WHY DO INSURANCE COMPANIES USE AMBIGUOUS LANGUAGE IN THEIR POLICIES? A BIBLIOMETRIC REVIEW

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ABSTRACT

This study aimed to investigate the reasons for insurance companies using ambiguous language in their insurance policies. A bibliometric and content analysis method was used by analyzing papers published from1985to 2020 and employing VOS viewer to conduct multiple sets of analyses. The results revealed five clusters and streams on ambiguity: optimal insurance, ambiguity aversion, insurance contracts, uncertainty, and risk assessment. The results confirmed the growing interest in studying ambiguity in insurance contracts and how the legal system handles ambiguity in insurance contracts. This research paper could be a starting point for future research to expand the scope of the investigation and provide background on the purpose of drafting insurance contracts in an ambiguous way and the overall impact of that drafting approach on both insurance companies and policyholders.

Keywords: Insurance, Ambiguity, Insurance Contracts, Bibliometrics, Research Agenda

INTRODUCTION

The main aim of insurance companies is to grant risk-averse protection from a broad range of threats, including healthcare costs, loss of life, harm to property, exposure to liability, and unemployment. Despite their effectiveness in these respects, however, insurance contracts seldom work as intended. Their shortcomings were first pointed out by Doherty and Schlesinger (1990),and include insolvency of insurers and contractual confusion on behalf of customers who may lack the financial knowledge to interpret their insurance contracts correctly (Peter & Ying, 2019).According to Ghirardato (2004), uncertainty or ambiguity applies to situations in which certain incidents do not have a straightforward, socially reasonable likelihood allocation. Ambiguity in insurance contracts means that there is more than one understanding that contributes to indefiniteness or a lack of clarification (Schane, 2002).

When there are insurance policy terms that can be understood in different ways and involve uncertainty, the parties involved may interpret the terms in their favor, which can lead to court litigation. Others refer to ambiguity when words have more than one meaning rather than the language being unclear. Moreover, Schane referenced a theory that the parties involved in a contract must adhere to the written words that constitute the contract and not the interpretation or how each party tries to find meaning in their favor, with the exception being if the court ruled that they were unable to make an interpretation (Schane, 2002).

Furthermore, a doctrine known as the ambiguity doctrine exists in insurance contracts. It states that if ambiguity is detected in a contract, it must be constructed against the insurer. This rule derived from *contra proferentem*, which is now used for all insurance contracts and agreements, including those used by large organizations (Miller, 1988).

The courts'involvement concerning ambiguity should factor indownstream decision implications, both as to expected insurer behavior and the interpretive model. However, this involvement is considered insufficient,as courts often do not know how insurance companies will redraft their policies, and theycannot guarantee how insurance companies will modify the insurance coverage following the *contra proferentem*(Boarman, 2019).

The purpose of this paper is to elucidate why insurance companies use ambiguous language in drafting terms, conditions, and policies. To achieve the objective of this paper, we carried out an analysis of literature based on a bibliometric and systematic review of 278 papers published from 1985 to 2020 to ensure methodical accurateness in mapping the results of the analysis on ambiguous language in insurance contracts.Our research dataset was utilized to conduct a series of analyses using the bibliometric approach to visualize similarities (Nobanee, 2020). Furthermore, a co-occurrence analysis was conducted and resulted in five streams: ambiguity and optimal insurance, ambiguity aversion and insurance contracts, health insurance, uncertainty, and risk assessment.

Our paper begins with the study method adopted and the logic behind it. We then detail how the data set was used, exported, and analyzed using multiple statistics methods by VOSviewer. Next, we address the clusters of studies that represent the key research themes. Finally, our findings and future directions for the study are discussed.

METHODS

To achieve a comprehensive study explaining why insurance companies use ambiguous language in their contracts, we used the most recent bibliographic research developments. Specifically, we used the Scopus database, an abstract and indexing database developed by Elsevier Co. with full-textlinks(Burnham, 2006).Links to STM journal papers and the references used in those articles are provided by the Scopus database. Over 41,000 STM and social science titles are indexed by Scopus developers, which indicates how massive the database is (Burnham, 2006).

Many researchers have used bibliometric analysis. A study on chain management and green supply by (Fahimnia, Sarkis&Davarzani, 2015) used this method to add insight that was not utilized previously in this field. Furthermore, the bibliometric analysis provided the researchers withthe opportunity to analyze more than 1,000 articles, which led to the detection of key research topics, interrelations, and collaboration patterns (Nobanee, 2021).

