulated. The first hypothesis tests whether a Christian entrepreneur sees his work as a vocation of God, more than a Christian employee. After testing the hypothesis it has to be clear whether vocation plays a more important role in the life of a Christian entrepreneur compared to a

Christian employee. This hypothesis clarifies whether the concept of vocation affects the choice of a Christian individual to become an entrepreneur.

*Hypothesis 1:*

*A Christian entrepreneur sees his work as a vocation of God, more than a Christian employee.*

To test this hypothesis some sub hypotheses are formulated. They are based on four different variables (see the ‘Data’ chapter) which measure the importance of vocation for Christian entrepreneurs and employees.

*Hypothesis 1A: The faith of a Christian entrepreneur plays a bigger role in making his occupational choice, than in the case of a Christian employee.*

*Hypothesis 1B: A Christian entrepreneur does see his work as a vocation of God, more than a Christian employee.*

*Hypothesis 1C: A Christian entrepreneur is driven by Gods call, more than a Christian employee.*

*Hypothesis 1D: The calling of God, in the case of job changing, has a higher impact on a Christian entrepreneur than on a Christian employee.*

### **Value to society**

The second part deals with the Christian drive to add value to the society. First the explanation of the concept of sustainable entrepreneurship is necessary.

Entrepreneurship and sustainable development are related in terms like ‘ecopreneurship’, ‘social entrepreneurship’, ‘sustainable entrepreneurship’ and indirectly ‘institutional entrepreneurship’ (Schaltegger and Wagner, 2011). Schaltegger and Wagner (2011) review relevant literature about these concepts and sum up the motivations and goals of these different kinds of sustainability oriented entrepreneurship. The ‘core motivation’ of ecopreneurship is to ‘contribute to solving environmental problems and create economic value’, of social entrepreneurship to ‘contribute to solving societal problems and create value for the society’, in the case of institutional entrepreneurship to ‘contribute to changing regulatory, societal and market institutions’, and of sustainable entrepreneurship to ‘contribute to solving societal and environmental problems through the realization of a successful

business'. Secondly, the 'main goal' of ecopreneurship is to 'earn money by solving environmental problems', of social entrepreneurship to 'achieve a societal goal and secure funding to achieve', in the case of institutional entrepreneurship to 'change institutions directly', and of sustainable entrepreneurship to 'create sustainable development through entrepreneurial corporate activities'.

Especially in the case of social entrepreneurship the motivation is to solve societal problems and create value for the society and also sustainable entrepreneurship tries to solve societal problems (by running a successful business). Both forms of entrepreneurship serve the society. A Christian may feel the moral duty to serve and add value to the society, based on his faith. This duty may influence business dilemmas and the orientation toward social and sustainable entrepreneurship. Graafland, Kaptein and Mazereeuw-van der Duijn Schouten (2006) explore the relation between religious belief and possible dilemmas in daily business of Dutch executives. They find that the frequency at which dilemmas arise is directly related to religious belief. This may indicate that also Christian values will evoke dilemmas. Entrepreneurship may be an accurate way to solve these dilemmas in a personal way. In the same year Graafland, Mazereeuw-van der Duijn Schouten and Yahia (2006) investigate the relationship between the Islamic religion and the level of socially responsible business conduct (SRBC) of Islamic entrepreneurs. First they find that Islamic entrepreneurs attach higher weights to some specific elements of SRBC. However, they also find that Muslims less apply SRBC in practice compared to non-Muslim managers. Nevertheless it is not possible to state that also Christians will less apply SBRC in practice (compared to non-Christian) because the Islam really differs from Christianity. Graafland and Mazereeuw-van der Duijn Schouten (2007) provide, in their research on the influence of eschatological beliefs of executives on their SRBC, weak evidence that eschatological beliefs affect the executives' SRBC. Graafland, Kaptein and Mazereeuw-van der Duijn Schouten (2007) argue that the relationship between the conception of God of Dutch executives, norms and values and business conduct exists. They also find that 'executives with a monotheistic conception of God display a stronger orientation toward socially responsible business conduct than executives with a pantheistic conception of God'. These two findings may be an indication that Christian beliefs, founded on a monotheistic religion, affect the tendency to get involved in social en sustainable entrepreneurship and add value to the society.

To test the possible additional drive of Christian entrepreneurship to add value to the society, a second hypothesis is created. This hypothesis tests whether Christian entrepreneurs have a



stronger drive to add value to the society than a Christian employee and whether this drive is therefore associated with the entrepreneurial choice of a Christian.

*Hypothesis 2:*

*A Christian entrepreneur has more drive to add value to the society through his job, compared to a Christian employee.*

To test this hypothesis, again four sub hypotheses are formulated. They are based on four different variables (see the 'Data' chapter) which measure the drive to add value to the society (for entrepreneurs and employees).

*Hypothesis 2A: A Christian entrepreneur thinks it is important that a Christian management has a larger duty to sustainable entrepreneurship than a non-Christian management, more than a Christian employee.*

*Hypothesis 2B: An entrepreneur thinks that he adds more value to the society (as a Christian compared to a non-Christian), compared to an employee.*

*Hypothesis 2C: A Christian entrepreneur thinks he directly has more positive influence on the society, compared to a Christian employee.*

*Hypothesis 2D: A Christian entrepreneur thinks it is his Christian duty to be serviceable to the society, more than a Christian employee.*

### **Christian workplace**

The attention to research on workplace spirituality and religion is growing (Giacalone and Jurkiewicz, 2003). According to the reviewing study of Garcia-Zamor (2003) there is clear empirical evidence that freedom for spirituality at workplaces results in a new organizational culture where employees feel happier and perform better, compared to organizations without freedom for spirituality. The effect (of freedom for spirituality) on motivation, the immunity for stress, creativeness and morale of the employees is also positive (Garcia-Zamor, 2003). Spirituality can be defined as 'the quest for meaning in life in a personal manner' (Goossen, 2004). For certain individuals this quest may be fulfilled by Christianity and for others in a total different way.

Based on the literature listed above, a Christian may have the preference to work in Christian environment. Due to the fact that this is not always possible through wage work,

entrepreneurship is a possibility. By starting up a business, the entrepreneur is able to create an organization with a Christian workplace and may feel happier and perform better. Also his motivation, immunity for stress, creativity and morale will possibly benefit. Besides that, the entrepreneur has the opportunity to develop an organization with freedom for religious and spiritual needs and offers this workplace to other employees (Goossen, 2004).

To test whether an entrepreneur really prefers a Christian workplace, more than a Christian employee, the final hypothesis is developed. Hypothesis three tests whether a Christian entrepreneur will appreciate a Christian workplace (over a non-Christian workplace), more than a Christian employee. Through this way this hypothesis will test whether the appreciation of a Christian workplace influences the choice to become an entrepreneur.

