Oksana SMIRNOVA

FRAME-BASED APPROACH TO THE EU FINANCIAL TERMS WITH THE NOMINAL BASE *RISK/RISQUE/RIZIKA* IN ENGLISH, FRENCH AND LITHUANIAN

MRU
MYKOLAS ROMERIS
UNIVERSITY

MYKOLAS ROMERIS UNIVERSITY

Oksana Smirnova

FRAME-BASED APPROACH TO THE EU FINANCIAL TERMS WITH THE NOMINAL BASE *RISK/RISQUE/RIZIKA* IN ENGLISH, FRENCH AND LITHUANIAN

Doctoral thesis
Humanities, Philology (H 004)

Vilnius, 2020

The doctoral thesis was prepared in 2015-2019, defended at Mykolas Romeris University in accordance with the right to doctoral studies granted to Mykolas Romeris University and Vytautas Magnus University by the order of the Minister of Education, Science and Sport of the Republic of Lithuania No V-160 dated 22 February, 2019.

Scientific supervisor:
Prof. Dr. Sigita Rackevičienė (Mykolas Romeris University, Humanities, Philology H 004).

Oksana Smirnova

KONCEPTUALIŲJŲ FREIMŲ TAIKYMAS ES FINANSŲ SRITIES ANGLŲ, PRANCŪZŲ IR LIETUVIŲ KALBŲ TERMINŲ SU PAGRINDINIU DAIKTAVARDINIU DĖMENIU *RISK / RISQUE / RIZIKA* ANALIZEI

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

Adj. – adjective
Adv. – adverb
Compl. – complement
MWT *risk/risque/rizika* – multi-word term with the nominal base *risk/risque/rizika*
Obj. – object
N – noun, the dependent noun in a multi-word term
Num. – numeral
PP – prepositional phrase
Sbj. – subject
SWT *risk/risque/rizika* – single word term *risk/risque/rizika*
V – verb

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Natural language remains the main instrument of communication and cognition, as it satisfies the natural humans' need to express their thoughts, emotions, new ideas, and experience. It provides an infinite capacity of communicating our thoughts, expressing our emotions, describing innovative ideas, and sharing our experience (Gelbukh & Kolesnikova, 2013, p. 2). However, it goes without saying that new technologies have radically changed communication between people; today it is almost instantaneous and takes on many forms. One of the greatest advantages of modern technologies is that it connects people around the world. The world-wide web is not only useful for personal information exchange, but also for easy access to information, often in many languages.

Though English remains *the lingua franca* of the global direct and online communication, other languages also play an important role in international cooperation. The EU promotes multilingualism as the main instrument of intercultural understanding and business development as it enhances employability, mobility and improves the competitiveness of the EU economy (European Commission, 2017).

The EU funds translation of the EU legal acts and other documents so that they are published and available in all official languages of the member states. The EU legal acts regulate various domains of the life of the EU citizens and are daily used not only by politicians and functionaries, but also by ordinary people who need to know the EU regulations for personal or professional reasons. Today the EU legislation is drafted in 24 official languages; all language versions of the EU documents are authentic texts that have the same legal effect. Thus, translation is an integral part in the process of drafting and adopting acts. Translation errors may create legal uncertainty, lead to misinterpretation and wrong application of the EU law in the EU member states. Therefore, precision in the translation of legislative documents is of immense importance.

Terminology is a key component of legislative documents. Terms represent concepts and establish a conceptual framework of any field. That is why, it is essential that terms are understood in the same way in different languages. The quality of translation of a specialised text relies on finding optimal correspondences for terminological units. Translation of terminology requires special knowledge of the field, its concepts and their relations in the source and the target languages.

The application of Cognitive Linguistics in legislative language analysis provides significant information about the language structure and the way in which people perceive the world, as this theory, based on empirical practice, goes beyond the visible structure of the language. It emphasises the experiential nature of linguistic competence and investigates the complex background and operations of cognition that shape conceptualization and create grammar and discourse. Cognitive linguists seek to explain how language functions to make meaning possible. Introduced by linguists such as Fillmore, Lakoff, Langacker and Talmy in the 1980s, currently it is one of the fastest growing and influential theories on the nature of language, the human mind and their relationship. The terminological studies have also shifted to cognitivism. Cognitive-based terminology theories investigate terms in texts and discourse; they place emphasis on meaning as well as on conceptual structures

and develop the idea of ontology as the most suitable way of conceptual representation. Cognitive linguists have developed a number of influential terminology theories; the most prominent are Sociocognitive Terminology (Temmerman 1997, 2000, 2005) and Frame-Based Terminology (Faber 2007, 2019, l'Homme 2004, 2012).

The present research is a cognitive frame-based approach to terms with the nominal base *risk/risque/rizika* extracted from the corpus of the EU legislative documents on financial issues in English, French and Lithuanian. The choice of terms from the financial field of the EU for the analysis was not accidental. One of the main functions of the EU is economic cooperation of its member states. Today 27 countries take part in a large single trade market, which allows most goods, services, money and people to move freely across their borders. The EU is the largest trade block in the world, the national and international exchanges are very important for the development of any country. The EU is constantly connected to financial transactions within the union and out of it; the exchanges are regulated by the EU legislative documents, which are full of terms. Hence, transparency of financial terms is of prime importance in order to ensure smooth exchange between countries.