The bibliometric analysis also provides the opportunity to research a large data set (Nobanee et al., 2021). For example, research on one long-running journal benefited from this method, as it provided the researchers all the data setsfor articles published during the 30 years of the journal, which helped them reveal trends that aligned with key objectives of their study (Merigo, Blanco-Mesa, Gil-Lafuente&Yager, 2016).

The search criteria in Scopus were based on selected keywords, insurance, and ambiguity in an article's title or keywords. This resulted in 95 articles. Based on the keywords derived from a cluster analysis, the resulting articles did not support our research, and thus, a new search criterion was used based on insurance contract and ambiguity in all fields, limiting the results to those in English.

The final data set included 278 articles from 1985 to 2020, as seen in Table1 below. The results confirmed the growing interest in understanding why insurance companies use ambiguous language in their contracts and policies, as evidenced by the number of articles; there was only one article in 1987, and 36 articles by 2020.

Steps	Criteria	Number of Results
Table 1 **SEARCH CRITERIA AND RESULTS**		
Search query	All ("insurance contract*" and "ambig*") and (limit-to (language, "English"))	
1	Articles retrieved from Scopus using selected keywords	290
2	Articles in English	278
Final dataset		278

FINDINGS

The number of publications represented the first step in the analysis using VOSviewer as seen in Figure 1, which shows a steady and growing interest in insurance contracts, policies, and ambiguous language. There was more interestand more research completed between 2019 to 2020, totaling 70 articles. The analysis of the number of articles is further ranked by citation in Table 2. Search criteria were based on a minimum citation of 2, and there were 186 resulting articles. However, only the top 20 articles were selected. Of these, Langley contributed most to the insurance contracts and ambiguity, with 522 total citations.
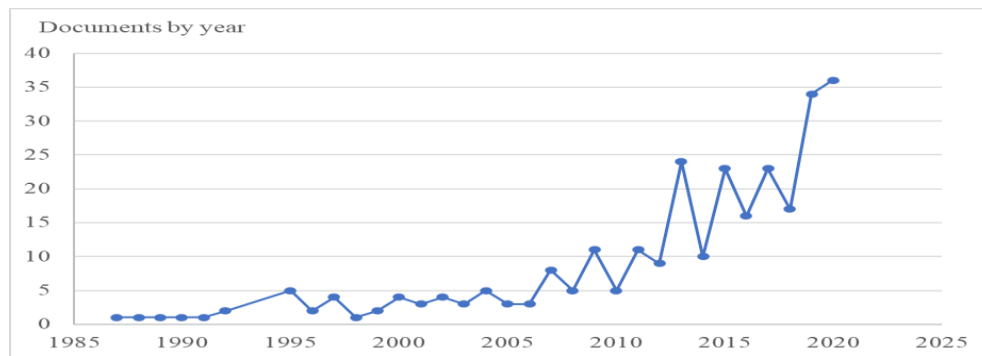

FIGURE 1
NUMBER OF PUBLISHED ARTICLES BY YEAR

Rank	Document	Citations	Rank	Document	Citations
Table 2 **ARTICLES RANKED BY CITATION**					
1	Langley P. (2008)	522	11	Ericson R.V. (2004)	108
2	Davis G.F. (2005)	366	12	Gollier C. (2011)	88
3	Swedberg R. (2009a)	218	13	Koehler J.J. (2003)	86
4	Cole S. (2013)	201	14	Barseghyan L. (2013)	85
5	Levinthal D. (1988)	187	15	Swedberg R. (2009b)	81

6	Heimer C.A. (1999)	178	16	Tilly C. (2007a)	79
7	Moschini G. (2001)	175	17	Eeckhoudt L. (2011a)	78
8	Schneiberg M. (2008)	137	18	Rosenbloom E.S. (1997)	78
9	Schneiberg M. (2001)	121	19	Aerts J.C.J.H. (2011)	73
10	Tilly C. (2007b)	111	20	Tilly C. (2004)	71