*Hypothesis 3:*

*A Christian entrepreneur will appreciate a Christian workplace, more than a Christian employee.*

Also for the third hypothesis some sub hypotheses are drawn up. They are once more based on four different variables (see the 'Data' chapter) which measure the appreciation of the Christian workplace by entrepreneurs and employees.

*Hypothesis 3A: A Christian entrepreneur prefers a Christian workplace over a non-Christian workplace, more than a Christian employee.*

*Hypothesis 3B: (Imaginary) A Christian entrepreneur will prefer a Christian management over a non-Christian management, more than a Christian employee.*

*Hypothesis 3C: A Christian entrepreneur prefers the work climate in a Christian workplace over the work climate in a non-Christian workplace, more than a Christian employee.*

*Hypothesis 3D: (Imaginary) A Christian entrepreneur prefers a Christian colleague over a non-Christian colleague in the same function, even when the non-Christian colleague better fits the function profile, more than a Christian employee.*

### III. DATA

After reviewing relevant literature and formulating different hypothesis, this section covers the created and used data. First the process of data generation and the different institutions that are approached for assistance are considered. Besides that this section explains several choices that are made.

#### **The idea**

Data about entrepreneurship and religion in the Netherlands is scarce. Only the CBS (Centraal Bureau voor de Statistiek), an institute that collects, edits and publishes statistics on behalf of the government, science and business, has some data about entrepreneurship and religion, measured as membership of a church and attendance during religious worships. This dataset is not extensive and does not contain information about the effect of religious values.

Because data about the effect of religious values on the choice (of Christians) to become an entrepreneur is not available, creation of new data was committed. A survey among Christians through the Netherlands would be accurate to gather data in a relative short term. The first consideration was how it would be possible to reach a large number of Christians, across the Netherlands, that are willing to respond. Through good connections two Christian trade unions, the RMU (Reformatorisch Maatschappelijke Unie) and the CGMV (Chirstennetwerk Gereformeerd Maatschappelijk Verbond) were willing to cooperate.

#### **RMU and CGMV**

The RMU is a trade union, with 16.000 members through the whole country, that protects the interests of their members by personal advice, negotiations, judicial advice, and expertise. Besides that they give information about work, salary and working conditions issues. The organization is not only available for employees, but also for entrepreneurs and own account workers in all age categories.

Reformatory social union (RMU directly translated) stands for the Bible as initial concept of their operations, the principle and practical aspects of employment and the society are the essence of their organization, and employees, employers and independents are working harmonious in one union.

The RMU has four core objectives. First they want to promote the reconsideration on the social functioning of the members. They also stimulate the cooperation between employers,

employees and independents. Adjacent to it, they assistance members in a personal way, also by juridical advice. Finally they look after the social and economic interests of their members.

The CGMV is a Christian trade union, with more than 11.000 members through the whole country, that connects people and their work by representing the interests of employees and employers. They also function as a network for Christians and they offer opportunities to connect to one another in the work field. Their members include employers, employees, benefit recipients, and volunteers.

Christian network reformed social union (CMGV directly translated) stands for inspiration and support for the members in providing livelihood, personal development and in servicing other member of the society according to the meaning of God. Through this way their members are admitted to the union when obstacles occur and are free to do their work.

The purpose of the CGMV is to respond to questions about work and income, offer legal assistance and career guidance, represent groups of the members at their employers, and facilitate networks for the members.

These two organizations are very suitable for this research because they cover the target group of this research, Dutch Christians with different backgrounds across the whole country.

### **The questionnaire**

The questionnaire is posted online and forwarded by the RMU and the CGMV to all their members, with the explicit request to fulfill this questionnaire and stimulate research on Christian entrepreneurship by lending an ear to this request. The members of the two unions are distributed across the whole country and are united with different Christian churches, from orthodox to relative liberal.

In the introduction the entrepreneur is defined as an ‘independent business owner’, large and small scale. The introduction also pointed to the importance of the response of both employers and employees.

The total questionnaire consists of 38 questions about general information of the respondents. This general information is used to include conceivable control variables in the final model. After this general part, the more specific part with research information follows. This part entails 12 questions (postulated as statements) about the three hypotheses and will be used as

the most important variables to confirm or invalidate the hypotheses. For all the questions and statements a category called ‘I do not want to say that’ is included.

## **Variables**

The dependent variable of this research is the entrepreneur variable. A dummy variable that describe if the respondent is an entrepreneur or not. This variable equals one in the case of an entrepreneur and zero in the case of an employee. The entrepreneur is defined as an independent business owner.

The questions and statements in the part of independent variables are based on a survey of the European Union. The European Commission’s Directorate-General ‘Enterprise and Industry’ studied the development of entrepreneurship in EU member states for a long time and this resulted in a dataset called ‘Eurobarometer Survey on Entrepreneurship’. This dataset exists of a lot of important variables which may be valuable in research on entrepreneurship. A lot of these variables are included in this research and give general information about issues like age, gender, nationality, number of children, education, skills, opportunity perception, network opportunities, and risk aversion and are based on this survey. Some of these variables will be relevant control variables and are used in the models (which are explained in the next chapter).

Some other conceivable control variables are added to control for the importance of religion for the respondent. This aspect is captured by the statement whether religious belief is important for the daily life and if religious belief determines the doings of the respondent. Also two questions are asked about the membership of a church or Christian community.

The most important part of the survey is the final part about research specific information. Through twelve questions, four for each hypothesis, the different hypotheses will be tested. The first set of four questions deals with the concept of vocation. The first question states that religion has (had) an influence on the occupational choice of the respondent, the second one states that he perceives his work as a vocation of God, the third statement asserts that the respondent is driven by the orders of God and the final one claims that he will not change his job before he knows that God calls him for another job.

The next four questions are statements that cover the aspect of adding value to the society. This part starts with the statement that a company with a Christian management has to be more committed to social responsible entrepreneurship than a company without a Christian

management, continues with the statement that the respondent is, as a Christian, more valuable for the society compared to somebody who is not a Christian, thirdly states that the work of the respondent has a direct positive influence on the society and ends by asserting that the respondent sees it as a Christian duty to be valuable for the society.

Finally the third hypothesis is covered by four questions about the importance of a Christian workplace. The first question states that the respondents prefers to work in a Christian workplace over a non-Christian workplace, secondly the respondent is confronted with the statement that he prefers a Christian management over a non-Christian management, the third question states that the respondent appreciates the work sphere in a Christian company more than in a non-Christian company and this part ends by stating that in the situation of an application the respondent prefers an Christian employee, who not perfectly fits the vacancy profile, over a non-Christian employee, who perfectly fits the vacancy profile.