Moreover, the term *risk/risque/rizika* is an international term which has a common origin. According to the English Etymology Dictionary the noun *risk* is derived from French *risque* about 1660s; first, it was used as a noun, later as a verb, while in French and Lithuanian this noun derives from the Latin noun *resecum* which entered the languages via Italian. The terms *risk*, *risque*, *rizika* are strongly related. Thus, the similarity of the frames between the three languages is certainly increased by the common origin of the selected terms.

The research investigates how the analysis of terminological meaning can be addressed from the perspective of Frame Semantics, i.e. how Cognitive Linguistics allows revealing conceptualization of specialised knowledge structures and their linguistic representation.

The aim of the research

The aim of the research is to carry out a frame-based analysis of the terms designating the concept RISK in an ad hoc trilingual parallel corpus of financial documents, organise them into conceptual frames which represent risk-related situations in the financial field and contrast the linguistic means used to express these situations in English, French and Lithuanian.

The research is based on the expansion of the context containing the term *risk/risque/ rizika* from a term (single-word term or multi-word term) to complex predicative frames. In the present study, these different contexts are denoted as micro- and macro-contexts of the financial term *risk/risque/rizika*. The micro-context of the term *risk/risque/rizika* is understood as the lexical environment of the nominal base *risk/risque/rizika* which forms nominal phrases that function as multi-word terms. Meanwhile, the macro-context is seen as an argument structure formed by a verb attaching the term *risk/risque/rizika* as one of its arguments and evoking a predicative frame.

Objectives of the research

In order to achieve the aim of this research, the following objectives were set:

1. to perform the analysis of the principles of Cognitive Linguistics and Frame Semantics in particular, Corpus Linguistics and Contrastive Linguistics, as well as their application in terminological research;
2. to compile a trilingual parallel ad hoc corpus of the EU financial documents consisting of three subcorpora: English, French and Lithuanian;
3. to apply the frame-based approach to the micro-context analysis of the selected nominal term *risk/risque/rizika*:
   - to establish the most typical modifiers of the selected term and to extract the multi-word terms with the nominal base *risk/risque/rizika*;
   - to analyse the semantics of the modifiers and to classify the multi-word terms according to the elements of the RISK_scenario frame;
   - to analyse and contrast the formal patterns of the investigated multi-word terms in English, French and Lithuanian;
4. to apply the frame-based approach to the macro-context analysis of the selected nominal term *risk/risque/rizika*:
   - to annotate the predicative argument structures with the term *risk/risque/rizika*;
   - to analyse the semantics of the annotated verbs;
   - to establish and analyse the frames evoked by the annotated verbs;
   - to contrast the semantico-syntactic structures and lexical expression of the frames in English, French and Lithuanian;
5. to discuss the peculiarities of the linguistic means used to express the same risk-related concepts and their relations in the English, French and Lithuanian subcorpora;
6. to develop a cognitive map of the concept RISK based on the analysis of the macro- and micro-contexts of the term *risk/risque/rizika*.

The data sources and the object of the research

The present study is a corpus-driven research focused on the micro- and macro-contexts of the term *risk/risque/rizika*. The ad hoc parallel corpus of the EU legislative documents of the financial field was compiled for the purposes of the given research. The compiled corpus is a trilingual corpus composed of three subcorpora in the English, French and Lithuanian languages. The legislative documents were downloaded from the Official Journal of the European Union which is an open access online source. In total, 154 legislative documents in three languages related to various financial issues of the EU and enacted in the period 2013-2018 were collected. The documents were transformed into plain text and aligned for term extraction and analysis. The size of the subcorpora is as follows: the English subcorpus consists of 1,006,485 words, the French subcorpus contains 1,181,647 words, and the Lithuanian subcorpus comprises 803,845 words. The size of the parallel corpus is about 3,000,000 words.

In total, 203 financial multi-word terms with the nominal base *risk/risque/rizika* were

extracted for the micro-context analysis (70 English terms and their French and Lithuanian equivalents). During this research, 4314 English sentences which include 45 different verbs, 4360 French sentences which include 54 verbs, and 2075 Lithuanian sentences which include 25 verbs that form argument structures with the term *risk/risque/rizika* were extracted and annotated for the macro-context analysis.

Methods

The research employed a number of methods for data extraction, analysis and generalisation of the received results. The extraction of the research material (terms and argument structures) from the compiled ad hoc corpus was carried out by applying corpus linguistics methodology: word frequency lists, concordance analysis, collocational analysis. The extracted research material underwent a granular analysis by using various methods. First, a descriptive-analytical method for a thorough investigation of the micro- and macro-contexts of the selected terms was applied aiming to proceed to the frame-based semantic analysis of the conceptual relations between the concept RISK and other financial concepts. Second, contrastive-qualitative and quantitative methods were used to reveal the linguistic expression of the established conceptual relations in English, French and Lithuanian. Finally, the results of the research were generalised into a cognitive map of the concept RISK.