VOSviewer was used to visualize the network analysis shown in Figure 2 below. It shows Langley P. with 522 total citations. Langley's contribution was through his documentbased on literature from the sociology of finance and international political economy and guided by comprehensive empirical studies. It examines the unique relationships that now connect Anglo-American society with the financial markets (Langley, 2008). However, the streams were more interconnected among authors with similar keywords, insurance, risk, uncertainty, and ambiguity, and these formed the main clusters for this paper.
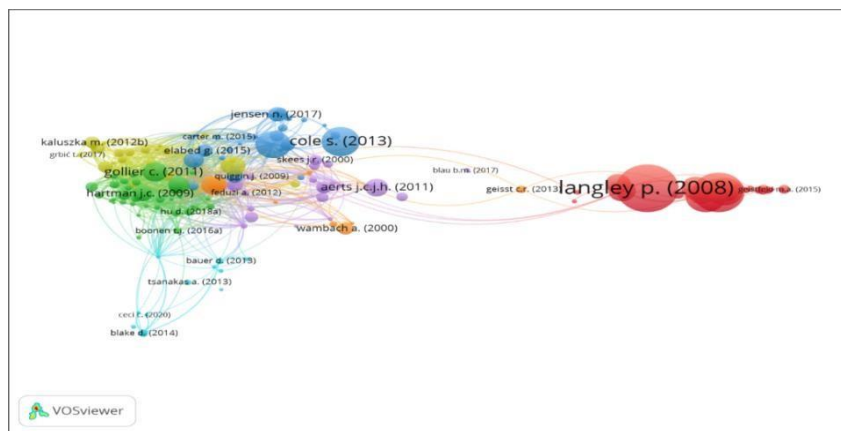

FIGURE2
VISUALIZATION OF A NETWORK OF ARTICLES BY THE NUMBER OF CITATIONS

Following the articles by citation analysis, the source of highest impact journals ranked by citation with the number of documents provided, as seen in Table 3. The top 20 sources were selected, with Principles of Economic Sociology leading in the number of documents by citations. The Journal of Mathematical Economics was the lowest-ranked source for articles by citations.

Table 3					
SOURCE OF ARTICLES BY CITATION					
Rank	**Source**	**Citations**	**Rank**	**Source**	**Citations**
1	Principles of economic sociology	299	11	The geneva papers on risk and insurance theory	47
2	Journal of economic behavior and organization	230	12	Economic theory	40
3	Economic and financial decisions under risk	134	13	Handbook of insurance: second edition	40
4	Theory and society	132	14	Journal of economic surveys	40
5	Insurance: mathematics and economics	122	15	Agricultural finance review	37
6	European journal of operational research	117	16	Astin bulletin	36

7	Agricultural economics (United Kingdom)	74	17	Risk analysis	34
8	Economic journal	65	18	Geneva papers on risk and insurance theory	30
9	Journal of Risk and insurance	59	19	Decisions in economics and finance	26
10	Applied economic perspectives and policy	49	20	Journal of mathematical economics	24

The total strength of the bibliography coupling links among authors was calculated and resulted in 214 authors. The top 20 authors were selected and ranked by the number of citations, as seen in Table 4. The top 20 authors were selected,with Langley being the top author who contributed to this search literacy, followed by Davis, McAdam, and Richard. Their Organization Theory and Social Movement Theory contribution was cited 366 times. There were a total of 36 articles cited 5,298 times for the top 20 authors. Langley, as an author, contributed around 10% of the total citations among authors.

Table 4 AUTHORS RANKED BY CITATIONS						
Rank	Author	Documents	Citations	Rank	Author	Documents	Citations
1	Langley P. 2008	1	522	11	Giné X. 2013	1	201
2	Davis G.F. 2005	1	366	12	Tobacman J. 2013	1	201
3	Mcadam D. 2005	1	366	13	Topalova P. 2013	1	201
4	Richard Scott W. 2005	1	366	14	Townsend R. 2013	1	201
5	Zald M.N. 2005	1	366	15	Vickery J. 2013	1	201
6	Swedberg R. 2003,2004,2009	4	364	16	Levinthal D. 1988	1	187
7	Gollier C. 2011,2013,2014	6	322	17	Heimer C.A. 1999	1	178
8	Schneiberg M. 2008, 2002, 2001	3	283	18	Hennessy D.A. 2001,2020	2	178
9	Tilly C. 2004,2005,2007	4	270	19	Moschini G. 2001	1	175
10	Cole S. 2013	1	201	20	Schlesinger H. 2011, 2014	1	149

The organizations affiliated with the authors of the research literacy,shown in Table 5, show the top 20 organizations ranked by published documents, with the University of Waterloo, in Canada, and Columbia University, in the United States, leading with 9 published documents each. They were succeeded by the University of Pennsylvania, with eight publications. Thisindicated that there is more dedicated research on the main topic of this paper in Canada and the United States countries compared to the contributions of the rest of the world.

