



Empirical evidence on factors influencing farmers' administrative burden: A structural equation modeling approach

Christian Ritzel, Gabriele Mack, Marco Portmann, Katja Heitkämper & Nadja El Benni

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Motivation and aim of the study

- Cross-compliance based direct payment system
 - Farmers have to fulfill cross-compliance standards (Mann, 2005)
 - Farmers participate in voluntary agri-environmental programs (Mack et al., 2020)
 - Farmers have to provide various documentations to prove eligibility for direct payments (El Benni et al., 2020)

- Administrative burden
 - Administrative burden: “The experience of policy implementation as onerous” (Burden et al., 2012)

- Aim of the study
 - Estimating factors that influence the farmers’ perceived administrative burden



Overview of administrative regulations imposed on Swiss farmers due to the cross-compliance based direct payment system

Ongoing records required to demonstrate animal welfare (livestock farms)
- Accompanying document for cloven-hoofed animals
- Udder health report
- Treatment journal
- Inventory list of veterinary medicinal products
- Animal movement notifications
- Manure flow report and cleaning journal
General annual records (all farms)
- General information form
- Land survey form
- Animal survey form
Annual records to demonstrate cross-compliance standards (all farms)
- Nutrient balance sheet and documentations
- Land plot registry
- Crop rotation report
- Biodiversity area report
Annual records for voluntary agri-environmental programs (all farms)
- Biodiversity area report (biodiversity programs)
- Feed balance sheet (grassland-based milk and meat program)
- Documentation of regular outdoor exercise of animals (regular outdoor program)
- Registration for voluntary agri-environmental programs in the following year
Monitoring and inspections by the government (all farms)
- At least every four years, area records every eight years



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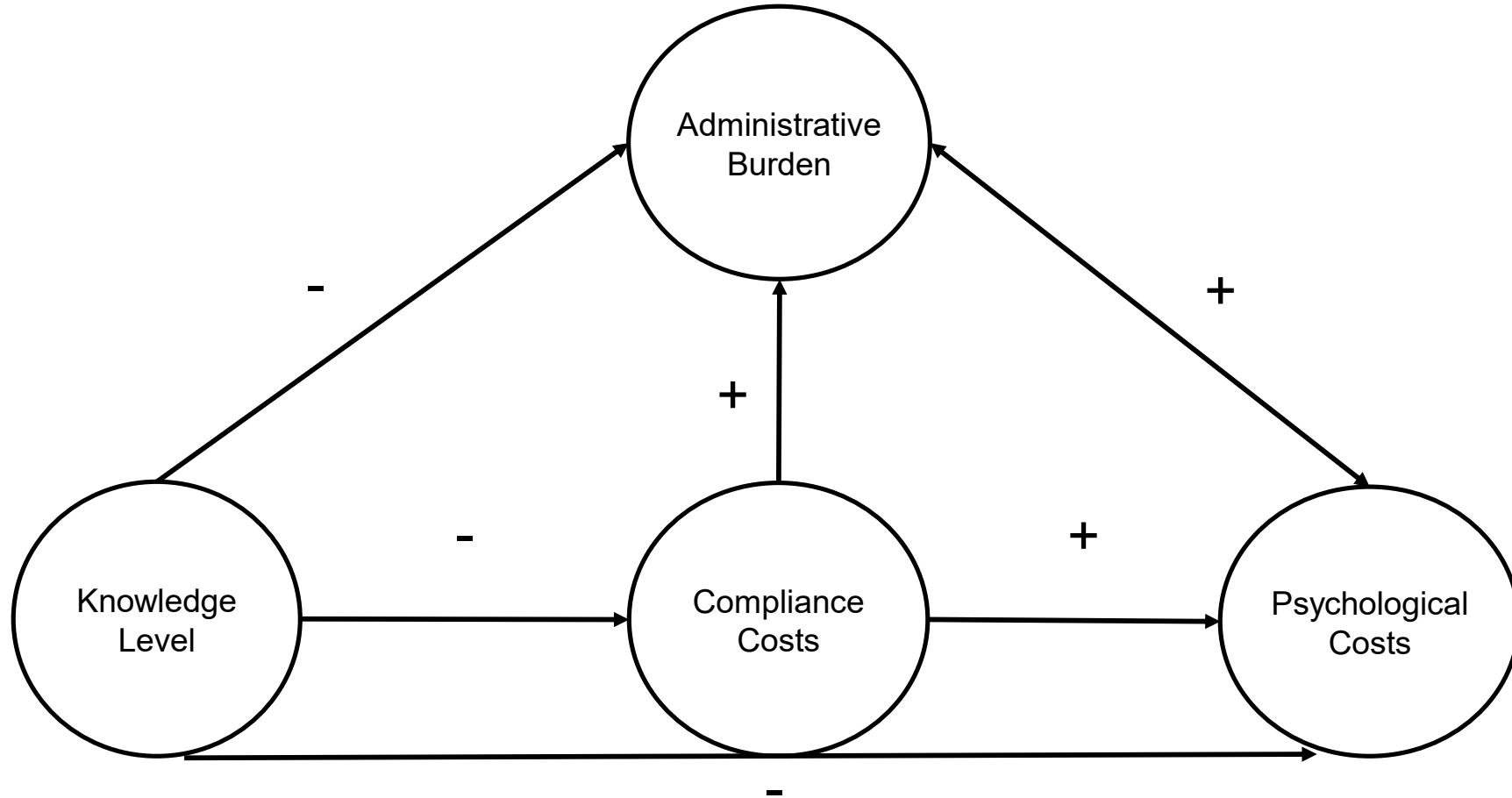
Framework – Factors influencing administrative burden