Scientific novelty and value of the research

The scientific novelty and value of the research are stipulated by the following aspects of the research:

1. A frame-based approach to the analysis of the terminological data. This is the first scientific work in which Frame Semantics methodology is applied for the contrastive analysis of the English, French and Lithuanian terminology. While the English and French terminology have been investigated by using frame-based approach for several decades, it is the first attempt to apply this methodology for the analysis of the Lithuanian terminological data.
2. A corpus-driven analysis of trilingual terminological data. Corpus linguistics offers new possibilities for the language analysis, enables researchers to deal with a big amount of data, helps to disclose the real use of terms and to reveal the perception of the universal conceptualization of a domain in question and peculiarities of its linguistic expression in different languages.
3. The object of the research is the terminology of the financial field. This is the first work, in which a granular analysis in three languages of the micro- and macro-contexts of a financial term is performed and a cognitive-conceptual map is developed.

The doctoral thesis provides new insights into the identification of the knowledge structures underlying specialised texts and highlights important shades of term meanings and their conceptual interrelations in the domain.

Relevance of the research and practical application
of the findings of the research

The relevance of the research is multidimensional. The current development of terminology is the result of advances in technology and the ever-increasing need for specialised communication among communities with different languages. Terminology addresses social needs and attempts to optimize communication among specialists, professionals, translators or ordinary users by providing assistance. The main task of terminology in translation is to convey the sameness of the conceptual meaning of the terms through the language. The quality of translation depends on the translator's ability to decode correctly the meaning and activating the knowledge structure. Thus, it is important to understand not only the single term, but also the whole conceptual structure of a particular domain in order to correctly place the relevant term in the whole terminology system. Thus, the current research contributes to the development of specialised communication in the following aspects:

1. It provides a methodology to develop cognitive structure revealing interrelations among the concepts of a particular domain. The awareness of the structure is indispensable in order to convey the fine distinctions of meanings of terms.

2. It establishes and contrasts typical syntactic structures of multi-word terms with the nominal base *risk* in English, French and Lithuanian, and thus, provide useful information to developers of the French and Lithuanian terms and translators as well as to specialists of natural language processing who develop automatic term extraction applications.

3. The research also reveals typical predicative argument structures and collocations with the term *risk/risque/rizika* which are important for translation of specialised (financial) texts. The awareness of fixed predicative structures facilitates the process of translation as it enables translators to formulate coherent text sections. Typical semantico-syntactic models can also be used in various machine translation applications. This work is the first attempt to systematise the English, French and Lithuanian verb-term relations and provide their systemic description.

4. The parallel corpus developed for the research (consisting of three monolingual sub-corpora) is available to the public in CLARIN repository and might be used for various research purposes.

5. The results of the research might be used as a model for the development of a new-generation dictionary. In recent years, terminological and lexicographical work has changed significantly, mostly due to introduction of computer applications and availability of electronic corpora. Terminologists apply a new methodology for compiling online specialised dictionaries of new generation that incorporate natural language processing applications. Such dictionaries give users access to rich linguistic information based mostly on information collected from specialised corpora. New generation dictionaries provide not only an explanation of concepts similar to that given in encyclopaedias, but also the argument structure, combinatorial possibilities of terms with other terms of the domain, lists of lexical relationships (e.g., synonyms, antonyms,

hyperonyms, collocates), etc. They also provide syntactic and semantic annotations of contexts in which terms appear. The present study is partly an attempt to approach the terms with the nominal base *risk/risque/rizika* by using a similar methodology which is used in new generation dictionaries, such as DicoEnviro or JuriDiCo, with hopes that this research could inspire lexicographers to create a frame-based dictionary of financial terms.

Therefore, the findings of this research might be applied by terminology researchers, practitioners, trainers, users and other participants of the international specialised communication whose interests and work concern the links between language and knowledge.

Structure of the doctoral thesis

The doctoral thesis includes an introduction, theoretical and methodological parts, the empirical research and conclusions.

The introduction is devoted to the discussion of the aim, objectives, data sources and object of the research. It also highlights the originality and relevance of the research, presents the applied methods and introduces the theses to be defended and the list of publications on the topic.

The first part presents the theoretical background of the research, i.e. the linguistic theories relevant to frame-based terminology: principles of Cognitive Linguistics, Frame Semantics, Corpus Linguistics and Contrastive Linguistics and their application in terminology research. The second part is devoted to the methodology of the research and issues related to the selection of the data used. The third part presents the empirical analysis of the collected data: analysis of the micro-context of the term *risk/risque/rizika* and analysis of the macro-context of the term *risk/risque/rizika*. In the fourth part the peculiarities of the linguistic means used in the parallel texts are discussed. The fifth part introduces the final results of the thesis – the cognitive map of the concept RISK. The thesis ends with the conclusions of the research.

Theses to be defended

1. The frame 'RISK_ scenario' enables to classify the multi-word English, French and Lithuanian financial terms with the nominal base *risk/risque/rizika* into semantic categories according to the meanings of the modifiers of the base.
2. The frame-based analysis of the macro-context of the term *risk/risque/rizika* reveals new information about the terms which cannot be revealed in the micro-context analysis: it uncovers the actions and processes related to the concept of RISK.
3. The frame-based approach provides bases for the comparison of the linguistic means used to express the same conceptual structures in English, French and Lithuanian.

