

# **Title: The Holy Triad? Religion, Globalization, and Sustainable Development**

## **Abstract**

This thesis deals with development, globalization, and religion. These topics have so far largely been studied in isolation (and if studied often only in a qualitative sense and based on the assumption of unidirectional causation). This thesis demonstrates the interrelationships of development, globalization, and religion and highlights the heterogeneity of signs, sizes, and causal directions of the relationships. Since development, globalization, and religion have always been deeply rooted in human nature, their relations offer a complicated research puzzle. This is further complicated by the fact that globalization and (sustainable) development are multidimensional in nature and the fuzzy concept of (non)religion that to a large extent is subjective and based on self-reporting. The aim of the thesis therefore by necessity is modest; the research project tries to contribute four small pieces to the puzzle posed by development, globalization, and religion.

The first puzzle piece relates to a significant gap in the History of Economic Thought on international trade that by and large neglects thinkers and authors of Ancient Asia. This puzzle piece is uncovered in Chapter 2 which, through traditional narrative reading, reviews and discusses the attitudes toward merchants and their commercial activities in five major philosophies of life in Ancient Asia (Vedic religion, Buddhism, Confucianism, Chinese Legalism, and Islam). Following Jacob Viner's approach to analyze the impact of early Greek, Roman, and Christian thinking on trade the thesis analyses the attitudes toward merchants and their commercial activities (that serve as a proxy for the attitude toward trade and international trade). Within the context of religion and international trade, the chapter also reflects on the recent findings regarding the impact these five philosophies of life have on international economic relations and exchange. An important finding is the heterogeneity of these impacts (ranging from a very positive attitude in Islam to a consistently negative evaluation in Chinese legalism). The findings of this chapter serve as a source of inspiration for the remainder of the thesis that due to data availability focus on the contemporary empirical relevance of religion for globalization and sustainable development.

The second puzzle piece is a first look at the empirical relation between religion and globalization, focusing on the direction of religion with the use of a Granger causality analysis and the Impulse-Response Functions of a set of Vector Auto Regression models. In a sense Chapter 3 expands the domain considered in Chapter 2, both in terms of dimension and scope, as it also

analyzes believers versus non-believers (and particularly introduces Christianity and Atheism into its models) and because the analysis goes beyond international trade per se covering multidimensional aspects of globalization (economic, social, and political globalization as well as the legal distinction between *de facto* and *de jure* measures of globalization). Chapter 3 methodologically moves to quantitative analysis. Based on a sample of 159 countries in the period between 1990 and 2015, a Granger causality test of the relation between religion and globalization is performed that shows significant – so far not recognized – heterogeneities with respect to the direction, size, and significance of the relationship between multidimensional globalization and the seven categories of (non)religions.

The third puzzle piece is a complicated one: the multidimensional concept, sustainable development. Chapter 4 deals empirically with the relation between globalization and sustainable development. A panel data set of 160 countries in the period between 1990 and 2018, is used to estimate 180 non-linear models. Importantly, the measures for globalization are on the whole significant both in a linear and in a quadratic form suggesting an inverted-U relationship between sustainable development and globalization. The underlying genuine effect and the variation in the estimates of these 180 regressions are analyzed by means of a self-meta-analysis, believed to be the first time this tool has been conducted in such a manner in empirical economic research.

The last puzzle piece that this thesis contributes is an analysis of the direct and indirect effects that religion has on sustainable development. Chapter 5 is positioned in the center of the topics addressed in earlier chapters as it is surrounded by the three previous research puzzle pieces. A quantitative analysis estimates a system of four simultaneous equations that allows development, globalization, and religion to simultaneously affect each other under inter-correlated conditions. Based on a sample of 146 countries in the period between 1990 and 2015, Chapter 5 investigates the effects of different religions on sustainable development, both directly and indirectly via two possible channels: globalization and income.

Through the results of these four chapters, this thesis contributes to the literature in five possible ways:

1. The review in Chapter 2 helps to fill the gap due to the lack of research on the ancient period of Asia in the literature on the history of economic thoughts on international trade. Besides, such review and discussion point out the heterogeneity among religions in positioning international trade, which is barely noticed in the literature.
2. The empirical quantitative examination of relations between different religions and globalization reveals heterogeneity among religions. The results in Chapter 3 also

suggest various directions of Granger causality (either from religion to globalization or the other way round or two-way) in this correlation. Acknowledging and being aware of such heterogeneity and variations in directions of Granger causality could help future research on this topic by improving their methodology.

3. By proposing a non-linear relation between globalization and sustainable development, Chapter 4 calls for different ways of modeling this relation. Besides, the multidimensional approach and the self-meta-analysis enabled by this approach ring a reminder to empirical research to consider the multidimensionality of both globalization and sustainable development rather than taking them as single-dimensional concepts.
4. Chapter 4 provides a self-meta-analysis, innovative use of an established method in economic research. This innovation is relevant to other empirical studies that need to report on important variations in a large range of estimations.
5. The results in Chapter 5 endorse the significant and heterogeneous, direct and indirect effects on sustainable development exerted by different religions and philosophies of life (including Atheism).

The pieces of the research puzzle on the (inter) relationship of development, globalization, and religion do not provide the full picture. As with any jigsaw puzzle, it is likely that some pieces are missing and that the pieces that were put together in later research may fit differently. The bottom line of the dissertation is, however, not influenced by such consideration. The conclusion from this thesis is clear: religion and its potential effects should be elements of the future discourse of development.