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Factors determining farmer satisfaction with the organic certification process in Chile

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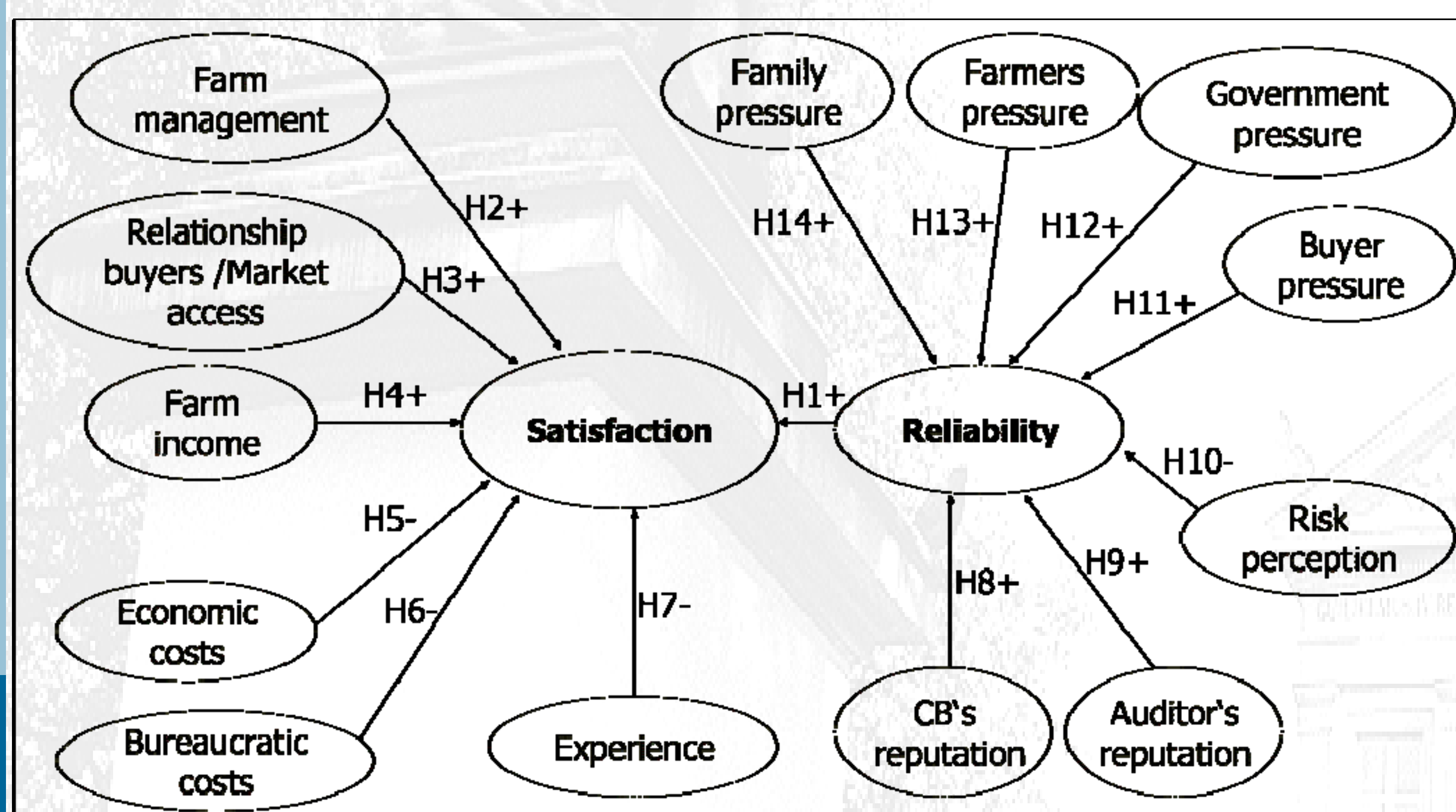
1. Problem statement

⇒ Perceived negative effects associated to the use of quality and safety control systems have been described in the literature (Getz and Shreck, 2006; Gawron and Theuvsen, 2006; Dorr and Grote, 2009; Hammoudi *et al.*, 2009; Karipidis *et al.*, 2009).

2. Objective

⇒ To critically assess farmers' satisfaction with the certification system process and the factors driving it.

3. Research hypotheses and model



CB = certification body.

4. Methodology

⇒ Data from 60 Chilean organic farmers.

Table 1. Sample characteristics^a

Age (years)	Gender (female/male)	Experience Org. farming (years)	Size of farm (ha)	Number of workers (#)
49.1	8/52	7.0	21.7	9.5
12.3 ^b	13.3%/86.7%	5.2	37.7	16.6

^a 87% of the surveyed farms are affiliated to the certification body BCS ÖKO-GARANTIE GMBH.

^b Standard deviation in *italic*.

⇒ Questionnaire with multiple scale items (Likert scale, -3 to +3).

⇒ Analytical framework: Structural equation modelling.

⇒ Statistical approach: Partial least squares (PLS).

⇒ Software: SmartPLS version 2.0 M3.

5. Results

⇒ The majority of respondents (90%) show some degree of satisfaction with the organic certification procedure.

5.1. Assessment of the measurement model

⇒ Indicator loadings (data not displayed) are consistent with recommended threshold (see Henseler *et al.*, 2009; Hair *et al.*, 2011).

⇒ Reliability and convergent validity scores are also acceptable (see Table 2).

⇒ Discriminant validity is also supported (data not displayed).