List of publications on the topic of doctoral thesis

The main findings and conclusions of the dissertation have been published in four research articles and presented in five international and national conferences and other scientific events. The research articles are published in scientific journals indexed in international scientific databases.

1. Smirnova, Oksana, Rackevičienė, Sigita. ES teisės aktų terminai lietuvių ir prancūzų kalbomis. Kalba ir kontekstai = Language in different contexts: mokslo darbai. Vilnius: Edukologija. ISSN 1822-5357. 2016, t. 7 (1), d.1, p. 78-92. [Communication & Mass Media Complete; Communication Source; MLA] [M.kr.: 04H]

2. Smirnova, Oksana, Rackevičienė, Sigita. The EU English terms including the word *market* and their French and Lithuanian equivalents. Darnioji daugiakalbystė : periodinis mokslo žurnalas = Sustainable multilingualism: biannual scientific journal, no. 11, Kaunas: ISSN 2332-2019. 2017, p. 179-195. [CEEOL, GOOGLE SCHOLAR, MLA] [M.kr.: 04H];

3. Smirnova, Oksana. Semantic analysis of the EU English financial terms including the word *Risk* and their equivalents in French and Lithuanian = Europos sąjungos anglų kalbos finansinių terminų su pagrindiniu dėmeniu *rizika* ir jų ekvivalentų prancūzų ir lietuvių kalbomis semantinė analizė // Kalba ir kontekstai = Language in different contexts: mokslo darbai. Vilnius: Edukologija. ISSN 1822-5357. 2018, t. 8 (1), p. 78-93. [Communication & Mass Media Complete; Communication Source; MLA] [M.kr.: 04H];

4. Smirnova, Oksana, Rackevičienė, Sigita. Corpus-driven analysis of multi-word terms including the word 'Risk' in English, French and Lithuanian. Terminologija, t. 25. ISSN 1392-267X. 2018, p.86-106. [CSA: Linguistics and Language Behavior Abstracts; CEEOL – Central and Eastern European Online Library; MLA] [M.kr.: 04H].

1. THEORETICAL BACKGROUND OF THE RESEARCH

One of the main tasks of modern linguistics is to find an appropriate and economic way to describe the complex phenomena of human language. It is not to deny that modern technologies have infused new vigour into the analysis of language and provided new effective tools to process huge amounts of linguistic data and disclose universal and particular features of different languages. The present research dwells on the methodological principles of three major linguistic theories: Cognitive Linguistics, Corpus Linguistics and Contrastive Linguistics. This chapter provides a short overview of theoretical background of the present study.

1.1. The main principles of Cognitive Linguistics and Frame Semantics and their application in terminology research

1.1.1. Premises of the development of Cognitive Linguistics and Cognitive Semantics

Cognitive Linguistics (CL) is an approach to the study of natural language that originated in the late seventies and early eighties in the works of George Lakoff, Ronald Langacker, and Len Talmy. This approach brought out as a reaction against Structuralism and Generative Linguistics. Structuralists considered language as an autonomous system that exists apart from other cognitive processes (perception, interaction and conceptualization). According to structuralists, 'the meaning of a word is determined by the language system itself' (Ibarretxe-Antuñano, 2004, p. 3). Adherents of Generative Linguistics state that language is an autonomous component of mind, independent of other mental faculties (Ibarretxe-Antuñano, 2004, p. 3). Traditionally it was assumed that in order to get knowledge of a language, one needs to have knowledge of its lexicon and syntax. Thus, in order to learn a language a learner has two tools-a dictionary and a grammar book (Taylor, Cuyckens & Dirven, 2003, p. 4).

In Cognitive Linguistics there is no strict distinction between lexical and grammatical categories, as they form a continuum (Taylor, Cuyckens & Dirven, 2003 p. 1). Cognitive Linguistics postulates that language is not an autonomous cognitive faculty; it is governed by general cognitive principles rather than by a special-purpose language system. Grammar is considered as the result of language observation and use (Croft & Cruse, 2004, p. 3, 19). 'Language, then, is seen as a repository of world knowledge, a structured collection of meaningful categories that help us deal with new experiences and store information about old one' (Geeraerts & Cuyckens, 2007, p. 5). As language in Cognitive Linguistics is considered to be as a cognitive human capacity and an instrument for organization, processing, and conveying information, the spectrum of its research encompasses a wide range of issues such as structural principles of natural language categorization, functional principles of linguistic organization, conceptual interface between syntax and semantics, the relationship between language and thought, the conceptual universals, etc. Cognitive Linguistics gives priority to semantics in linguistic analysis and recognises the encyclopaedic nature of

linguistic meaning (Geeraerts & Cuyckens, 2007, p. 5). Cognitive Linguistics has developed into one of the most dynamic and attractive frameworks of theoretical and descriptive linguistics and has given impetus to the development of a great variety of theories, e.g., Cognitive Semantics, Cognitive Grammar, Construction Grammar, Generative Semantics, etc. The present study is based on Frame Semantics theory, which generated from Cognitive Semantics.