Type of Cost	Examples
Learning costs	Individuals must learn about a direct payment program, whether they are eligible, the nature of the benefits, and how to access the program.
Psychological costs	Individuals face loss of autonomy or power, or an increase in stress.
Compliance costs	Individuals must complete forms and provide documentation.

Moynihan et al. (2014)



Conceptual model and hypotheses





Database

▪ Survey data

- A written survey of 2,000 randomly selected Swiss farmers was conducted from February to April 2019 (Mack et al., 2019)
- The response rate was approximately 40% (N=808)
- Questions on farmers' experiences of administrative requirements, administrative compliance costs and statements on agricultural policy...

▪ Measuring «administrative burden»

- y_1 : Perceived administrative burden today
- y_2 : Perceived administrative burden today compared to 5 years ago

▪ Measuring «compliance costs»

- y_3 : Change in administrative workload due to switch to electronic forms
- y_4 : Time spent for providing documents for the direct payment inspection
- y_5 : Time spent when direct payment inspection takes place



Database

▪ Measuring «psychological costs»

- y_6 : Identification with the direct payment system
- y_7 : Identification with direct payment control measures
- y_8 : Identification with obligations on collecting farm data
- y_9 : Restricted entrepreneurial freedom

▪ Measuring «knowledge level»

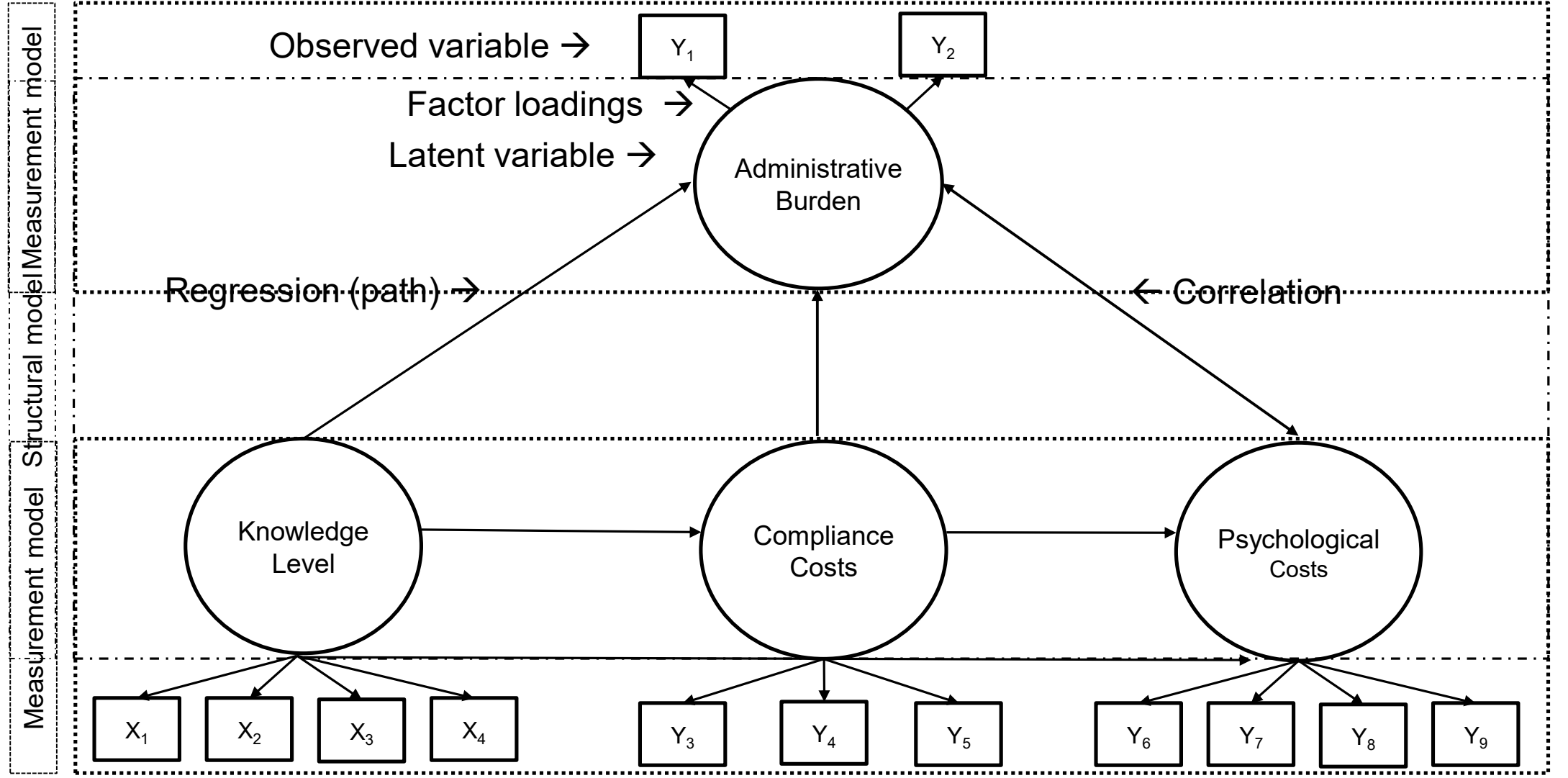
- x_1 : Education
- x_2 : Information level direct payment control measures
- x_3 : Information level on current obligations to collect farm data
- x_4 : Information level on the current agricultural policy

→ Ordinal scaled variables

→ g_{sem} (generalized structural equation modeling)

