

Klaubert, Anja

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**Being religious -  
A Question of Incentives?**

by  
Anja Klaubert

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# **Being religious – A Question of Incentives?**

Anja Klaubert\*

Leuphana University of Lüneburg,

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## **Abstract**

Studies of the relationship between religion and economics can be divided into three major lines of research: behavioural economics of religion (microeconomic approach), macroeconomic consequences of religion and religious explanations of economic phenomena. Except for the third line strong evidence has been found on the microeconomic level of individuals and households that economic behaviour and outcome correlate with religion. Furthermore the role of religion on the macroeconomic level, e.g. the impact on economic growth, has been analyzed, too.

However, only a few models integrating these two levels exist. In order to exemplify such an integrated model, the first step of the analysis has to be the examination of the decisions taken on the microeconomic level. For this purpose this paper focuses on rational incentives to be religious and to take part in religious activities without taking into account the benefits derived from religious beliefs itself.

JEL Classification: A1 (General Economics), B4 (Economic Methodology), Z12 (Religion)

Key Words: religion, incentives, individual religiosity

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\* Institute of Economics, Leuphana University Lüneburg, klaubert@leuphana.de, phone: 0049 (0) 4131 677 2312, Fax: 0049 (0) 4131 677 2026

## **(1) Introduction**

*“For man's character has been moulded by his every-day work, and the material resources which he thereby procures, more than by any other influence unless it be that of his religious ideals; and the two great forming agencies of the world's history have been the religious and the economic”.* (see Marshall 1920: 1.)

Social phenomena, including religious issues, were analysed within an economic framework at first in the eighteenth century. In this context, Durkheim's 1897 study of the role of religiosity regarding differing suicide rates ought to be mentioned (see Gruber 2005). He explains the lower suicide rates in Catholic communities compared to those of Protestant communities by the fact, that Catholics are more socially integrated in their denomination.

The first contributions to the economic analysis of religion can be traced back to Thomas Aquinas on the one hand who dealt with religion and public finance, and the well known statements by Adam Smith, who noted, that culture could explain economic actions on the other hand.

From today's perspective one has to state two things concerning religion and economics, which both care about the human well-being: on the one hand a continuing significance of religion connected with the very obvious fact that the decisions of human beings are influenced by emotions as well as by logic can be observed. On the other hand one has to realise the persistent interpersonal and international income differences, which can be no longer explained by material factors alone. These trends could serve as an explanation for the increased interest of economists in religious issues since the late twentieth century.

Since that time many studies and literature has been published to document the diverse associations between measures of “religiosity” and social-economic outcome<sup>1</sup>. Aside from the views of anthropologists, psychologists or sociologists, the line of research in economic theory addressing religion can be divided into two major parts.

One line of research is dealing with the influence of religion on an economic relevant

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<sup>1</sup> For a recent survey on Economics of Religion see Kumar, V. 2008.

outcome of the macroeconomic and individual level. The probably best known author in this context was Max Weber. Following his argument, the economic development of the western world is to some extent ascribed to the Protestant Revolution. Nevertheless his publicity you can find mixed empirical evidence for his findings (see Blum and Dudley 2001). Studies on the aggregate level (within and between countries) investigate how religion affects measures of economic outcomes like per capita income, growth rate of per capita Gross Domestic product (GDP) respectively average GDP per capita, the saving ratio, corruption, trade and institutions, partly with emphasis on particular religious traditions such as Islam, Hinduism or Catholicism. On the microeconomic level of households and individuals a strong link between religiosity and a wide range of (economically relevant) social behaviour exists: mental and physical health, deviant behaviours (crime, drug and alcohol abuse, suicide), measures of well-being, marital stability, divorce and fertility.