Cognitive Semantics as one of the Cognitive Linguistics theories represents an approach to the study of mind and its relationship with acquired experience and culture via the language, which is considered as a methodological instrument to uncover conceptual organisation and structure of various fields of human life (Evans & Green, 2006, p. 153). Application of Cognitive Semantics has expanded world-wide and become one of the most used theoretical frameworks in modern semantic research. Cognitive Semantics has introduced some important research results into Cognitive Psychology (e.g., the prototype structure and the family resemblance structure) and started applying them in analysis of linguistic categories. Prototypically structured lexical categories offered an innovative approach to the description of word meaning (Evans & Green, 2006, p. 153).

The main principles of Cognitive Semantics enable researchers to approach human conceptual organisation from different perspective. Cognitive Semantics encompasses the following approaches: a) conceptual structure is embodied (works of Mark Johnson, Leonard Talmy); b) semantic structure is conceptual structure (works of George Lakoff), c) meaning representation is encyclopaedic (works of Charles Fillmore, Ronald Langacker), d) meaning-construction is conceptualization (works of George Lakoff) (Evans & Green, 2006, p. 153-154).

Cognitive Semantics views meaning as an encyclopaedic representation. It means that a semantic structure is realised in the form of linguistic units or words providing access to a large inventory of structured knowledge (the conceptual system). In other words, a word meaning can be understood as a large repository of encyclopaedic knowledge to which it is connected. This encyclopaedic knowledge arises from human interaction with other human beings (social experience) and the world around us (physical experience) (Evans & Green, 2006, p. 206).

Fillmore, Atkins and Langacker argue that words are never represented out of context and their meaning is only understandable in respect to frames or domains of experience. 'A frame represents a schematisation of experience (a knowledge structure), which is represented at the conceptual level and held in long-term memory and relates elements and entities associated with a particular culturally-embedded scene, situation, or event from human experience' (Evans & Green, 2006, p. 211). Fillmore and Langacker consider that words (and grammatical constructions) are linked to frames or domains in such a way that the meaning associated with a particular word (or grammatical construction) cannot be understood out of the frame with which it is associated. They provide an example of the word *aorta*. The word *aorta* denotes a particular lexical concept, which can be clarified through the frame of the MAMMALAN CIRCULATORY SYSTEM. Such approach also shows that a word becomes meaningful as a consequence of its use. This view completely differs from the traditional view of linguistic meaning named the dictionary view which

considers that a word meaning or sense is primary and determines how it can be used. Such interpretation of the word meaning is usually used by lexicographers. The adherents of the used-based approach adopted by Cognitive Semantics states that the meaning of any given word is constructed in the context in which it is used. It means that the meaning associated with a single word changes depending on the exact context of use. Lexical units are keys of access to encyclopaedic knowledge. According to this view, words are not containers that present strict ready-made sets of information; on the contrary, they open access to a large network of encyclopaedic knowledge. The dynamicity of encyclopaedic knowledge is not of the last importance as it provides an extension of knowledge due to our experience and interaction with the world, e.g., the financial term *risk* denotes financial loss, the analysis of this term in the financial documents reveals that *risk* can be caused by a guarantor, a service provider, a business model, covered bonds etc., the user extends his/her knowledge about the term *risk* by acquiring new information about it through the term use in the context, thus, *risk* can be stimulated by individuals, institutions, financial actions or valuable papers.

Two theories of semantics contributed to the investigation of encyclopaedic nature of meaning: a) the theory of Frame Semantics developed in the 1970s and 1980s by Charles Fillmore, and b) the theory of domains, developed by Ronald Langacker (1987). However, these two theories developed in different ways: Fillmore's theory, which generated from his theory of Case Grammar, developed into Construction Grammar, while Langacker's theory inspired emergence of Cognitive Grammar (Evans & Green, 2006, p. 206).

The present study applies the principles of Frame Semantics, which are discussed in the chapters below.

1.1.2. Evolution and interdisciplinarity of the concept 'frame'

Before the application of the concept of 'frame' in linguistics, this concept was already successfully used in other scientific fields, such as psychology and computer science. Cognitive psychologists proved that knowledge is represented in human mind as perceptual symbols (Evans & Green, 2006, p. 206). Linguistic prototype theories provided new models of knowledge organisation and knowledge representation. In psychology and Artificial Intelligence (and later in linguistics), the term 'frame' was used 'to indicate the organising principle that underlies knowledge representation on the one hand, and semantic representation on the other' (Nerlich & Clark, 1999, p. 141). Research in cognitive psychology, computing and linguistics focused on the same aspects – 'the conceptual underpinnings of human understanding and meaning generation' (Nerlich & Clark, 1999, p. 141).

According to Nerlich and Clark, the concept of frame has undergone the following stages (Nerlich & Clark, 1999, p. 127):

1. pre-AI (Artificial Intelligence) conception – an anthropological frame (1950s-70s) which was introduced into ethnographic and ecological study, social interaction and human experience, i.e. anthropologists were inspired by the ethnography of speaking (Goodenough, 1964) ;

2. AI-conception – introduction of new concepts in Cognitive Science and Artificial Intelligence (Minsky, 1975; Schank and Abelson, 1977; Rumelhart, 1975): Minsky considered

'frame' as 'a data-structure representing a stereotype situation', Schank and Abelson used the term 'script' to refer to knowledge structure for sequence of events, while Tanneu interpreted the concept of a frame 'as structures of expectations' (Minsky et al., 1975, as cited in Petruck, 2003, p. 1).

