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Assessing policyholders' acceptance of life settlements in Spain using a technology acceptance model

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1. Introduction

A life settlement (LS), as offered in the US, is an agreement whereby a policyholder sells their life insurance policy to an investor for a greater price than its cash surrender value. In this way, the investor undertakes to pay, if any, the outstanding premiums and has the right to receive the death benefit when the insured dies.

This secondary market of life insurance policies has a strong development in the US, but this fact does not follow in many countries.

LSs can be considered a novel and innovative financial asset in countries where they are not yet established, as in the case of Spain.

Our work analyses the key factors for the development of a secondary life insurance market through LSs in Spain.

We use consumer-behaviour findings from academic research on the acceptance of new techs and services.

The analysis is grounded on the Technology Acceptance Model (TAM) (Davis, 1989; Venkatesh and Davis, 2000) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003 and Venkatesh et al., 2012).

Our work evaluates the impact on attitude (ATT) towards LSs of the following variables:

- Performance Expectancy (PE), also called Perceived Usefulness, is the degree to which policyholders perceive that engaging in LSs will enhance their utility.
- Expected Easiness (EE) is the perception of the absence of difficulties to carry out an LS.
- Social Influence (SI) is related to the influence that people close to the policyholder may have on the intention to use LSs (family members, friends, trusted financial advisors, ...).
- Ethical problems (EP). The fundamental reason behind this variable is the loss of insurable interest on the part of the new policyholder because the original objective of providing financial protection for the insured's loved ones is lost.
- Bad Feelings (BF). This variable is justified by the fact that LS transactions often occur under high emotional distress for the policyholder.

We use fuzzy set qualitative comparative analysis (fsQCA) as the basis, supplemented by partial least squares-structural equation modelling (PLS-SEM).

The use of fsQCA and PLS-SEM are rather complementary than competitive since they allow analyzing data from two non-excluding points of view:

- PLS-SEM is a variable oriented technique and coefficients measure the net incidence of each input variables on the output variable.
- FsQCA does not quantify the influence of the inputs on the output by a coefficient but rather discovers various ways in which the explanatory variables combine to produce a response.
- In PLS-SEM, an input variable only can be linked with the output with one sign.
- FsQCA allows a different sign for the influence of an input variable into their impact on the output in different combinations of explanatory variables.
- FsQCA does not assume symmetrical relationships between variables.

Our work sequentially employs fsQCA and PLS-SEM, using the configuration derived from fsQCA as a guide to construct the PLS-SEM architecture to adjust.

2. Research hypotheses

We formulate the hypotheses to assess with fsQCA as follows:

- Hypothesis 1a (H1a). The combination of high (low) perceptions about PE, EE, SI (EP, BF) produces sufficient conditions for acceptance of LSs.
- Hypothesis 1b (H1b). The combination of low (high) perceptions about PE, EE, SI (EP, BF) produces sufficient conditions for rejection of LSs.
- Hypothesis 1c (H1c). Causes for the acceptance and rejection of LSs by policyholders are different, i.e., recipes indicating rejection are not mirror opposites of recipes of acceptance.

And the hypotheses to be tested using PLS-SEM are:

- Hypothesis 2a (H2a). PE positively influences policyholders' attitude towards LSs.
- Hypothesis 2b (H2b). EE positively influences policyholders' attitude towards LSs.
- Hypothesis 2c (H2c). SI positively influences policyholders' attitude towards LSs.
- Hypothesis 2d (H2d). EP negatively influences policyholders' attitude towards LSs.
- Hypothesis 2e (H2e). BF negatively influences policyholders' attitude towards LSs.

3. Material and methods

Data collection was carried out through a structured questionnaire aimed at people who have a university degree and are linked to the insurance or financial industry.

Analysis of data is done by implementing two sequential methods:

- **Analysis with fsQCA: How do input variables combine to enable policyholders' positive or negative attitude towards LSs?**

We use fsQCA 3.1 software (Ragin, 2017) and follow the steps proposed by Pappas and Woodside (2021).

- **Analysis with PLS-SEM: What is the net effect of every input variable and its statistical significance on policyholders' attitude towards LSs?**

We used SmartPLS 4 software and followed the steps outlined in Hair et al. (2019).

Results of fsQCA

Factor/Recipe	Positive attitude (ATT)		
	1	2	3
PE	●	●	●
EE	⊗	●	●
SI			●
EP		⊗	
BF	⊗		●

Note: A full circle (●) indicates the affirmation of a variable, and circles with x (⊗) indicate its negation.

Regarding the explanatory recipes of ATT:

- The variables PE and SI come affirmed and EP comes negated.
- EE comes affirmed in two recipes, but negated in another. We can make a similar appreciation with respect to BF.
- The most important variable to produce acceptance is PE, since it must be affirmed in all three recipes. EE is also present in all recipes but with contradictory signs.