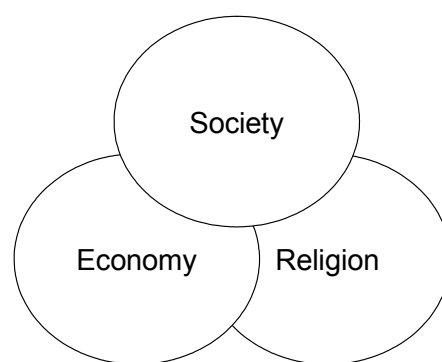


Figure 1: Relationship between religion and social-economic issues

Another line of research is represented by David Hume and Karl Marx, who inverted this direction of causality and were at best sceptical of the role of religion. For Marx religion seems to be a “by-product”. The focus has been on the factors of both sides, supply and demand. Believers were seen as rational consumers who want to maximize their utility and chose different levels of religiosity due to their distinct preferences. This research line suggests a relation at the individual and aggregate level between economic (income, urbanization, life expectancy, etc) and scientific development (education) on the one hand and the importance of religion on the other hand. On the supply side demand is treated as a fixed factor and one focuses on how religious phenomena of interest vary with changes in the supply of religious goods. These approaches aim to explain the existence of religious

organisations which were seen as clubs or firms that collectively constitute a religious market where they have to earn the resources necessary to assure the company's survival. One assumes that the suppliers like the demanders of religious goods act rational, too, and try to maximize social welfare, efficiency, membership, longevity or the share in God serving activities of society.

A third line of research is dealing with religious explanations of economic phenomena. Religious Economics is independent from the other two approaches and focuses primarily on the analysis and criticism of the economic development from a theological point of view.

When looking at the several studies, some shortcomings ought to be mentioned. First, when religion has been included as a variable of interest, it has often been measured by global indicators (such as denominational affiliation, frequency of church attendance, frequency of prayer, or self-rated religiousness) that are poorly theoretically linked to measures of economic well-being. Even when significant results are obtained, they provide little insight into how religion works in the lives of individuals.

I will try to explain this mechanism with the explanation of the incentives to be religious. Hence, I am going to start my analysis concerning the relationship between religion and the economy one step further back and investigate not only the incentives provided by religions to behave in a certain way, but also the incentives that people may have to believe and take part in religions.

Another problem with global religious measures seems to be, that they were built on the supposition of an underlying stability in religiousness. One assumes that religion influences some attributes like hard work, initiative, belief in the value of education, propensity to save and invest and so on. On the one side these attributes are not correlated with economic progress, e.g. saving is good, but only if the savings are deployed in productive ways. Whereas on the other side the helpfulness of religiousness may vary across time, context and situations, e.g. frugality served Japan well until its recession, since that time it has been an obstacle to recovery. According to the assumption that each of the major world religions promotes accumulation of wealth and hard work, while discouraging idleness, debt, and

poverty, as McCleary 2007 has exemplarily shown, it is better to examine the shape (fundamentalism, private vs. public held religiosity,...) of religion rather than analysing which religion fosters which attitude.

A bulk of studies only deals with Judeo-Christian tradition, but even if there are no empirical data for other religions you have to concern yourself with the richness and diversity of religion beyond the Western World in theoretical approaches.

Summing up, to my knowledge it doesn't exist an approach dealing with the complete line of argumentation, which means to me starting with the question: Looking from an economic point of view, why are people religious today?

Before giving an overview concerning the several motives people might have to be religious, I am going to go more into detail on the relevant literature.

## **(2) Literature Review**

Some literature addresses moral principles and how they fit into people's decision-making process (for examples see Bentham 1970, Harsanyi 1977 and Sen 1977). It was stated that individuals act on both self-interest and moral "sympathies" whose claims are enforced internally by conscience.

Only a few authors really stress the relationship between religion and incentives. On the one hand you can study incentives set by religions to foster different kinds of behaviour. The main focus here lays on the importance of heaven and hell respectively salvation and salvific merits in fostering or preventing desirable respectively undesirable behaviour (for examples see Hull and Bold 1994, Ruffle and Sosis 2003, Klick 2004, McCleary 2007).

On the other hand, one step further back, the incentives to be religious are examined in very few articles. Allport and Ross 1967 pointed out the importance of distinguishing individuals motivated by goals intrinsic to religious life from people motivated by values extrinsic to the character of religion, such as a desire for status or self-justification. Most empirical studies in this field found that greater intrinsic religiousness was related to better mental health, sociability, sense of well-being, tolerance and lower levels of prejudice.