The answer categories differ per question. Some questions are open and some questions closed. The categories of the closed questions are mostly 'yes or no' and 'totally agree, agree, neutral, disagree or totally disagree'. All the questions and answer categories are available in the appendix.

## **Dataset**

The survey, accessible between 08-04-2013 and 27-05-2013, resulted in dataset with 1399 respondents and a total amount 892 fully completed questionnaires with each 50 questions. Because many respondents did not complete all the questions, 507 questionnaires were worthless. Some of the respondents did not really answer some questions and answered the question with 'I do not want to say that'. This answer category is decoded as a missing value and will be excluded in the analyses.

## IV. METHODS

This chapter explains how models are generated to test the different hypotheses. All the different hypotheses say something about the difference of a religious value between Christian entrepreneurs and Christian non-entrepreneurs. Therefore the models have an dependent variable that equals one if the respondent is an entrepreneur and zero otherwise. The different models exist of the main independent variables about vocation, the duty to add value to the society, and the importance of a Christian workplace and show the effect of these variables on the likelihood to be an entrepreneur. Significant results will indicate whether there is a difference between entrepreneurs and non-entrepreneurs.

Because of the dependent dummy variable, logistic regression is used for all the different models. Like mentioned in the paragraphs above the dependent variable equals one if the respondent is entrepreneur and zero otherwise. The main independent variables are based on the three different main hypotheses and subdivided in four different variables. This results in three main models:

Model 1

*Entrepreneur* =

$$\beta_1 + \beta_2 \text{vocation} + \beta_3 \text{man} + \beta_4 \text{married} + \beta_5 \text{children\_below\_12} + \beta_6 \text{children\_12\_and\_above} \\ + \beta_7 \text{secondary\_education} + \beta_8 \text{intermediate\_vocational\_education} + \beta_9 \\ \text{higher\_professional\_education\_and\_scientific\_education} + \beta_{10} \text{entrepreneurial\_parent} + \beta_{11} \\ \text{employment} + \beta_{12} \text{entrepreneurial\_family} + \varepsilon$$

The vocation variable consists of four variables:

- Occupational choice

Statement: Religion has (had) an influence on my occupational choice

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Vocation

Statement: I perceive my work as a vocation of God

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Gods call

Statement: I am driven by the orders of God

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Different vocation

Statement: I will not change my job before I know that God calls me for another job

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

#### Model 2

*Entrepreneur* =

$$\beta_1 + \beta_2 \text{ value\_to\_society} + \beta_3 \text{ man} + \beta_4 \text{ married} + \beta_5 \text{ children\_below\_12} + \beta_6 \text{ children\_12\_and\_above} + \beta_7 \text{ secondary\_education} + \beta_8 \text{ intermediate\_vocational\_education} + \beta_9 \text{ higher\_professional\_education\_and\_scientific\_education} + \beta_{10} \text{ entrepreneurial\_parent} + \beta_{11} \text{ employment} + \beta_{12} \text{ entrepreneurial\_family} + \varepsilon$$

The value to society variable consists of four variables:

- Sustainable entrepreneurship

Statement: A company with a Christian management has to be more committed to social responsible entrepreneurship than a company without a Christian management

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Add value to society

Statement: As a Christian, I am more valuable for the society compared to a somebody who is not a Christian

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Positive influence

Statement: My work has a direct positive influence on the society

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Duty to be serviceable

Statement: I see it as a Christian duty to be valuable for the society

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)



Model 3

*Entrepreneur* =

$$\beta_1 + \beta_2 \text{christian\_workplace} + \beta_3 \text{man} + \beta_4 \text{married} + \beta_5 \text{children\_below\_12} + \beta_6 \text{children\_12\_and\_above} + \beta_7 \text{secondary\_education} + \beta_8 \text{intermediate\_vocational\_education} + \beta_9 \text{higher\_professional\_education\_and\_scientific\_education} + \beta_{10} \text{entrepreneurial\_parent} + \beta_{11} \text{employment} + \beta_{12} \text{entrepreneurial\_family} + \varepsilon$$

The Christian workplace variable consists of four variables:

- Preference

Statement: I prefer to work in a Christian workplace over a non-Christian workplace

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Christian management

Statement: I prefer a Christian management over a non-Christian management

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Work climate

Statement: I appreciate the work sphere in a Christian company more than in a non-Christian company

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

- Christian colleague

Statement: In the situation of an application I prefer an Christian employee, who not perfectly fits the vacancy profile, over a non-Christian employee, who perfectly fits the vacancy profile

Answer categories: Totally agree (1), Agree (2), Neutral (3), Disagree (4), Totally disagree (5)

All the models control for possible differences due to age, gender, marital status, education, employment (for 12 hours or more), having entrepreneurial family, and the number of children. The age variable shows the year of birth of the respondent, with 1995 as the first year that equals one. Increasing numbers point to increasing ages. The variable about gender equals one in the case of a man en zero in the case of a woman. According to the data, more

than eighty percent of the respondents is married. Due to this number, a variable is created that equals one if the respondent is married and zero otherwise (more categories are not essential). For education some categories are required, because the highest education a respondent ever completed show a relative broad distribution. Four dummy variables are created. They equal one in the case of secondary education, intermediate vocational education, higher professional education and scientific education, and any other education (as the highest education ever completed). The final dummy is omitted to prevent collinearity. The models also control for the number of children. The first variable describes the number of children below twelve and the second variable the number of children of or above twelve. The reason behind this division is that children of twelve will mostly receive secondary education and this may increase the independency of the parents. Two variables are about family. The first one is equal to one if the respondent has at least one entrepreneurial parent (in-law) and zero otherwise and the second variable equals one if the respondent has a least one entrepreneurial family member and zero otherwise. Finally the models control for the hours of employment. According to the CBS, the limit for belonging to the labor force is equal to twelve hours (weekly). The dummy variable is equal to one if the respondent has work for more than twelve hours and is equal to zero if not.

## V. RESULTS

The data is analyzed with the reported methods. This fifth chapter starts with descriptive statistics of the relevant and interesting variables. After this general part the hypotheses the results of the hypotheses tests are shown and interpreted.

### **Descriptive statistics**

The first table shows the descriptive statistics of nearly all the variables for the total sample, entrepreneurs and non-entrepreneurs. The average year of birth is 1970 (1 = 1995), does not differ a lot between entrepreneurs and non-entrepreneurs and has a large standard deviation. This means that the age of the respondents relatively differs a lot. The dataset consists for more than half of men and this category is overrepresented as well in the entrepreneur group. More than eighty percent is married and also in this case this category shows a higher percentage in the entrepreneur category. The average amount of children below 12 is around one and the amount of children of 12 and above is around two. Both variables seem to be higher in the case of entrepreneurs. All the respondents have a Dutch nationality.