Table 5 ORGANIZATIONS RANK BY DOCUMENTS					
Rank	Organization	Documents	Rank	Organization	Documents
1	University of Waterloo	9	11	UniversitéFédérale Toulouse Midi-Pyrénées	5
2	Columbia University in the City of New York	9	12	Universiteit van Amsterdam	4
3	University of Pennsylvania	8	13	The University of Manchester	4
4	University of California, Davis	6	14	VrijeUniversiteit Amsterdam	4
5	Imperial College London	6	15	University of Kentucky	4

6	Wharton School of the University of Pennsylvania	6	16	City University of London, Cass Business School	4
7	Cornell University	5	17	University of Minnesota Law School	4
8	CNRS Centre National de la RechercheScientifique	5	18	National Bureau of Economic Research	4
9	City, University of London	5	19	ETH Zürich	4
10	Ludwig-Maximilians-UniversitätMünchen	5	20	Toulouse school of Economics - Recherche - TSE-R	4

The analysis of the countries of the corresponding authors' results is shown in Table 6.The top 3 countries that published more on insurance ambiguity were the United States,which published 121 documents with a total of 2921 citations, followed by the United Kingdom,which published 29 documents with total citations of 831 (that too, with clear variance compared to the United States). This further indicated that the United States is leading in research efforts on the chosen topic. Chinacame in third, with 25 articles published and 114 total citations. In terms of citations, the U.S., the U.K., and France were the leading countries. U.S. rules and regulations on insurance and the overall size of the insurance marketfurther support the evidence of increasing interest in the research topic in that country.

Table 6 COUNTRIES' RANK BY NUMBER OF DOCUMENTS			
Rank	Country	Documents	Citations
1	United States	121	2921
2	United Kingdom	29	831
3	China	25	114
4	France	23	490
5	Germany	23	195
6	Canada	22	275
7	Netherlands	13	110
8	Switzerland	13	96
9	Italy	11	49
10	Australia	7	41

The keywords were analyzed by the number of occurrences, and the top 16are displayed in Table 7. "Insurance"led the occurrences, followed by "risk assessment." The keywords represented the search criteria for this paper. "Ambiguity," which is the main interest of this paper, ranked third, with 19 occurrences.

Table 7 KEYWORDS RANKED BY OCCURRENCES					
Rank	Keyword	Occurrences	Rank	Keyword	Occurrences
1	Insurance	29	9	Health insurance	9
2	Risk assessment	20	10	Risk	9
3	Ambiguity	19	11	Economics	8
4	Insurance system	14	12	Choquet integral	7
5	Ambiguity aversion	12	13	Climate change	7

6	Risk management	12	14	Cumulative Prospect Theory	7
7	Decision making	11	15	Index insurance	7
8	Adverse selection	9	16	Insurance contracts	7

VOSviewer software was used to identify the occurrence of keywords. A minimum number of 5 occurrences of keywords resulted in 30 keywords.With 29 occurrences, "insurance"was the most frequently used keyword, indicating that this word alone is used in the published papers as the main field topic. "Risk assessment," with 20 occurrences, "ambiguity," with 19 occurrences, and "insurance system," with 14 occurrences,were the other three most frequently used keywords.The finding from the analysis is that the main keywords support the aim of this paper, and the majority of the publications used the major keywords.
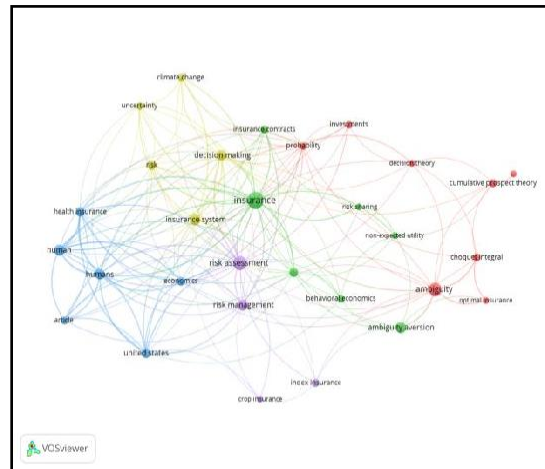

FIGURE 4
A NETWORK OF KEYWORDS BY THE NUMBER OF OCCURRENCE VISUALIZATION

Cluster Analysis

A co-occurrence analysis was conducted and resulted in five streams that were used to identify the main keywords in each cluster as follows: ambiguity and optimal insurance, ambiguity aversion and insurance contracts, health insurance, uncertainty, and risk assessment (Table 8). We selected the key articles under each stream. A comprehensive analysis was done on each article to obtain each article's purpose, findings, and future research suggestions.