3. post-AI 'Frame Semantics' developed by Fillmore (Fillmore, 1975).

Development of post-AI Frame Semantics was influenced by several frameworks, in particular, by conception of frame in Artificial Intelligence introduced by Minsky (1975) (Hamm, 2009, p. 1) and theory of Semantic Fields (Nerlich & Clark, 1999, p. 137-138).

Minsky's scientific ambition was to develop the frame language as a tool for knowledge representation in Artificial Intelligence. He defined frames as data structures representing a stereotypical situation. According to Minsky, 'a frame is a collection of questions to be asked about a hypothetical situation. It can be viewed as an organised matrix of slots for given states of affairs' (Martin, 2006, p. 282). In other words, Minskyan (AI) frames are data structures, which represent stereotyped knowledge as a slot-filler framework. Slots are a set of general conceptual categories, while fillers specify the slots. According to Minsky, frames are structures composed of stereotyped background knowledge, which are essential for understanding of concept or word meaning (Minsky, 1977, as cited in Martin, 2006, p. 282). Thus, the starting point of Minsky's research was knowledge about stereotypical situations and not the linguistic data.

Table 1. *Fragment of a Minskyan frame (Minsky, 1977, as cited in Martin, 2006, p. 282)*
musical instrument

SLOT	FILLER
isa	wind/percussion/stringed/plucked/keyboard etc. instrument
function	special function other than musical
material	
size	as compared to other members of the subtype
form	
sound	typical sound produced
position of instrument	vis-à-vis player

The research of Fillmore was based on the opposite, i.e. the starting point of his research was linguistic data. In his early works, Fillmore approached frames only linguistically: he took the syntactic-semantic description of lexical items as the starting point and analysed how lexical units could be associated with scenes.

In later works, Fillmore turned towards knowledge-oriented description of word meaning: 'word meaning must be described in relation of semantic frames-semantic representations of conceptual structures and patterns of beliefs, practices, institutions, images etc. that provide a foundation for meaningful interaction in a given speech community' (Fillmore, 2003, as cited in Martin, 2006, p. 282). A frame serves to characterise a small abstract scene, which identifies the participants of the scene. The participants are the arguments of

predicates extracted from the sentences describing the scene (Hamm, 2009, p. 2). In order to understand a sentence, the language user has mental access to such schematized scene, e.g., Fillmore analysed the lexical items *buy* and *sell* to find out how these items could be associated with prototypical instances of sentences in the context of the trade or business.

Table 2. *Example of a Fillmorian frame (Fillmore, 2003, as cited in Martin, 2006, p. 282)*
sell

ISA	commercial transaction
SELLER	who sells?
GOODS	what is sold?
BUYER	to whom is sold?
CONDITIONS	for what is sold?

Thus, the main difference in Minsky's and Fillmore's works on semantic frames is the starting point of the research: while Minsky starts the research from stereotypical situations seeking to fill them with relevant data, Fillmore analyses linguistic data and on the basis of the data analysis constructs frames which represent knowledge on situations. However, Fillmore was influenced by Minsky's definition of a frame and broadened frame-conception by supplementing its linguistic approach with knowledge-oriented underpinnings.

As it was discussed above, Frame Semantics was influenced by advances in Cognitive Anthropology, Cognitive Science and Artificial Intelligence (Petruck, 2003, p. 1). One more framework that made important impact on the development of frame semantics was Semantic Field theory created by Trier and later developed by his numerous adherents. Field Semantics was influenced by Humboldt's interest of thought construction by language and Saussurean interest in the systemic structure of language (Nerlich & Clark, 1999, p. 126). The theory of Semantic Fields states that lexicon is organised into overlapping semantic fields and the words, assigned to the same semantic field, share a common 'semantic component' (Jackson & Zé Amvela, 2007, p. 107). Thus, semantic analysis focuses on grouping words together into fields on the basis of an element of shared meaning, e.g. words referring to drinking vessels, verbs of communication, etc. (Jackson & Zé Amvela, 2007, p. 128). Frame Semantics inherited the main categorisation principles from Field Semantics and developed them further.

According to Post (1988), both theories (Field Semantics and Frame Semantics) approach groups of words that belong to the same conceptual space and both hold that conceptual fields and frames reflect the world experienced by the users of a language (Post, 1988, as cited in Nerlich & Clark, 1999, p. 126). They both enable linguists to find how semantic fields and frames interface with conceptual structures, knowledge representation, memory, and text understanding by humans and computers. However, Field Semantics analyses groups of words as a linguistic system and their systemic relations, while Frame Semantics focuses on the meaning of a word which arises from its context and conceptual information activated by it. Field Semantics encodes linguistic information, whereas Frame Semantics, in addition to linguistic information, incorporates cultural and contextual

background information. In Field Semantics, the meaning of a word is defined as all possible relations with other words in a semantic field. In Frame Semantics word meaning is best understood in relation to the conceptual structure which supports and motivates it (Nerlich & Clark, 1999, p. 145). Frame Semantics focuses on the study of how lexical fields are conceptually and pragmatically implemented in our bodily, social and cultural experiences and practices (Nerlich & Clark, 1999, p. 125-126). Words evoke the frame in the mind of a speaker/hearer, the interpreter of a sentence or a text in which the words occur. (Petruck, 2003, p. 1). Such approach differs from the Semantic Field theory where a word is defined in relation to other words in the same *field*. In Frame Semantics, a word is defined in terms to its background frame, not in relation to other words. Field Semantics theory of word meaning relies on the existence and knowledge of other semantically related words. In contrast, Frame Semantics takes the view that a word meaning depends on its conceptual background, knowledge of which is necessary for its appropriate use (Petruck, 2003, p. 3).