The highest completed education is for the total sample on average intermediate vocational education. This is also the case for the non-entrepreneur part, but the highest mean for entrepreneurs is higher professional education and scientific education. The entrepreneurs seems to be higher educated, while the age at which somebody stops with studying does not really differ between the two groups and has a mean of 19 (according to the total sample).

On average 36,7 percent of the respondents has an entrepreneurial parent or parent-in-law. The percentage of non-entrepreneurs is 35,3 and nearly eight percent lower than in the case of entrepreneurs. This may be an indicator that the entrepreneurs have more entrepreneurial parents. The difference is also present in the means of the variable about family members, but is smaller compared to the entrepreneurial parent variable. Nearly the total sample does have a job for more than 12 hours. The variable that indicates that the respondent is an own account worker or not (equals one if own account worker and two if not), shows that only nine percent of the total sample is own account worker and they mostly characterizes themselves as entrepreneurs.

Nearly all the respondents are members of a Christian community (the membership variable equals one if the respondent is a member and two if not). About the religious belief two variables are included in this table. One whether they determine the daily life and one whether

they determine the doings of the respondent (one is totally agree, two is agree, three is neutral, four is disagree and five is totally disagree). The means show values that are very close to one, so on average the sample seems to agree with both questions. Besides that the difference between entrepreneurs and non-entrepreneurs, entrepreneurs agree on average a little bit more, is small.

The statement ‘I think it is important that people take social and ecological responsibility in their doing’ resulted in an average of 1.753 (one is totally agree, two is agree, three is neutral, four is disagree and five is totally disagree). This means that on average the respondents (totally) agree with this statement. Entrepreneurs seems to (totally) agree a little bit more than non-entrepreneurs.

Table 1 also gives some descriptive statistics about the main independent variables about vocation, adding value to the society and the importance of a Christian workplace. All the variables of the part about vocation show a difference between the categories of entrepreneurs and non-entrepreneurs. The category of entrepreneurs does agree more with the statements compared to the non-entrepreneurs. In other words, the importance of vocation seems to be larger for Christian entrepreneurs compared to Christian employees. These differences between means are also present in the second category about adding value to the society. However, in this case the differences are smaller than in the previous category. The differences between means in the third category about the importance of a Christian workplace are even smaller. This may indicate that the importance of these concepts of adding value to the society and working in a Christian workplace do less differ between Christian entrepreneurs and Christian employees (compared to the concept of vocation).

Table 1: Descriptive statistics

	Total	Entrepreneurs	Non-entrepreneurs
N	879	173	706
Year of birth	26.005 (13.509)	27.376 (13.165)	25.847 (13.537)
Man	0.741 (0.438)	0.878 (0.328)	0.709 (0.455)
Married	.801 (0.400)	0.912 (0.284)	0.776 (0.417)
Children (below 12)	0.929 (1.476)	1.237 (1.569)	0.861 (1.453)
Children (12 and above)	2.011 (2.235)	2.630 (2.171)	1.876 (2.234)

Nationality	1 (0.000)	1 (0.000)	1 (0.000)
Secondary education	0.182 (0.386)	0.140 (0.348)	0.191 (0.393)
Intermediate vocational education	0.395 (0.489)	0.343 (0.476)	0.405 (0.491)
Higher professional education and scientific education	0.377 (0.485)	0.479 (0.501)	0.358 (0.480)
Other educational background	0.046 (0.210)	.047 (0.211)	0.046 (0.209)
Age of stop studying	19.357 (4.587)	20.092 (5.705)	19.220 (4.283)
Entrepreneurial parent (in-law)	0.367 (0.482)	0.434 (0.497)	0.353 (0.478)
Employment (more than 12 hours)	0.942 (0.234)	0.948 (0.223)	0.942 (0.234)
Entrepreneurial family (member)	0.796 (0.404)	0.855 (0.353)	0.783 (0.413)
Own account worker	1.912 (0.283)	1.665 (0.473)	1.972 (0.166)
Membership Christian community	1.010 (0.100)	1.006 (0.076)	1.011 (0.106)
Religious belief and daily life	1.400 (0.581)	1.324 (0.560)	1.419 (0.586)
Religious belief and doing	1.811 (0.723)	1.734 (0.698)	1.828 (0.731)
Social and ecological responsibility	1.753 (0.557)	1.674 (0.539)	1.772 (0.559)
Occupational choice	2.963 (1.047)	2.838 (1.061)	2.991 (1.045)
Vocation	2.445 (0.897)	2.273 (0.905)	2.487 (0.892)
Gods call	2.392 (0.800)	2.233 (0.782)	2.430 (0.803)
Different vocation	2.796 (0.938)	2.655 (1.002)	2.829 (0.924)
Sustainable entrepreneurship	2.124 (0.961)	2.046 (0.881)	2.148 (0.985)
Add value to society	3.470 (0.916)	3.453 (0.932)	3.476 (0.912)
Positive influence	2.595 (0.779)	2.486 (0.720)	2.615 (0.787)
Duty to be serviceable	2.019 (0.645)	1.908 (0.563)	2.038 (0.652)
Preference	2.692 (1.048)	2.688 (1.124)	2.695 (1.028)
Christian management	2.811 (1.027)	2.849 (1.060)	2.805 (1.018)

Work climate	3.090 (0.945)	3.012 (0.985)	3.110 (0.933)
Christian colleague	3.256 (0.992)	3.192 (1.126)	3.271 (0.962)

Standard deviations are reported in brackets.

The correlation results of table 2, at page 53, show relative high and negative correlations between the entrepreneur variable and the vocation variables. Also the third and fourth variable of the value to society category show relative high and negative coefficients. All the other correlations are relative low. The negative results indicate that entrepreneurs seem to agree more with the statements. Further analyzing these results show that the first four correlation coefficients are significant. Also the coefficients of the correlations between the variables called ‘add value to society’ and ‘positive influence’ and the dependent variable are significant. These results are consistent with the numbers of table 1.

The results of the three times four models show different numbers of observations. This is due to the missing values that are generated as a result of the ‘I do not want to say that’ category.

### **Vocation**

The first main hypothesis of the specific part deals with the concept of vocation and states, based on previous research:

*A Christian entrepreneur sees his work as a vocation of God, more than a Christian employee.*

Like mentioned in the previous parts this hypothesis is tested through four models with four different independent variables and the same dependent variable. The results of these models are followed by a nuanced conclusion about confirmation or invalidation of the main hypothesis.

The starting hypothesis of the part about vocation is:

*Hypothesis 1A: The faith of a Christian entrepreneur plays a bigger role in making his occupational choice, than in the case of a Christian employee.*

According to the results of table 3 the effect of the occupational choice variable on the entrepreneur variable is negative and significant (on 5% level). This means that an increase of the occupational choice variable decreases the probability of being an entrepreneur. In the

answer category one is totally agree, two is agree, three is neutral, four is disagree and five is totally disagree. When a respondent shows higher values of the occupational choice variable (in other words he does (totally) disagree or less agree with the statement that his religious belief influence(d) his occupational choice), this will decrease the probability of being an entrepreneur. The conclusion is that hypothesis 1A is confirmed.

