

Almuth D Merkel

Research Statement

Becoming a researcher. Having had the opportunity to live in different countries and gain experience in the field, the socioeconomic grievances among the local population left a lasting impact on me. After graduating high school, I worked and lived in one of the poor outskirts of Santiago de Chile for one year. There, I witnessed students voicing discontent about disparate opportunities on the streets and families struggling to live a healthy and dignified life with very limited financial means. As a result, I decided to study Ecotrophology, which addresses both domestic economics and nutrition science, including food processing and diet planning.

Through the study of ecotrophology, I developed a strong interest in food security. I seized opportunities to intern in Mexico and Nicaragua, where I observed that inefficient agricultural production contributes to food insecurity. I thus completed a master's in food and agribusiness to better understand food availability and stability. Soon, I developed a strong interest in understanding the causes and consequences of food insecurity. In my master's thesis, I focused on Venezuela, which has been confronted with a starving population and conflict, despite resource abundance. Through this research project I learned about the importance of the political and economic environment for peaceful and prosperous economic development. In my dissertation, I examine this relationship in more detail.

Research Interest. My research focuses on the analysis of the causes and consequences of unequal economic development. I am particularly interested in the concept of the social market economy as a formula for peace, prosperity, and sustainability. My research is applied in nature and data-driven, including economic impact studies and public policy simulations. It is aimed at supporting evidence-based policy and decision-making.

Yet, academic research results are traditionally published as journal articles. Access to those articles, however, is often limited to academia. In response to this limitation, I have developed a special interest in the use of information technologies to bridge the gap between academic research and informed public policy and debate.

Research Strategy. I believe that the traditional presentation format of research results undermines its purpose of contributing to a more informed public debate and discourages reader interaction with valuable information. Such insights, however, are relevant and useful far beyond academia. I have thus adopted a two-fold research strategy. Firstly, embedded in the scientific method, I conduct applied and data driven analyses of socio-economically relevant topics. Secondly, I take advantage of information technologies to communicate research results in a comprehensible way.

Specifically, in my dissertation I explore opportunities to translate the insights from my empirical analysis into an accessible format and develop an interactive data visualization and simulation framework. I then code an interactive web application accordingly so that a user may simulate social market conform policy changes and their impact on peace, prosperity, and sustainability.

I believe that the academic community has a responsibility to support evidence-based policy and decision-making and to contribute to a more informed public debate. By combining the scientific method (to gain insights) with information technologies (to share insights), I direct my research efforts towards the public domain. With that, I hope to build a solid foundation for potential future collaborations within and beyond academia.