Brañas Garza, García Muñoz and Neuman 2008 examine how measures of religious practice might be affected by incentives. They show that, when positive and negative incentives are available, the former are more effective than the latter in encouraging religious practice. The effect of the carrot (heaven) was found to be more than twice as large as the effect of the stick (hell). To conclude, in the presence of the largest possible stakes (infinitem rewards), rewards (carrots) are more effective than punishment in encouraging religious practice. Contrary to Hull and Bold 1994, who showed that at a certain point the introduction of hell is more effective than increasing the claimed rewards in heaven for encouraging social desired behaviour, the paper of Brañas Garza, García Muñoz and Neuman shows that for encouraging religious practice the rewards of the heaven are more effective.

### **(3) Incentives to be religious**

In general, individual behaviour is determined by incentives, which means, that persons don't act randomly, but systematically. They choose to participate in a religion respectively stay religious according to its perceived benefits and costs.

The goods provided by religions are more or less beneficial to the agent. Religions interpret the world and give answers to the essential questions of existence (e.g. the meaningfulness of life and death). They try to give a sense of meaning in a confusing world. Thereby the interpretations and answers are based on the transcendent world which addresses the core of religions. Therefore religious institutions seem to be more than one among many types of social organizations. Furthermore religions provide moral and ethical teachings which give the believer a sense of right and wrong. They want their followers to behave in a specific way. Thereby religions influence the way people consume and produce goods and interact. One might say that religions have a share in building up the "moral – capital stock" of a society and in the relief of the judicial system. A question arising in this content is whether religion could be more effective in enforcing behaviour than the state. Next to these main products several by-products are produced in joint production process:



membership in a community, education and preservation of knowledge, charity (e.g. nursing), and help in secular affairs.

Due to the fact that religions are willing to restrict the benefits to those who undertake demanding rituals and prohibitions, although membership is a necessary condition for enjoying the provided religious and social goods, it is not sufficient for being saved or enlightened. Generally one may consider two main motivations for being religious: intrinsic and extrinsic motivations (e.g. Allport and Ross 1967). Thereby I understand being religious as meaning believe in and / or belong to a specific denomination. By distinguishing individuals motivated by goals intrinsic to religious life from people motivated by values extrinsic to the character of religion,<sup>2</sup> it becomes clear that extrinsic motivated people pursue secular goals when being religious whereas the intrinsic motivated are striving primarily for salvation, meaning and enlightenment. However they will participate on the provided secular goods, too. In this context, the question raises, if this fact leads to a crowding out of the intrinsic motivation as it is the case in secular issues. Nevertheless, only these true followers of a religion can totally benefit.

a. "Believing"-Motive

Intrinsic motivations are expressed by the "believing"-motive which reflects the core product of religions and is only provided by religions. Religious people get the benefit by believing per se. People have several ideas concerning the creation of the world, the meaning of life and expectations of the consumption in an afterlife, may it be heaven, hell, rebirth or an intermediate state like the purgatory (see Durkin and Greely (1991)). These expectations could be seen as calculated on a subjective probability of believing in the existence of a supreme being: either it exists or not. Believers then get a direct benefit out of the function of religions to give meaning and explanations about the held expectations. Due to these explanations the uncertainty upon the "Supreme Being" and the afterlife is reduced.

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<sup>2</sup> For an empirical distinction between extrinsic and intrinsic religious motivated individuals see Bergin, Masters and Richards 1987; Donahue 1985; Ryan, Rigby and King 1993.

Moreover religious belief and practice provide individuals the faith that their lives are sanctioned and supported by a "Supreme Being". They believe that they belong to a divine plan which gives their lives sense. Due to the decreased uncertainty about life and afterlife, feelings of religious and spiritual satisfaction and comfort awake.

Furthermore religious contribution is backed by the motivation to get some guidance in life. The moral values and social norms established by religions could serve in this purpose. These behavioural rules determine how to live according to a divine plan. The moral-creating and order-giving power of religion arises from its origin, which goes back to an authority that is free from human weaknesses. In this way religions offer clear rules for living which could even solve socially problematic conflicts of interest.

If the religious institutions (prophets, canonical texts, ecclesiastical hierarchies), that define the salvific merit, give people the possibility to gain salvation through their own efforts, people will employ the necessary resources to attain such an end. Therefore the intrinsic motive to be religious has very strong implications for behaviour and will influence such traits like work effort, saving, and charity (see McCleary 2007). The question why an individual is looking for salvation or answers to essential questions of life shouldn't be so much of an issue of economics than of philosophy although the rational explanations range from education and socialisation to tradition.