Subsequently the second hypothesis is:

*Hypothesis 1B: A Christian entrepreneur does see his work as a vocation of God, more than a Christian employee.*

Table 3 shows that the effect of the vocation variable on the entrepreneur variable is negative (on 5% level). Respondents that show higher values of the vocation variable (in other words he does (totally) disagree or less agree with the statement that his work is a vocation of God) have a lower probability of being an entrepreneur. This result confirms hypothesis 1B.

The next hypothesis talks about Gods call:

*Hypothesis 1C: A Christian entrepreneur is driven by Gods call, more than a Christian employee.*

Also the results of hypothesis 1C, described in table 3, show a negative and significant coefficient (on 5% level). When a respondent shows higher values of the Gods call variable (in other words he does (totally) disagree or less agree with the statement that his work is driven by the orders of God), this will lead to a decrease of the possibility of being an entrepreneur. Hypothesis 1C is confirmed.

This part ends with the hypothesis about a practical situation:

*Hypothesis 1D: The calling of God, in the case of job changing, has a higher impact on a Christian entrepreneur than on a Christian employee.*

The variable that tests the final hypothesis of this part, listed in table 3, is negative and significant (on a 5% level). This means that a respondent with higher values of the different vocation variable (in other words he does (totally) disagree or less agree with the statement that will not change his job until he knows that God calls for a different job), will show a lower possibility of being an entrepreneur. Also hypothesis 1D is confirmed.

Based on the negative and significant results of the four sub hypothesis, the main hypothesis is clearly confirmed. Not one variable show contradictory results. A Christian entrepreneur sees his work as a vocation of God, more than a Christian employee.

Table 3: Vocation

Dependent variable = Entrepreneur	1.	2.	3.	4.
Occupational choice	-0.217** (0.087)			
Vocation		-0.228** (0.104)		
Gods call			-0.324*** (0.117)	
Different vocation				-0.210** (0.097)
Man	0.830*** (0.302)	0.778** (0.302)	0.800*** (0.302)	0.781*** (0.302)
Married	0.205 (0.353)	0.132 (0.356)	0.132 (0.356)	0.157 (0.356)
Children (below 12)	0.151** (0.064)	0.148** (0.064)	0.155** (0.064)	0.155** (0.064)
Children (12 and above)	0.137*** (0.044)	0.130*** (0.044)	0.132*** (0.044)	0.126*** (0.044)
Secondary education	-0.234 (0.491)	-0.322 (0.492)	-0.363 (0.493)	-0.360 (0.494)
Intermediate vocational education	0.089 (0.461)	0.072 (0.460)	-0.012 (0.461)	0.066 (0.460)
Higher professional education and scientific education	0.389 (0.456)	0.381 (0.455)	0.311 (0.457)	0.425 (0.456)
Entrepreneurial parent (in-law)	0.302 (0.187)	0.304 (0.187)	0.297 (0.187)	0.250 (0.189)
Employment (more than 12 hours)	-0.025 (0.408)	-0.107 (0.405)	-0.071 (0.408)	-0.114 (0.407)
Entrepreneurial family (member)	0.311 (0.249)	0.267 (0.248)	0.270 (0.248)	0.269 (0.248)
Constant	-2.578	-2.416	-2.195	-2.384
Chi-squared	60.12	58.82	61.81	57.66
Log-likelihood	-399.338	-398.368	-396.876	-396.007
Pseudo R-squared	0.070	0.069	0.072	0.068
Observations	862	861	861	854

The table presents four logit models which measure the effect of four religious values on the decision of a Christian to become an entrepreneur.

Standard errors are reported in brackets.

\*, \*\*, \*\*\* indicates significance at the 90%, 95%, and 99% level, respectively.



## **Value to society**

The second part of the research works on the possibility that a Christian entrepreneur or employee may feel the duty or drive to add value to the society. The second hypothesis, built upon previous research, is:

*A Christian entrepreneur has more drive to add value to the society through his job, compared to a Christian employee.*

Like in the first part, the second hypothesis is tested through four models with four different independent variables and the same dependent variable and again the results of these models will be followed by a detailed conclusion about confirmation or invalidation of the main hypothesis.

The first hypothesis of the part about adding value to the society is:

*Hypothesis 2A: A Christian entrepreneur thinks it is important that a Christian management has a larger duty to sustainable entrepreneurship than a non-Christian management, more than a Christian employee.*

Table 4 shows for hypothesis 2A negative but insignificant results. Therefore the hypothesis cannot be confirmed. The respondents see no difference in the duty of Christian and non-Christian management to sustainable entrepreneurship.

The next hypothesis deals with a comparison between Christians and non-Christians in their added value for the society:

*Hypothesis 2B: An entrepreneur thinks that he adds more value to the society (as a Christian compared to a non-Christian), compared to an employee.*

Also for hypothesis 2B insignificant results are shown in table 4. Despite of the fact that the results are positive, the hypothesis cannot be confirmed. The respondents see no difference in the to the society added value of Christians and non-Christians.

Hypothesis 2B is followed by:

*Hypothesis 2C: A Christian entrepreneur thinks he directly has more positive influence on the society, compared to an Christian employee.*

As opposed to the results of the models of hypotheses 2A and 2B the results of the model of the third hypothesis show, according to table 4, a negative and significant coefficient (on a 5% level). Like in the first part about vocation, the interpretation is not straightforward. An increase of the positive influence variable decreases the probability of being an entrepreneur. Again the answer categories are totally agree (one), agree (two), neutral (three), disagree (four) and totally disagree (five). Higher values of the positive influence variable (in other words he does (totally) disagree or less agree with the statement that his work has a direct positive influence on the society), will result in a decrease of the probability of being an entrepreneur. The conclusion is that hypothesis 2C is confirmed.

The last sub hypothesis tests the following:

*Hypothesis 2D: A Christian entrepreneur thinks it is his Christian duty to be serviceable to the society, more than a Christian employee.*

Table 4 displays a negative and significant coefficient (on a 5% level). This means that an increase in the variable about the duty to be serviceable (in other words the respondent does (totally) disagree or less agree with the statement that it is his Christian duty to be valuable for the society through his work), will result in a decrease of the probability of being an entrepreneur. The conclusion is that hypothesis 2D is confirmed.