The first cluster on ambiguity was the key objective of this paper. The articles revealed interest in ambiguity from two perspectives: ambiguous language and the *contra proferentem* law and its further progress toward the ambiguity doctrine of insurance law when ambiguity was detected in the contract language despite the origin of drafting language. Ambiguity was not considered when the language was not clear, as it had multiple interpretations that could be used against the insurers in the U.S. legal system, and thus the contract or the legislative act contained "ambiguity."We also noticed that multiple papers referred tothe objective of a contract that had to be considered, which is the language and words used in a contract that uniquely represent the intentions of the drafter. Therefore, it is the interpretation of the document that holds risk, and the courts or legal system should not look into the intentions behind the words and instead focus on the purpose of the words. The other part of ambiguity driving the research papers is ambiguity

as a situation and the study of the impact of ambiguity aversions on insurance decisions, which are grouped in the second cluster.

The next main interest in the first cluster was related to optimal insurance as a concept, and the results of insurance contract interpretations on consumers' demand. According to Zheng (2020),deductibles and co-insurance are provided in an optimal insurance plan when transaction costs depend on the actuarial value of the policy. Also, if the policyholder is averse to the net insurance payoff loss, a fixed compensation equivalent to the insurance premium should be paid(Zheng, 2020).

The second cluster revealed authors' interests in ambiguity aversion, with insurance contracts being the most frequentkeyword, that is, how limited insurance interpretation impacts the insurance decision, optimal demand for insurance amidst uncertainty. The demand for optimal insurance decreases when there is an aversion to ambiguity or risk. The insurance contracts showed that ambiguity exists and creates challenges to contract laws. Moreover, articles focusing on legal aspects and how the legal system handles ambiguity in the U.S. courts were aligned with the first cluster on ambiguity keywords.

The third cluster's main keyword selected was health insurance. Health insurance targeted case studies showing discrimination risk owing to policyholders' health status, which forces insurance companies to amend their healthcare coverage. Insurers' rightsmay be restricted to price their own contracts based on individuals' relevant characteristics and some adverse selection. Uncertainty was our focus on the fourth cluster, which revealed multiplearticles addressing the resultsand degree of insurance demand associated with ambiguity and the risk of contract non-performance and how model uncertainty can be integrated intodecision-making. The results showed thatinsurers' demand significantly decreases when risk and uncertainty are introduced, which was in line with researchers' interest in ambiguity as a keyword in the first cluster.

Risk assessment was the main keyword of the final cluster. We noted that primary paperswere based on some case studies on risk measures to examine how choice impacts the decision- maker's attitude toward risk.

Table 8 SUMMARY OF KEY PAPERS				
Stream	Author	Purpose	Finding	Suggestion for future research
Ambiguity	Peter R., Ying J. 2019	The purpose of the paper is to research the optimal demand for insurance under uncertainty when there are risk-averse consumers as well as ambiguity averse consumers and the relationship with the non-performance of the contracts. Ambiguity aversion results in reduced demand for optimal insurance and a negative relationship between optimal coverage and the level of consumers' ambiguity aversion.	How uncertainty about the non-performance of contracts may undermine insurance markets' operation is an issue for regulators. Non-performance contract uncertainty can occur when there is no trust in the insurance system, limited knowledge in financial and contract terms, complexity in the contracts, and the contract tenor.	It may be important to further analyze contract length or the degree of verifiability of claims based on data availability.