Azzi and Ehrenberg (1975: 32) pointed out, that a "[A]lthough all three motives [salvation, motive, consumption motive and reputation motive; note from the author] are undoubtedly present, our model will primary consider the salvation motive..." As in most studies, the primary motivation for religious participating was assumed to be "afterlife consumption", which describes a strong restriction. Next to this main motive other secular causes of being religious exist, that are rooted in the "Here and Now". These motives should be taken into account as well. People who are lacking any internalized religious principles are extrinsically motivated, i.e. they use their religion for personal or social gains, even at the expense of others. As the Consumption- and the Reputation-motive refer to communally held beliefs and dogmas, that are expressed publicly, their satisfaction requires a community.

*b. Consumption-motive*

Next to religious goods, religions promote group solidarity and cooperation, how anthropological studies have shown (e.g. Irons 2001, Rappaport 1999, Sosis and Alcorta 2003, Wilson 2002). In this context people don't benefit from an expected state of bliss in the remote future or getting answers to questions of the afterlife but from group membership. Thereby religious rituals (see Ruffle and Sosis 2003) serve as mechanisms to achieve solidarity and cooperation. Participants in religious activities may benefit from religions through the direct consumption of religious meetings in the form of entertainment during church attendance and mutual activities even without really believing. Due to the emerging positive externalities the benefits from membership don't only depend on one's own inputs but also on the inputs (quantitative and qualitative ones) of the other fellows. Furthermore one might benefit from membership to a community and taking part in a network (charity, trade, mutual help, and education) as in other social societies and clubs, too. The social membership in religions seems to be a method for turning outsiders into insiders, because only the person who is a club-member participates in the network and is protected from outside threats. The trade connections of the Jews in the Middle-Ages are an example of transaction security and the intensity of the interactions within the group, which lead to increased economic transactions among the group-members (e.g. Helble 2007). But the stricter the religious system is the more rigid are the boundaries maintaining those who fall inside and outside of the group. Moreover the closeness with like-minded believers fosters social ties and creates a strong sense for community where one enjoys the offered fellowship of others. According to a study, conducted by the German Allensbach Institute for Public Opinion Research, church membership is primarily based on the possibility to give celebrations a dignified setting. Therefore consumption seems to be very important (see Schulz 2000).

c. Reputation motive

Whereas the Consumption-motive is targeted on the benefits of attendance, the Reputation-motive, which is another explanation for religious participation, is based on the capital value of reputation and functions in a rather indirect way. Reputation in this context means to raise expectations to a potential transaction partner outside the group, which only makes sense if one assumes that there are information asymmetries. People who are looking for reputation don't care about believing. Furthermore they don't only want to belong to the group because of their Consumption-motive, but also to signal outsiders their moral character. Who is committed to a religious organisation by membership and participation and therefore signals to accept a certain religious code of conduct, seems to be a more trustworthy partner, because breaking agreements would cause internal and external sanctions. One expects that a religious person will honour his promises even when material incentives favour breaking them. Therefore this moral information (information with respect to an individual's moral history) provides potential transaction partners with information permitting them to assess the risks associated with a given exchange. A membership out of fear of social ostracism and discrimination is based on the Reputation-motive, too.

The power of the Reputation-motive could be measured by the market density of a religion. If more people in one's personal environment belong to a specific denomination, the probability rises that you will join them. As Gruber 2005 found, a higher market density leads to a significantly increased level of religious participation. In that case the person seems to be a conformist, who is influenced in his religious convictions by what he/she thinks about what others could do (see Sliwka 2006). Furthermore the reputation-spending power of religions relies on membership numbers. In a religion where everyone belongs to a denomination, the membership says little about the reputation of a person, and secession doesn't mean a huge loss of reputation.