The results of the first two hypotheses seem to be conflicting with the results of the last two hypotheses. However, the first variables that are based on the first two hypotheses compares Christians with non-Christians. The fact that especially these hypotheses are not confirmed is interesting. Obviously Christians see no difference in the duty of Christians and non-Christians to sustainable entrepreneurship and they also think that there is no difference in the degree of adding value to the society of Christians and non-Christians. These findings do not really reject the hypothesis that a Christian entrepreneur has more drive to add value to the society (compared to a Christian employee). The confirmed third and fourth hypothesis state that a Christian entrepreneur thinks that he directly has more positive influence on the society and feels a larger duty to be serviceable to the society (compared to a Christian employee). These hypotheses seems to confirm that a Christian entrepreneur has more drive to add value to the society through his job, compared to a Christian employee. Consequently we can carefully say that also the second hypothesis is confirmed (with partial evidence).

Table 4: Value to society

Dependent variable = Entrepreneur	1.	2.	3.	4.
Sustainable entrepreneurship	-0.140 (0.095)			
Add value to society		0.0250 (0.096)		
Positive influence			-0.239** (0.119)	
Duty to be serviceable				-0.346** (0.150)
Man	0.745** (0.301)	0.756** (0.301)	0.807*** (0.303)	0.762** (0.302)
Married	0.156 (0.355)	0.160 (0.354)	0.166 (0.355)	0.179 (0.355)
Children (below 12)	0.161** (0.064)	0.159** (0.064)	0.153** (0.064)	0.152** (0.064)
Children (12 and above)	0.142*** (0.044)	0.134*** (0.044)	0.137*** (0.044)	0.140*** (0.044)
Secondary education	-0.273 (0.490)	-0.312 (0.491)	-0.307 (0.492)	-0.311 (0.495)
Intermediate vocational education	0.053 (0.459)	-0.007 (0.461)	0.008 (0.462)	0.0444 (0.464)
Higher professional education and Scientific education	0.389 (0.454)	0.346 (0.456)	0.306 (0.458)	0.352 (0.459)
Entrepreneurial parent (in-law)	0.318* (0.186)	0.321* (0.187)	0.294 (0.187)	0.337* (0.186)
Employment (more than 12 hours)	-0.0892 (0.406)	-0.0914 (0.404)	-0.0363 (0.406)	-0.0777 (0.407)
Entrepreneurial family (member)	0.273 (0.247)	0.282 (0.247)	0.289 (0.247)	0.243 (0.248)
Constant	-2.727	-3.059	-2.444	-2.325
Chi-squared	55.94	53.21	58.03	59.44
Log-likelihood	-401.872	-400.956	-400.383	-399.679
Pseudo R-squared	0.065	0.062	0.068	0.069
Observations	864	860	862	862

The table presents four logit models which measure the effect of four religious values on the decision of a Christian to become an entrepreneur.

Standard errors are reported in brackets.

\*, \*\*, \*\*\* indicates significance at the 90%, 95%, and 99% level, respectively.

## **Christian workplace**

The final part of the results is about the third hypothesis:

*A Christian entrepreneur will appreciate a Christian workplace, more than a Christian employee.*

To test this third main hypothesis also in this final part four sub hypotheses are conducted:

*Hypothesis 3A: A Christian entrepreneur prefers a Christian workplace over a non-Christian workplace, more than a Christian employee.*

*Hypothesis 3B: (Imaginary) A Christian entrepreneur will prefer a Christian management over a non-Christian management, more than a Christian employee.*

*Hypothesis 3C: A Christian entrepreneur prefers the work climate in a Christian workplace over the work climate in a non-Christian workplace, more than a Christian employee.*

*Hypothesis 3D: (Imaginary) A Christian entrepreneur prefers a Christian colleague over a non-Christian colleague in the same function, even when the non-Christian colleague better fits the function profile, more than a Christian employee.*

According to table 5, all the results are insignificant and therefore none of the hypotheses can be confirmed. There is no evidence that a Christian entrepreneur prefers a Christian workplace over a non-Christian workplace. According to the results it is also impossible to say that a Christian entrepreneur prefers a Christian management or the work climate in a Christian workplace (compared to a non-Christian management or a work climate in a non-Christian workplace respectively). Finally the results do not prove that a Christian entrepreneur prefers a Christian colleague over a non-Christian colleague (for the same function) in a situation where the non-Christian colleague better fits the function profile compared to the Christian employee.

Summing up the findings of these four analyses it is not possible to state that a Christian entrepreneur will appreciate a Christian workplace, more than a Christian employee.

Table 5: Christian workplace

Dependent variable = Entrepreneur	1.	2.	3.	4.
Preference	0.024 (0.087)			
Christian management		0.072 (0.088)		
Work climate			-0.066 (0.096)	
Christian colleague				-0.063 (0.090)
Man	0.766** (0.301)	0.768** (0.302)	0.731** (0.303)	0.730** (0.303)
Married	0.160 (0.354)	0.154 (0.354)	0.163 (0.354)	0.163 (0.355)
Children (below 12)	0.158** (0.064)	0.151** (0.064)	0.159** (0.064)	0.155** (0.064)
Children (12 and above)	0.136*** (0.044)	0.142*** (0.044)	0.130*** (0.044)	0.136*** (0.045)
Secondary education	-0.284 (0.489)	-0.321 (0.491)	-0.267 (0.489)	-0.263 (0.490)
Intermediate vocational education	0.034 (0.459)	0.032 (0.459)	0.028 (0.458)	0.070 (0.459)
Higher professional education and scientific education	0.373 (0.455)	0.367 (0.454)	0.405 (0.454)	0.409 (0.455)
Entrepreneurial parent (in-law)	0.325* (0.186)	0.308* (0.186)	0.301 (0.187)	0.354* (0.186)
Employment (more than 12 hours)	-0.087 (0.404)	-0.088 (0.405)	-0.084 (0.404)	-0.100 (0.405)
Entrepreneurial family (member)	0.270 (0.247)	0.267 (0.247)	0.256 (0.247)	0.277 (0.247)
Constant	-3.076	-3.202	-2.764	-2.798
Chi-squared	53.89	54.28	52.82	53.29
Log-likelihood	-402.672	-400.861	-400.266	-398.471
Pseudo R-squared	0.063	0.063	0.062	0.063
Observations	863	862	856	849

The table presents four logit models which measure the effect of four religious values on the decision of a Christian to become an entrepreneur.

Standard errors are reported in brackets.

\*, \*\*, \*\*\* indicates significance at the 90%, 95%, and 99% level, respectively.

## VI. CONCLUSIONS AND LIMITATIONS

The final chapter shortly outlines this study and lists the most important conclusions. Also the limitations are discussed.

Religion seems to have an effect on economic growth as also on entrepreneurship. In this field of research some studies has been done to verify whether the effect of religion on entrepreneurship is positive or negative. However, less is known about the impact of religion and religious values on the decision to become an entrepreneur. The specific aim of this research is to investigate, through a survey among Christians in the Netherlands, whether religious values influence the decision of Christians to become an entrepreneur.