	Zheng M., Wang C., Li C. 2016	The paper's objective is to consider the optimal insurance contract if the monopoly insurer is unsure of the proportion of different types of customers.	High-coverage customers receive full coverage, and low-type customers receive less than full coverage. A different arrangement is the best deal in this case. An insurer changes the prior conviction when there is uncertainty in the different menus of contracts. The presence of ambiguity can increase or decrease low-type customer coverage. When uncertainty increases, the optimal contract menu for an insurer seeking ambiguity moves to the menu that equalizes the profits of the 2 types of consumers, while the optimal contract menu for an insurer seeking ambiguity moves away from the menu that equalizes the profits of the 2 types of consumers.	In the insurance market, future research could consider all types of customers rather than the two types in this study, explore the choice of the insurer when the insurer has no opportunity to learn the composition of the consumers, and identify the degree to which the insurer can learn the composition of the consumers if the insurer has the opportunity to do so.
Optimal insurance	Zheng J. 2020	The aim of the paper is to investigate how limited insurance interpretation impacts the insurance decision.	Narrow framing reduces the demand for insurance. The standard deductible is not optimal. The optimal contract when a limited outlining is detected should contain a deductible and coinsurance.	Future research should focus on behavioral economics, in addition to addressing agency challenges and the impact on insurance contracting.
Ambiguity aversion	Alary D., Gollier C., Treich N. 2013	The research investigates how demand will increase for insurance when ambiguity aversion exists, as well as the overall optimal insurance design in this scenario.	The study showed that an aversion to uncertainty appears to increase the motivation to insure and self-insure, albeit with a simultaneous reduction in self-protection benefits.	For future studies, more general, uncertain probability should be considered, as should allocations and insurers with ambiguity-averse and other types of ambiguity-sensitive choice.

Insurance contracts	Lawrence M. Solan 2004	The article aims to investigate how ambiguity occurs when all parties involved in a contract acknowledge that thetext is clear, but assign different meanings to it and the overall impact when the legal system interprets it in favor of a particular party.	Ambiguity exists and creates challenges to contract laws. This article focuses on legal aspects and how the U.S. legal system handles ambiguity.	The author raises questions such as: Will anything about pernic ious uncertainty be done?J ust because there is a disa greement about the applic ability of language in a co ntract or a statute, this does not mean it is prudent to draw sweepin g conclusions regarding a mbiguity.
	Boardman M.E. 2019	The paper's objective is to investigate the unpredictability of insurance interpretation with the impact on insurers and policyholders and the term contra which the legal system is aware of and its results against insurer once ambiguity is detected.proferentem, which the legal system is aware of and its results against insurer once ambiguity is detected.	Contra proferentem was an important rule when ambiguity was discovered in insurance contracts. However, this rule can cause unpredictability as it will lead to changing the content of the contract rather than rephrasing the language.	The author suggests conducting future research exploring unpredictability's impact and providing further references to when and how the term contra proferentem should be applied. It also suggesting investigating insurance companies' reaction once a court rules a contra proferentem, such as will they refuse? Will they refuse the redraft but accept the contra interpretation of language? Re-drafting it to modify coverage is not necessarily for policyholders' benefit? Last, redrafting in a clearer language does not necessarily change the concept or policy itself.
Health Insurance	Bardey D., De Donder P., Mantilla C.	This article aims to investigate genetic tests on patients by comparing policyholders' welfare under disclosure obligation forces and consent requirements. Policyholders may be exposed to discrimination risk because they are forced to share their test results to insurance companies, and at the same time, adverse selection is a result of consent.	The findings showed that the disclosure obligation took up rates lower than the consent rule, suggesting that subjects are vulnerable to discrimination. At the same time, take-up rates were higher under consent law, hinting at the adverse strength of selection. A reduction in the expense of the test and the severity of adverse selection makes it more likely that the consent requirement is preferred to the disclosure obligation.	The researchers pointed out the importance of extending research on genetic tests with increasing medical testing advantages, combined with lower monetary costs, especially when researchers based their analysis on neutral framing and simple choices. Health decisions are complex, and this can be a useful paper to start a complex analysis.