To sum up, the notion of 'frame' is not only linguistic; it has been used in various scientific fields, such as psychology and computer sciences (Artificial Intelligence). However, it played a particular role in Charles J.Fillmore's work on Frame Semantics that constitutes a branch of Cognitive Semantics.

1.1.3. Conception of meaning in Frame Semantics

Fillmore stated that Frame Semantics originates from empirical semantics rather than from formal semantics. He aspired Frame Semantics to become a new way of looking at word meaning (Fillmore, 1982, p. 111). Fillmore succeeded in joining the analysis of language to the study of cognitive phenomena. Fillmore's early work focused on transformational syntax that inspired him to investigate the distributional properties of individual verbs. The goal of his research was to look at the substitutability of words preserving the meaning of the sentence. He called this phenomenon a syntactic frame, but soon the notion of 'frame' encompassed both syntax and semantics. Fillmore noticed that although the theory of semantic roles provided detailed semantic description of verbs, he felt a need to distinguish another independent level of role structures – cognitive structures for the semantic description of verbs in a particular limited domain (Geeraerts & Cuyckens, 2007, p. 171). Thinking in this way Fillmore showed that the words that fall under a certain frame do not represent merely a group of individual words, but a domain of vocabulary whose elements presuppose a schematization of human perception of a particular situation. Frames activate the speaker's or addressee's background knowledge about what could be relevant in such situation or 'scene'. In the early work, Fillmore made distinction between the notion of 'scene' and 'frame'. He defined 'scene' in a very general sense which involves visual scenes, different kinds of interpersonal transactions, standard scenarios defined by the culture, institutional structures, enactive experiences, body images, while 'frame' was defined as systems of linguistic choices or collections of words including choices of grammatical rules or linguistic categories that can occur with prototypical senses (Geeraerts & Cuyckens, 2007, p. 172). In other words, 'scene' was a cognitive, conceptual, or experiential entity and

'frame' was a linguistic one (Petruck, 2003, p. 1). In later work, he extended the notion of 'frame' by fusion of two notions 'scene' and 'frame' into one, i.e. 'frame'. Fillmore defined 'frame' as a cognitive structuring device which is partly realised by words associated to it and used in order to clarify the meaning (Petruck, 2003, p. 1). The definition of the Frame Semantics theory can be found in the following quotation of Fillmore: '*The frame idea is this: there are certain schemata or frameworks of concepts or terms link together as a system, which impose structure or coherence on some aspect of human experience*' (Fillmore, 1975, as cited in López & Valenzuala, 1998, p. 3).

Thus, frames provide a way of characterizing the structured encyclopaedic knowledge that is connected to linguistic knowledge (Geeraerts & Cuyckens, 2007, p. 201). Frames were created on the basis of the assumption that language is a system of communication that reflects the world as it is constructed by humans.

Frame Semantics rejects the idea that there is a principal distinction between linguistic meaning and social or cultural meaning. They view a lexical unit as a unified entity. This means that Cognitive Semantics does not make a significant distinction between semantic and pragmatic knowledge. Knowledge of what words mean and knowledge about how words are used are both types of semantic knowledge (Evans & Green, 2006, p. 215). Fillmore, providing the results of the analysis of the verbs of judgment and verbs of commercial transaction, argues, 'nobody can really understand the meaning of the words in that domain who does not understand the social institutions or the structures of experience which they presuppose' (Fillmore, 1987, as cited in Geeraerts & Cuyckens, 2007, p. 172). Fillmore defines Frame Semantics as the study of how people link linguistic forms with cognitive structures - the frames. The frames are seen as the process (and the result) of the interpretation of linguistic forms, they can be viewed as a collection of knowledge, beliefs, and practice that form or activate our experience (Fillmore & Baker, 2009, p. 314). On the other hand, Frame Semantics focuses on 'the study of how linguistic forms evoke or activate frame knowledge' (Fillmore & Baker, 2009, p. 317). Thus, Fillmore's approach to the description of lexical meaning dwelled on the idea that word meaning can be understood only 'with reference to a structured background of experience, beliefs, practices etc. and these background frames activate the concept encoded by the lexeme' (Fillmore & Atkins, 1992, p. 77). The theory of Frame Semantics has influenced the encyclopaedic model adopted by Cognitive Semantics.