The three tested values deal with the concept of vocation, the duty to add value to the society and the importance of a Christian workplace. Many Christians base their behavior during and after their work on the will and the vocation of God. The will of God is revealed in the Bible. Christians may also feel the duty to add value to the society. Religious beliefs influence the tendency to get involved in social and sustainable entrepreneurship. Finally Christians may feel the desire to work in a Christian workplace. Spirituality, the quest for meaning in life in a personal manner, in workplaces makes that employees feel happy and perform well. Christianity can be seen as a form of spirituality and therefore Christians may feel the want to work in Christian workplaces or workplaces with freedom for spirituality/religion. Entrepreneurship is a possibility to serve the will of God and his vocation, to personally add value to the society and to create a workplace with freedom of spirituality and religion.

According to the results especially the part about vocation shows clear effects. A Christian entrepreneur sees his work as a vocation of God, more than a Christian employee. The religious value of vocation is positively associated with the choice of Christians to become an entrepreneur. The conclusion about the part of the possible duty to add value to the society is less evident. It seems to be that Christians themselves see no necessary difference between the duty to sustainable entrepreneurship and to add value to the society of Christians and non-Christians. Asking Christians about their personal duty, without a comparison with others, results in the conclusion that a Christian entrepreneur has more drive to add value to the society through his job, compared to a Christian employee. The findings about the conceivable preference of a Christian entrepreneur to work in and create a Christian or (for other religions) free workplace, show that it is not possible to state that a Christian entrepreneur prefers a Christian workplace, more than a Christian employee.

The religious values that encourage the feeling of the duty to add value to the society and especially of a vocation, are positively associated with the decision of Christians to become an entrepreneur.

The conclusions are in line with previous research about religion and entrepreneurship. Previous literature seems to have reached a consensus that religion affects entrepreneurship (Audretsch et al., 2007; Dodd and Gotsis, 2007 and Dana, 2009). How entrepreneurship affects religion is not clear. However, like Dana (2009) concludes, individuals will be influenced by the values that the religion carries out. This study proved that Christians values are positively associated with the decision of Christians to become an entrepreneur. This finding does also extend the knowledge about the individual determinants of entrepreneurship, like Parker (2004) suggests. Religious values are associated with the intrinsic motivation to make the decision to become an entrepreneur.

Compared to previous research, this research adds the explanation which values are associated with the decision to become an entrepreneur. To clarify this association more deeply, more research is required. This study may be a first step to more research on the question how different religions influence the decision to become an entrepreneur. Further research may answer the question whether Dutch Christians are relatively more entrepreneurial than non-Christians in the Netherlands. Another interesting research subject is the effect of possible benefits (or burdens) of Christianity, like having a network and being on the parish, on the probability of become an entrepreneur. Also the effect of other religions (in other countries) on the decision to become an entrepreneur is interesting to investigate. Finally it may be fruitful to examine whether lack of religious freedom shapes the entrepreneurial decision. However, in the field of religion and entrepreneurship a lot of work should be done.

After this study it is not possible to say something about the difference between the frequency of entrepreneurship among Christians and non-Christians. Like already mentioned, further research may compare data of the CBS about entrepreneurship among Christians and non-Christians and investigate if there are significant differences in the relative amount of entrepreneurship. This research may be a small indication that a difference is possible, because Christian entrepreneurs are driven by religious values which are absent in the case of non-Christian entrepreneurs.

Some research specific discussion may arise about the first two questions/statements about the variable about the duty to add value to the society. These two questions make the comparison

between Christians and non-Christians. Actually this ignores the aim of this research to look at the impact of religious values among Christians. Nevertheless, the other two questions are useful to test the second hypothesis.

Finally a question can arise about the importance of a Christian workplace. Is that a real Christian value or just a preference? Like mentioned in the literature review, this may be a reason to start a new business, but it is not a real value that is based on Christian belief. It is more a preference due to the background of a Christian. Therefore the insignificant results of the third part do not invalidate the conclusion of this research that Christian values are associated with the decision of Christians to become an entrepreneur.



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## APPENDIX

Alvast bedankt dat u bereid bent deze enquête in te vullen, welkom! Het invullen kost u waarschijnlijk niet meer dan 5 minuten.

Inhoud: Deze enquête vormt de basis van een onderzoek naar ondernemerschap onder christenen. Hierbij wordt er gekeken naar ondernemers, maar ook naar werknemers. Als ondernemer/werkgever maar ook als werknemer bent u van groot belang voor dit onderzoek! De resultaten van dit onderzoek zal ik gebruiken voor mijn eindscriptie voor de studie Economie aan de Erasmus Universiteit Rotterdam.

Belangrijke opmerking: In dit onderzoek wordt vaak de term ‘ondernemer’ gebruikt. De definitie die u hiervoor gedurende het onderzoek moet hanteren is ‘zelfstandige’. Hierbij gaat het om grootschalige en kleinschalige zelfstandigen.

Succes!

Maarten den Dekker (maartendekker@hotmail.com)

<b>General information</b>		
1.	Wat is uw geboortjaar?	... – Wil niet zeggen
2.	Wat is uw geslacht?	M – V – Wil niet zeggen
3.	Wat is uw burgerlijke status?	Gehuwd – Ongehuwd – Gescheiden – Verweduwd – Wil niet zeggen
4.	a. Hoeveel kinderen onder de 12 heeft u? b. Hoeveel kinderen van of boven de 12 heeft u?	... – Wil niet zeggen ... – Wil niet zeggen
5.	Wat is uw nationaliteit?	Nederlands – Anders – Wil niet zeggen
6.	Wat is uw hoogst afgeronde opleidingsniveau?	VMBO – HAVO – VWO – MBO – HBO – WO – Anders – Wil niet zeggen
7.	Hoe oud was u toen u stopte met voltijd studeren?	... – Wil niet zeggen
8.	Door mijn opleiding durf ik meer initiatief te nemen.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
9.	Door mijn opleiding begrijp ik de functie van ondernemerschap beter.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
10.	Door mijn opleiding werd ik geïnteresseerd in ondernemerschap.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
11.	Mijn opleiding verschafte mij vaardigheden die mij in staat (zouden kunnen) stellen om een onderneming te starten.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
12.	a. Is minstens één van uw ouders ondernemer geweest? b. Is minstens één van uw schoonouders ondernemer geweest?	Ja – Nee – Wil niet zeggen Ja – Nee – Niet van toepassing – Wil niet zeggen