Nevertheless, to merely seem religious isn't a sufficient condition for getting economic benefits. One's potential trading partner has to know about it. Surely it is insufficient for a person to declare: "I am Christian/Muslim/Buddhist, trust me!" Since religious belief is not

directly observable, it only can be communicated if it is accompanied by credible signals that one is religious and can be trusted. Membership to certain religious organisations could serve as such a signal for one's upstanding moral character, trustworthiness, and honesty. Due to the condition that religious belief is hardly to observe, taking part in religious activities (rituals, charity events,...) could be understood as a valuable signal of group commitment. By making highly specific investments concerning religion, the investor, who wants to appear religious, signals his truthful commitment. This view is opposed to Iannaccone 1992, who sees costly religious activities as a possibility to screen out free-riders from religious services. But membership is only a necessary and not sufficient condition to show one's moral character: one has to assure to live according to the religious code of conduct (norms for everyday behaviour: praying, food preparation, rules of cleanliness) either.

Next to signalling, where the needed information is given voluntarily, screening is a possibility of getting to know if someone is a reliable transaction partner. But here moral information about individual members can only be derived from religious activities that are publicly observable.

Summarizing one can say, that consumption and reputation rely more on the social capital character of religions and therefore one expects to belong to an increased level of trust, reciprocity, information, and cooperation among individuals. Figure 2 points out the main relations.

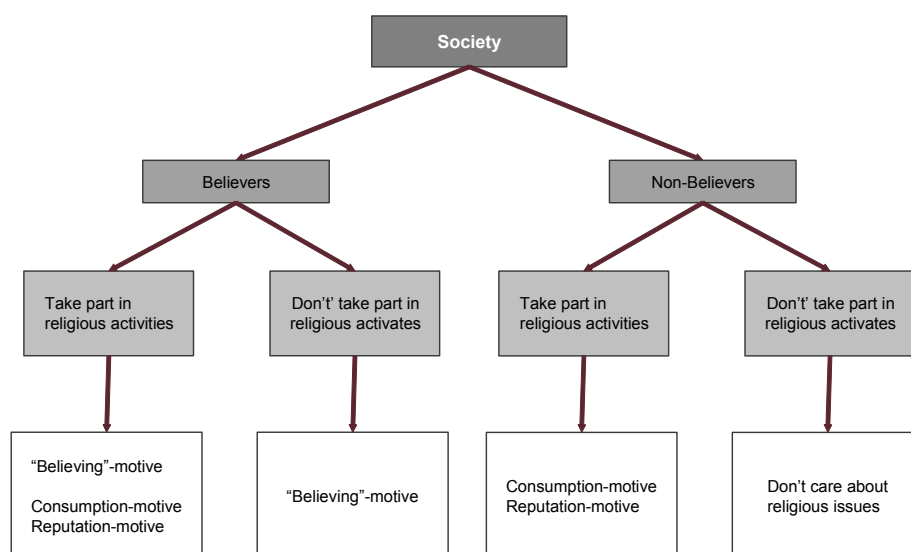


Figure 2: Incentives to be religious

d. Costs of being religious and taking part in religious activities

To benefit from religion, investments (monetary and non-monetary) are also necessary. This holds for intrinsic and extrinsic religiously motivated people. Generally the costs of being religious can be divided into costs which are connected to the learning and the compliance of the moral rules and costs that arise when breaking the rules.

Intrinsic motivated people have to face costs which arise out of the compliance of the moral rules (e.g. main condition: requiring membership, taking part in collective activities; specific (moral) behaviour injunctions, rules of cleanliness, medical treatment, food preparation) as well as the costs of acquiring spiritual capital. The term spiritual capital is used according to the “religious human capital” in Durkin and Greedy (1991: 182 ff) and Iannaccone (1990: 299). It encompasses on the one hand the knowledge of religious traditions, rites and norms which was acquired over the time by attending religious services and community activities as well as by praying and meditating. This know-how is necessary to practice religious activities and to get satisfaction out of it. On the other hand, investments in the relationship to other fellows, which have an impact on the benefits derived from religious attendance (see Iannaccone 1998) belong to spiritual capital, too. As the analysis has shown, the intrinsic motivated religious people only derive direct utility if an adequate spiritual capital stock was accumulated. Moreover being religious raise internal and external costs of disobedience (social control). Breaking the rules would cause internal sanction mechanisms for the intrinsic motivated person, because the concept of an “all seeing Judge of the World” performs as an enforcement and monitoring mechanism for moral conduct among the believers that supplements the social constraints on behaviour and the enforcement efforts of secular authorities, even in cases in which one is unobserved by others. Due to the fact, that the costs of an external monitoring of every individual's behaviour are extremely high, the system of internalized monitoring provided by religions represents an efficiency-enhancing adoption to this problem. The external costs raise by a sanctioning by the denomination (social ostracism and discrimination).