Factor/Recipe	Negative attitude (~ATT)		
	1	2	3
PE	⊗	⊗	⊗
EE	⊗	⊗	
SI	⊗	⊗	⊗
EP	•		•
BF		•	•

Regarding the explanatory recipes of ~ATT:

- All explanatory variables are present in at least one recipe with the expected sign.
- The most important conditions to explain ~ATT are the negation of both PE and SI since these variables participate in all the recipes.
- To produce resistance to LSs, it is also necessary to combine the negation of PE and SI with the negation of EE and/or the affirmation of EP and BF.

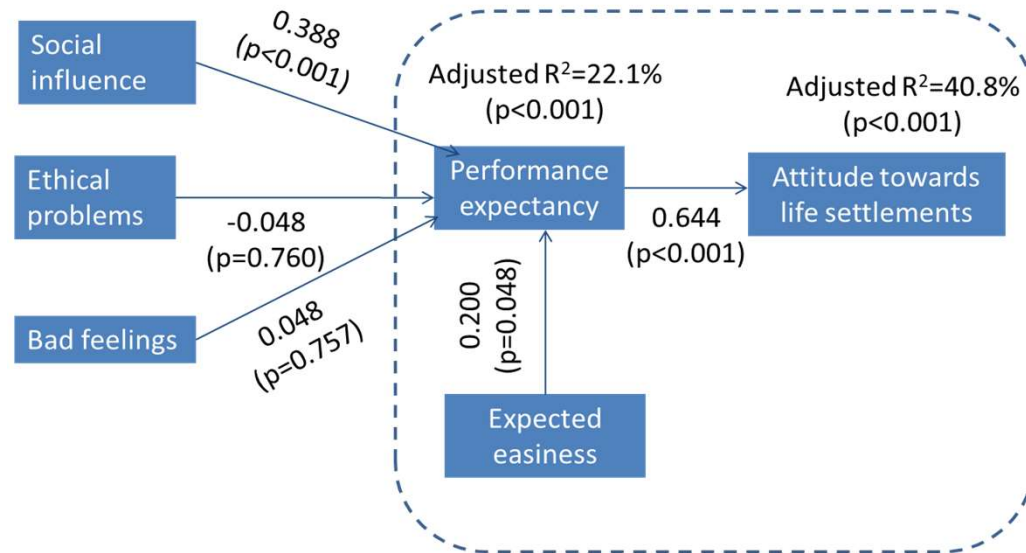
By analysing how EE, SI and BF impact ATT and ~ATT, it can be seen that recipes producing acceptance and resistance are not the mirror opposite.

Results of PLS - SME

The results of the fsQCA suggest that the key variable to explain the attitude towards LSs is PE .

The other explanatory variables must always be combined with PE to produce a positive or negative response in ATT.

We propose a PLS model where only PE has direct effects on ATT. The other variables indirectly impact ATT by influencing PE.



The numbers on the arrows represent the paths of the model and their significance level.

Path	Path Coefficient	p-value	Hypothesis acceptance
PE→ATT	0.644	<0.001	H2a is strongly accepted
EE→PE	0.200	0.048	
SI→PE	0.388	<0.001	
EP→PE	-0.048	0.760	
BF→PE	0.048	0.757	
EE→PE→ATT	0.129	0.057	H2b is moderately accepted
SI→PE→ATT	0.250	<0.001	H2c is strongly accepted
EP→PE→ATT	-0.031	0.761	H2d is rejected
BF→PE→ATT	0.031	0.751	H2e is rejected

- The direct effect of PE on ATT is quantified by a significant path coefficient We also find significant effects of SI and EE on PE. The impacts of EP and BF on PE do not show statistical significance at standard levels.
- As for the indirect effects of EE, SI, EP and BF on ATT, SI positively influences ATT with clear statistical significance; EE shows a positive influence with moderate statistical significance.
- EP and BF do not show a significant influence on ATT.

5. Conclusions

- PE is the most significant variable in explaining ATT.
- EE and SI have a significant positive direct impact on PE and a substantial positive indirect influence on ATT.
- EP and BF may significantly influence resistance towards LSs.
- The findings of this work have important implications for the development of a secondary life insurance market through LSs in Spain:
 - The key variable in fostering a positive attitude towards LSs is PE. Therefore, for LSs to be attractive to policyholders, they must offer significantly higher amounts than simply surrendering the policy.
 - Additionally, to create a perception of usefulness, it is essential to consider factors such as EE and SI. EE implies that the successful implementation of LSs requires fast and efficient procedures. SI implies that the acceptance of LSs by policyholders not only depends on relatives close to the insurer but also on the perception of financial advisors and insurance brokers. It is crucial that these professionals view LSs as a convenient option for their clients.

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Many thanks for your attention!