13.	Heeft u werk voor meer dan 12 uur per week?	Ja – Nee – Wil niet zeggen
14.	Heeft u minstens één familielid die ondernemer is?	Ja – Nee – Wil niet zeggen
15.	a. Is ondernemerschap uw zakelijke kernactiviteit? b. Bent u ZZP'er?	Ja – Nee – Wil niet zeggen Ja – Nee – Wil niet zeggen
16.	Hoe serieus heeft u overwogen om een bedrijf te beginnen?	Ik heb het nooit overwogen – Ik heb er wel eens over gedacht – Ik heb het opgegeven – Ik heb stappen gezet – Ik heb een jong bedrijf (niet meer dan 3,5 jaar oud) – Ik heb een volwassen bedrijf (meer dan 3,5 jaar oud) – Ik ben gestopt met mijn bedrijf – Wil niet zeggen
17.	a. Heeft u wel eens een bedrijf gestart? b. Heeft u wel eens een bedrijf overgenomen?	Ja – Nee – Wil niet zeggen Ja – Nee – Wil niet zeggen
18.	Hoeveel jaar bestaat uw bedrijf?	... – Wil niet zeggen
19.	Hoeveel werknemers werken er in uw bedrijf?	... – Wil niet zeggen
20.	Wat is uw jaarlijkse omzet?	€0 tot €25.000 – €25.000 tot €50.000 – €50.000 tot €100.000 – €100.000 tot €500.000 – Meer dan €500.000 – Wil niet zeggen
21.	Ik ben lid van een christelijke kerk of gemeente.	Ja – Nee – Wil niet zeggen
22.	Wat is uw kerkverband?	Baptisten gemeenten – Christelijk Gereformeerde Kerken – Evangelische gemeenten – Gereformeerde Gemeenten – Gereformeerde Gemeenten in Nederland – Gereformeerde Kerken – Nederlands Gereformeerde



		Kerken – Protestantse Kerk in Nederland – Hersteld Hervormde Kerk – (Vrije) Oud Gereformeerde Gemeenten – Gereformeerde Kerken Vrijgemaakt – Ander kerkgenootschap – Wil niet zeggen
23.	Mijn geloof is belangrijk voor mijn dagelijks leven.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
24.	Mijn geloof bepaalt mijn volledige doen en laten.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
25.	Ik wil(de) altijd al ondernemer willen worden.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
26.	Ik denk dat christenen vaker ondernemer worden dan niet christen.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
27.	Kent u iemand die in de afgelopen 2 jaar een onderneming heeft gestart?	Ja – Nee – Wil niet zeggen
28.	Zijn er in de komende 6 maanden in uw omgeving goede mogelijkheden om een bedrijf te starten?	Ja – Nee – Wil niet zeggen
29.	Heeft u de kennis, vaardigheden en ervaringen om een nieuwe onderneming te starten?	Ja – Nee – Wil niet zeggen
30.	Zou de kans op falen u weerhouden van het starten van een bedrijf?	Ja – Nee – Wil niet zeggen
31.	Over het algemeen ben ik iemand die bereid is om	Helemaal mee oneens – mee

	risico's te nemen.	oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
32.	Mijn leven wordt bepaald door mijzelf, niet door anderen over door veranderingen van buitenaf.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
33.	Ondernemers ontwikkelen nieuwe producten en diensten die nuttig zijn voor ons allemaal.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
34.	Ondernemers denken alleen aan hun eigen portemonnee.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
35.	Ondernemers creëren banen.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
36.	Ondernemers pikken banen van andere mensen in.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
37.	Ik vind het belangrijk dat mensen maatschappelijk en ecologische verantwoordelijkheid nemen in hun doen en laten.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
38.	Ik heb ondernemerschap niet direct gekozen omdat ik unieke zakelijke mogelijkheden zag, maar meer omdat dit de best beschikbare optie was.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
<b>Research specific information</b>		
1.	Mijn geloof is van invloed (geweest) op mijn	Helemaal mee oneens – mee

	beroepskeuze.	oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
2.	Ik zie mijn werk als een ‘roeping’ van God.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
3.	In mijn werk word ik gedreven door de opdracht die God mij gegeven heeft.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
4.	Ik verander niet van baan voordat ik weet dat God mij ergens anders ‘roept’.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
5.	Een bedrijf met een christelijke leiding moet zich meer dan andere onchristelijke bedrijven inzetten voor maatschappelijk verantwoord ondernemen (MVO).	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
6.	Als christen ben ik nuttiger voor de maatschappij in vergelijking met iemand anders die niet christelijk is.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
7.	Mijn werk heeft een directe positieve invloed op de maatschappij.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
8.	Ik zie het als mijn christenplicht om door mijn werk nuttig te zijn voor de maatschappij.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
9.	Ik werk liever in een christelijke werkomgeving dan in een niet christelijke werkomgeving.	Helemaal mee oneens – mee oneens – neutraal – mee eens

		– helemaal mee eens – Wil niet zeggen
10.	Ik verkies een christelijke baas boven een niet christelijke baas.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
11.	De werksfeer in een christelijk bedrijf vind ik beter dan in een onchristelijk bedrijf.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen
12.	Als ik zou mogen beslissen bij een sollicitatie, neem ik liever een christelijke werknemer aan die niet helemaal in het vacatureprofiel past dan een onchristelijke werknemer die wel in het vacatureprofiel past.	Helemaal mee oneens – mee oneens – neutraal – mee eens – helemaal mee eens – Wil niet zeggen

Table 2: Spearman's rank correlation coefficients of the 'entrepreneur' variable and the main independent variables

	Entrepreneur	Occupational choice	Vocation	Gods call	Different vocation	Sustainable entrepreneurship	Add value to society	Positive influence	Duty to be serviceable	Preference	Christian management	Work climate	Christian colleague
Entrepreneur	1.000												
Occupational choice	-0.067	1.000											
Vocation	-0.093	0.338	1.000										
Gods call	-0.097	0.348	0.581	1.000									
Different vocation	-0.086	0.214	0.389	0.444	1.000								
Sustainable entrepreneurship	-0.029	0.076	0.130	0.172	0.198	1.000							
Add value to society	-0.021	0.094	0.094	0.159	0.195	0.171	1.000						
Positive influence	-0.066	0.211	0.223	0.302	0.133	0.093	0.168	1.000					
Duty to be serviceable	-0.072	0.222	0.327	0.381	0.188	0.185	0.072	0.364	1.000				
Preference	-0.002	0.146	0.022	0.011	0.071	0.059	0.203	-0.058	-0.030	1.000			
Christian management	0.016	0.147	0.042	0.066	0.109	0.033	0.292	-0.032	-0.018	0.741	1.000		
Work climate	-0.047	0.088	0.035	0.032	0.096	0.080	0.292	-0.031	-0.038	0.559	0.562	1.000	
Christian colleague	-0.013	0.129	0.067	0.069	0.130	0.058	0.246	-0.038	0.008	0.412	0.445	0.447	1.000