Uncertainty	Biener C., Landmann A., Santana M.I. 2019	The aim of the paper is to assess within a broad behavioral experiment the extent to which demand for insurance is impacted when dealing with ambiguity and contract non-performance.	The researchers provided insight into insurance coverage expectations and reality, as most policyholders do not get reimbursed for their claims. The findings measured the probabilities of contract non-performance risk and ambiguity at certain points and the results of demand. The results indicated that both primary policy goals should manage the risks of non-performance of contracts as well as the uncertainty.	The degree of uncertainty and how it is applied, which researchers did not vary in their experiments, may be explored by further study.Given the variety of variables, as there are no adequate inquiries and conclusions, it is imperative to think about interpreting outcomes theoretically to determine their reliability.
	Ch. Pflug G., Timonina-Farkas A., Hochrainer-Stigler S. 2017	The paper aims to investigate how model uncertainty can be integrated into decision making. The method is illustrated by a risk management problem involving the optimal design of an insurance contract through a government's problem creation to decide to invest in or insurance for infrastructure under a model of ambiguity like the case of an earthquake.	The researchers found that: A deterministic pattern occurs when all parameters are well known for an optimization problem. If only some are known, a robust program can be identified. If a random distribution is specified for unknown parameters, then it is called a stochastic program. Finally, If the random parameters are unknown, but known to remain in distribution, then the problem is called an ambiguity problem, and its minimax solution is called distributionally robust.	Owing to an estimation error, statistical estimates and imprecise values of unknown parameters are most often negligible. Additionally, the probability model's choice, *i.e.,* the possible distribution class of potential distributions, is typically chosen by statisticians, so was not further evaluated or questioned.
Risk Assessment	Loisel P., Brunette M., Couture S. 2020	This paper aims to analyze the effects on forest management under the storm risk of the forest owner's insurance decision. First, it considers the risk expectations of the forest owners, and second, integrates the insurance decision and expands the Faustmann optimal rotation model under risk.	Using the empirical model, the researchers discovered that as insurance coverage was extended, the rotation period increased independently of the risk aversion of the forest owner. In addition, not accepting an insurance contract could be ideal for the forest owner. Finally, the findings indicated that a public transfer, which decreases the insurance premium, can promote insurance by the forest owner.	For future research, the goal should be to incorporate an analysis of other environmental items and extend the framework of Fraustmann proposed by Hartman. In addition to that, research should consider numerical solutions instead of analytical ones and consider thinning out the model, which can be used as an additional risk management strategy.

The search criteria in Scopus was based on selected keywords, namely "insurance contracts" and "ambiguity" in an article's title or keywords. The search criteria resulted in a total of 290papers. The selected articles were written in English, and the final data set used was based on 278 articles. The results were used in tables and figures to visualize the analysis. The data set was used to achieve bibliographic coupling of documents, sources, authors, organizations, and countries. Furthermore, the co-occurrences of keywords were used to measure the strength of the co-occurrence links with other keywords. From the articles that were published between 1985 to 2020, only the top 20 articles were selected. Of these, Langleycontributed most to the insurance contracts and ambiguity, with 522 total citations. The source of highest-impact journals ranked by citation resulted in Principles of Economic Sociology leading in the number of documents, with total citations of 299. The total strength of the bibliography-coupling links among authors was calculated and resulted in 214 authors. Only the top 20 authors were selected and ranked by the number of citations, with Langley being the top author,contributing to the search literacy with 522 citations. The bibliographic coupling on countries revealed that the United States and the United Kingdomare dominant contributors to the research field, which indicates the dedicated research in the main topic of this paper in these countries compared to the contributions of the rest of the world. This also indicates that there is a gap due to the lack of similar results from institutions in the rest of the world. The keywords were analyzed by occurrences, and the top 16 ranked by occurrences were selected, showing "insurance,""risk assessment," and "ambiguity" as to the main keywords. The results revealed five clusters and streams on ambiguity, optimal insurance, ambiguity aversion, insurance contracts, uncertainty, and risk assessment.

CONCLUSIONS

The main purpose of this paper is to investigate why insurance companies use ambiguous language in their policies and contracts. A bibliometric and content analysis method was employed for our study. Further analysis was done on key articles, which resulted from main clusters of keywords.

We observed that most articles investigating ambiguity considered the legal aspect and showed that ambiguity exists and creates challenges to contract laws and how the law system handles ambiguity in the U.S. courts. The insurance contracts research focused on ambiguity and a narrow framing of impact from the perspective of optimal insurance demand.

Overall, the results were important in showing the impact on contract parties and overall legal aspects of ambiguities in insurance contracts. However, we soughtto investigate why insurance companies use ambiguous language, the terms of complex words over simple words, and motives, and if these are linked to financial aspects or considerations. We were also seeking papers providing insurance companies as case studies and the process of initiating and drafting policies as well as policyholders' position toward ambiguity. This research paper could be a starting point for future research to expand the scope of the investigation and provide background on the purpose of drafting insurance contracts in an ambiguous way and the overall impact of that drafting approach on both insurance companies and policyholders.

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