Contrary to intrinsic motivated religious people, the costs which arise out of the compliance of the moral rules and of acquiring spiritual capital are lower for extrinsic motivated persons, because extrinsic motivated people probably rely on the moral rules only if the compliance of the rules is publicly observable. Though people who are striving for consumption and / or reputation don't benefit directly from the accumulation of spiritual capital, a credible level of spiritual capital is necessary to persuade others of one's commitment to the religion and therefore to gain credibility (Reputation-motive). Moreover a minimum of religious knowledge is indispensable to get an insight into religious rites to derive benefit from religious activities (Consumption-motive).

Extrinsic motivated persons have to face internal physiological costs raised by the cognitive discordances, which evolve out of the inconsistency between their actions (going to places of worship and taking part in religious activities and networks) and their belief (don't belief in the religious statements). Just as for intrinsic motivated persons there might be a sanctioning by the denomination in terms of loss of reputation, social ostracism and discrimination when breaking the moral rules.

Monetary disbursements occur, for instance, in terms of donations and financial resources which are connected to the compliance of the rules and the attendance at religious activities.

It's needless to mention the problems of investigating the differences between extrinsic and intrinsic motivations. First, religious bounded institutions and therefore religious mental models and ideologies only affect the behaviour of intrinsic motivated people who really believe. Therefore joining a religious organization for social reasons does not necessarily produce the kind of belief that leads to personal traits that enhance productivity. Second, because there could be gains from appearing religious, extrinsic motivated people will attempt to express the signals of religiousness. From an empirical point of view, the difficulty lies in distinguishing those deeds done out of the belief by itself from those rooted in secular causes. For instance, character traits would be useless as signals since people who lack them could perfectly imitate them. One has to find signals that can't be imitated so easily. As

a starting point one may differ between activities that are obligatory and those that are voluntary. People, who are more committed, will fulfil voluntary acts beyond the average believer, not only obligatory ones. As the people, who are extrinsically motivated, are forced to signal their moral character, on the other hand this enhanced commitment could be interpreted as a sign of extrinsic motivation. Contrary to extrinsic motivated people, intrinsically motivated persons care about less whether other people know about his or her moral standing. It is sufficient to them that "God" knows.

Furthermore one assumes that the Consumption- and Reputation-motive don't have a large effect in industrialized countries with a high urbanization rate. But especially in developing countries religious observance seems to be a response to underdeveloped legal and economic institutions.

#### **(4) Conclusion**

Religions as institutions are only completely relevant for those who truthfully believe. Only these true followers of a religion could totally benefit and only these will totally accept the restrictions, which are necessary. The true believer lives according to the rules even if this means to do without some things.

An important fact is, that one only can observe the actions of the people that don't leave not their attitudes and values behind. There are usually large deviations during the translating of values and beliefs into action and behaviour. Kuran's work on "preference falsification" examines the causes of such deviations. Social pressure might cause an individual to choose differently in public than in private. Used within the context of religions, one could state, that because of group pressure, the religion preferences people express in public often differ from those they hold privately. Such an extrinsically motivated person lives also according to the rules, but only as long as one may extract advantages out of the adherence.

The distinction between intrinsic and extrinsic motivation can serve as a coherent argument for estimating the influence of religion on several economic outcomes in a more



differentiating way. As far as one has internalized the religious belief and the religious code of conduct, one follows the strong incentives provided by religions to enforce appropriate social behaviour. Religious capital affects output by changing the manner in which technology and human capital are used. Religious capital leads to the establishment of networks, which are important not only for the religious services they provide but also for their non-religious services. Therefore religions have some kind of insurance function (e.g. network of charity, especially with respect to health and education). Furthermore religions enhance trust, which is considered to encourage repeated interactions necessary for making cooperation gains possible.

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Leuphana Universität Lüneburg  
Institut für Volkswirtschaftslehre  
Postfach 2440  
D-21314 Lüneburg  
Tel.: ++49 4131 677 2321  
email: [brodt@leuphana.de](mailto:brodt@leuphana.de)  
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