Table 2. Reliability and convergent validity scores

Latent constructs	N° items	CRA ^a (>= 0.7)	CR ^b (>= 0.7)	AVE ^c (>= 0.5)
Auditor's reputation	3	0.53	0.76	0.52
Bureaucratic costs	3	0.58	0.77	0.53
Buyers pressure	2	0.63	0.84	0.73
Relationship buyers/Market access	4	0.80	0.86	0.61
CB's reputation ^d	2	0.40	0.75	0.61
Economic costs	2	0.62	0.82	0.70
Experience in organic farming	1	1.00	1.00	1.00
Family pressure	1	1.00	1.00	1.00
Farm income	2	0.56	0.81	0.69
Farm management	3	0.57	0.76	0.53
Farmers pressure	3	0.61	0.79	0.56
Government pressure	1	1.00	1.00	1.00
Reliability of organic certification	3	0.62	0.79	0.57
Risk perception	3	0.59	0.77	0.52
Satisfaction	1	1.00	1.00	1.00

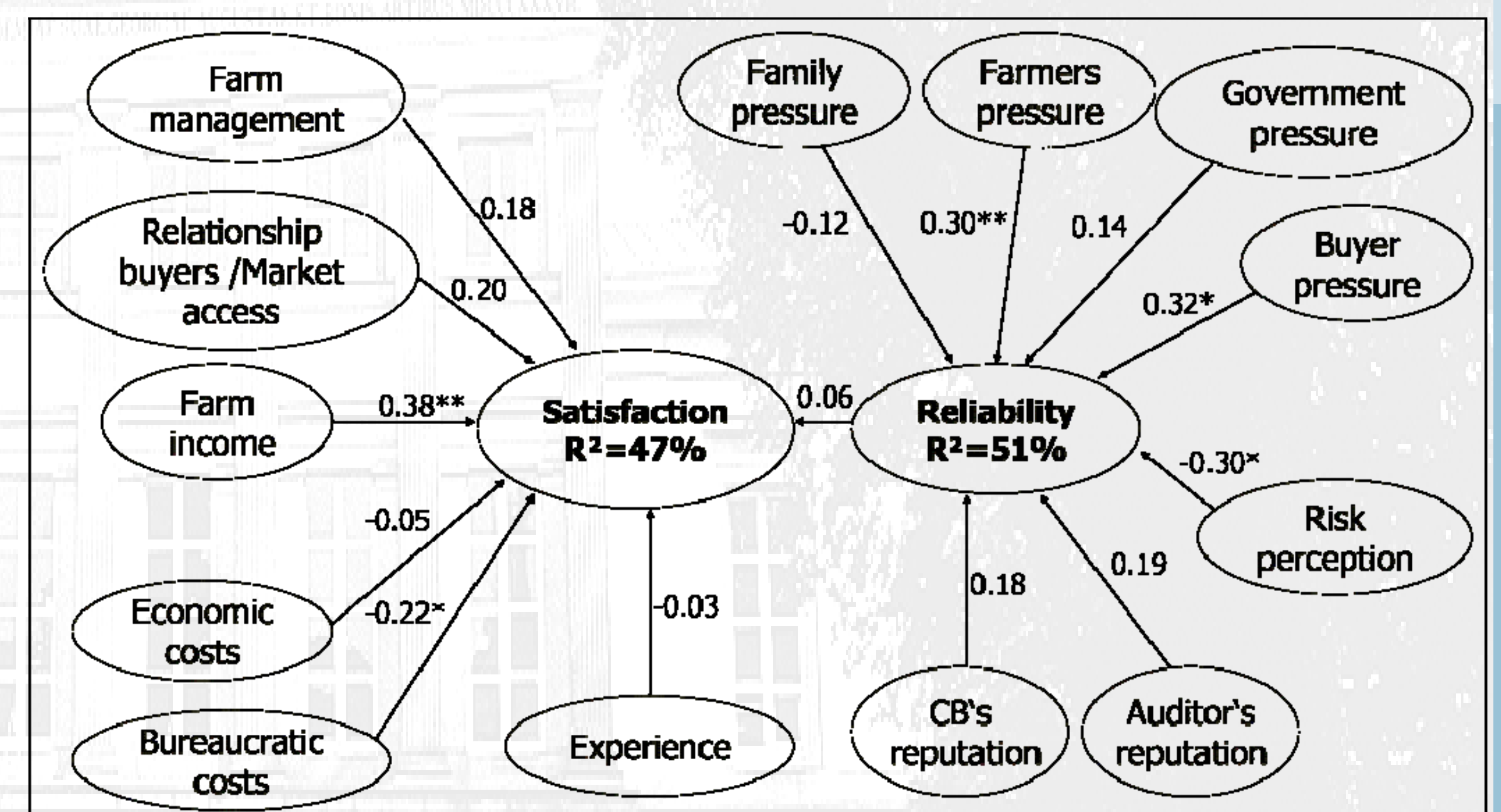
^a Cronbach's alpha.

^b Composite reliability.

^c Average variance extracted.

^d Certification body's reputation.

5.2. Assessment of the structural model



* Parameter is significant at $p < 0.05$; ** parameter is significant at $p < 0.01$.

6. Conclusions

⇒ Farm income major determinant of farmers' satisfaction.

⇒ Bureaucracy to get certification approval should be reduced.

⇒ Reliability would not play a significant role in satisfaction.

⇒ Reputation issues do not affect the perceived reliability.

⇒ Opportunistic behaviour of other farmers decreases the reliability.

⇒ Role of the State as monitor is poor.

⇒ Buyer pressure and farmers' control suggest ability of self-regulation within the industry.

7. Limitation and further research

⇒ The affiliation of the majority of surveyed farms to one CB may have biased the findings.

⇒ A more heterogeneous sample considering different CBs operating in Chile is needed in future studies.

References

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