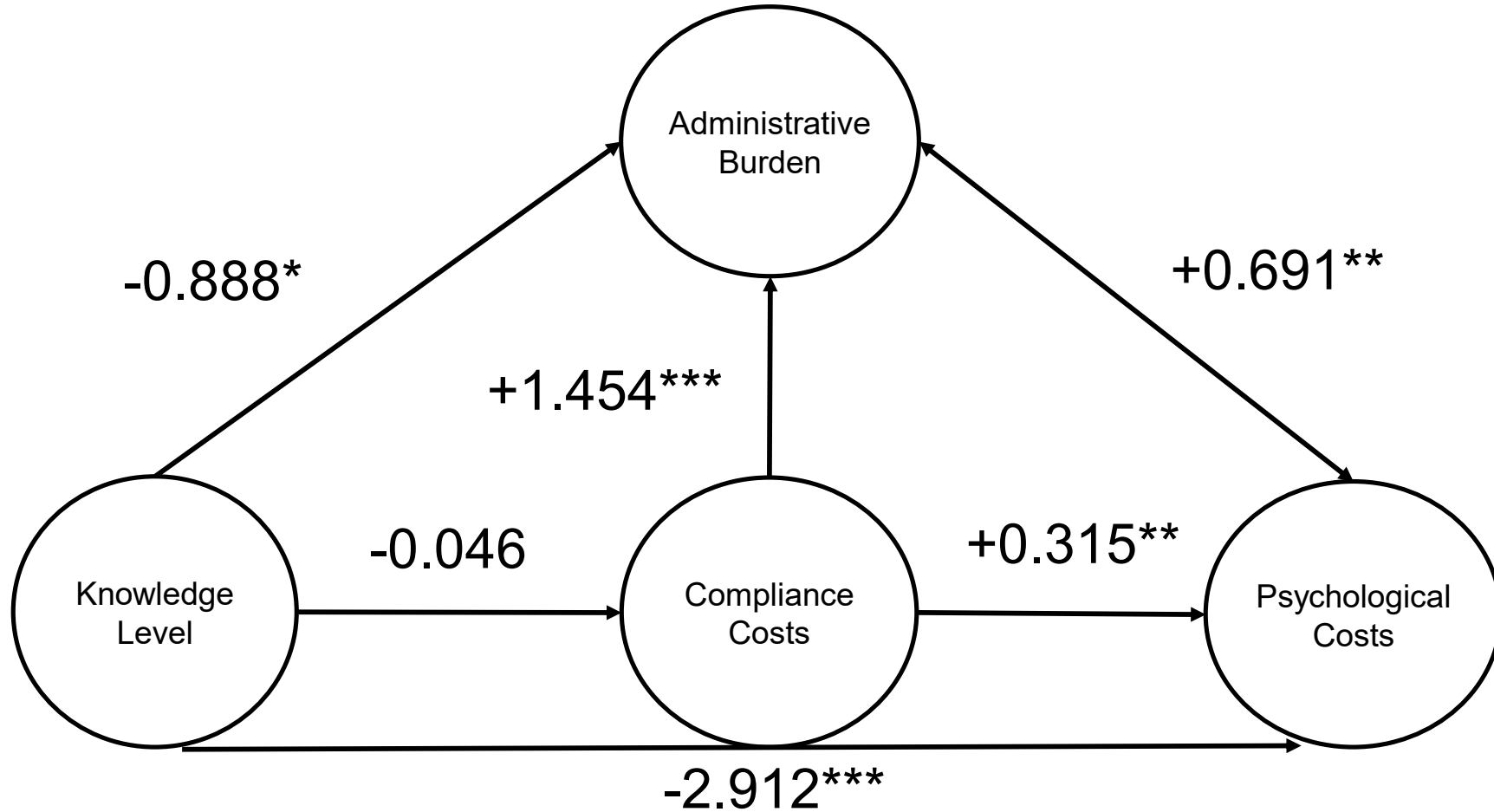


Method: Structural Equation Modeling (SEM)





Results GSEM

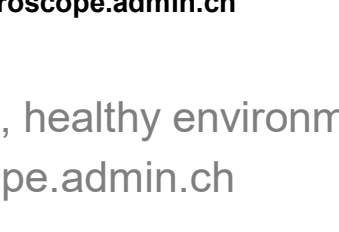
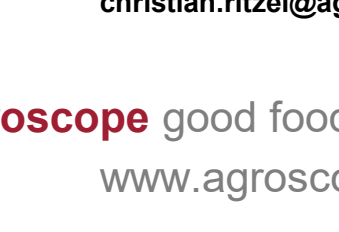
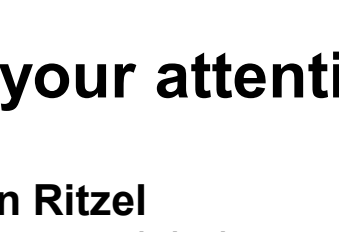
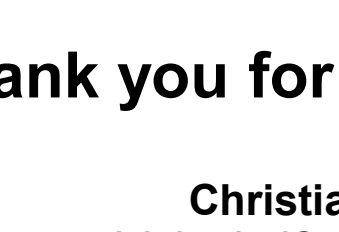


*** $p \leq 1\%$, ** $p \leq 5\%$, * $p \leq 10\%$



Conclusions & policy recommendations

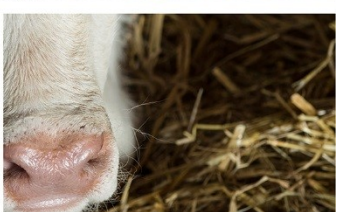
- The results confirm that not only rational factors such as compliance costs but also psychological factors influence farmers' perceived administrative burden
 - Well-educated and well-informed farmers exhibit lower psychological costs and perceive administrative tasks as less onerous
 - Furthermore, we find a strong positive effect of compliance costs on administrative burden
- To increase the acceptance of the cross-compliance based direct payment system, reducing farmers' administrative burden is of crucial importance for agricultural policy-makers
- To reduce farmers' administrative burden measures should focus on reducing compliance costs
 - Training and support of older farmers regarding the efficient handling of administrative requirements
 - Reducing the number of application documents to be completed for direct payments
 - Investing in e-government



Thank you for your attention

Christian Ritzel
christian.ritzel@agroscope.admin.ch

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