There are three main concepts in Frame Semantics: prototype, valence, perspective. Frame Semantics generated from the prototype theory developed by Rosch in the 70s. It sought to create cognitive conceptual models of lexical units and disclose their relations with other lexical units. The theory highlighted the importance of cognitive processes in categorisation. Rosch proved by experiment that categorisation may be reached by comparison of objects and experience (L'Homme & Zhicho, 2015, p. 3). A prototype designates the cultural context against which the meaning of a word is defined and understood, e.g., to understand the meaning of the word *breakfast*, it is important to understand the institutions and practices of the culture in which the category exists, it is necessary to understand the tradition of eating three meals a day at fixed times and that the meal is eaten in the early part of the day after a period of sleep and has a special menu; for this type of meal the word

breakfast is used (Petruck, 2003, p. 2; Fillmore, 1982, p. 118). In Frame Semantics, word meaning is characterised in terms of experience-based schematizations of the speaker's world, i.e. frames which impose order on prototypes. Thus, prototype is viewed as one of the essential concept in linguistic description with respect of frames. This innovative idea inspired linguists to investigate cognitive models developed on the basis of our interaction with the environment and to provide understanding of the meaning encoded in the language. The principles of this theory became the basis of Frame Semantics.

Valence is also an important concept of Frame Semantics. Valence enables researchers to describe the lexical unit in accordance with the dependents required by it. Moreover, the semantic and grammatical features of a lexical unit interact with each other in creating the meaning of a phrase/sentence. According to Fillmore, valence is one of the consequences of a frame; it is related to the ways in which lexical items-verbs can combine with other words to make grammatical sentences. Fillmore started word valence research by classifying verbs according to the types of events or situations they express. He defined situations as assemblies of roles; however, this approach did not give him satisfactory results. Therefore, he turned from role identification to situation identification. The situation types expressed by lexical units constituted a frame filled up with roles. In so doing, Fillmore constructed cognitive frames based on linguistic frames. Following his ideas, cognitive frames are the background understandings necessary for making sense of things that happen around us; and linguistic frames are specifically coded in lexical units or other features of linguistic form. He explained the process of activation of frames in the following way: a person can invoke a frame in a particular situation from his/her personal 'mental lexicon' to help himself/herself to understand the situation; in the same way a word can invoke a frame as it is related by conventional associations with it (Andor, 2010, p. 158).

In Frame Semantics, the valence is a property of a verb to activate an argument structure of a verb with participants required by the verb, varying in number and nature. The arguments are the semantic roles assumed by those participants (Evans & Green, 2006, p. 225). The COMMERCIAL TRANSACTION frame seems to be the best to illustrate the valence or argument structures of verbs activated by this frame. The verbs *buy, sell, pay, spend, cost, change, charge* etc. can be arranged to the COMMERCIAL TRANSACTION frame. In order to understand these verbs one needs to get access to a knowledge structure. As the valence is the basis of the construction of the frame, after the analysis of numerous examples, one can reveal that the verb *buy* is usually bivalent, it requires two participants, the BUYER and the GOODS, while the verb *pay* is usually trivalent, as it activates three participants; the BUYER, the SELLER, and the GOODS. The valence is not stable. The verb *pay* could also occur in a sentence with two participants (*The depositor pays a penalty*) or with four participants (*The manufacturing company pays a royalty to Starbuck Corporation for its production*). Both verbs are related to the actions of the BUYER, *buy* reflects the interaction between the BUYER and the GOODS, while *pay* relates to the interaction between the BUYER and the SELLER. This knowledge is a consequence of the COMMERCIAL TRANSACTION frame; moreover, it requires a particular grammatical organization. The sentences *Institutions buy credit protection (from the shareholders)/ The person pays the tax authorities (for telecommunication services)* show that *buy* and *pay* take

the same number of arguments. Syntactically they are realised as subject and direct object, and optionally as indirect object. The verb *buy* sets a relation between the semantic role of BUYER and GOODS, not a relation between the BUYER and the SELLER. This explains why the sentence *Institutions buy the shareholders* is not grammatically correct. The verb *pay* links the BUYER role with the SELLER role rather than the GOODS role; the verb can also activate a relation between BUYER and AMOUNT PAID *(Company pays 100 million for new shares)*, o between BUYER, SELLER and AMOUNT PAID *(The third party pays the borrower an amount of 100 million)*. Such approach to frames later was generated into Construction Grammar.

In the frame COMMERCIAL TRANSACTION the verb *pay* is connected to the transfer of MONEY from the BUYER to the SELLER in order to get the GOODS, while the verb *buy* is related to the transfer of GOODS from the SELLER to the BUYER in order to get MONEY. Thus, the frame COMMERCIAL TRANSACTION can be seen from two different perspectives: from the perspective of the BUYER or from the perspective of the SELLER. As it was mentioned above the concept of perpective is considered to be fundamental in Frame Semantics. Perspective indicates that there are at least two different possible points of view on a neutral frame. The frame COMMERCIAL TRANSACTION is considered to be an unpespectivized parent frame (also a neutral frame), its children frames are COMMERCE_GOODS-TRANSFER and COMMERCE_MONEY-TRANSFER, which perspectivize the COMMERCIAL TRANSACTION frame from the SELLER's and the BUYER's point of view. Each perspective provides the frame with quite different frame elements (Ruppenhofer et al., 2016, p. 82). The verbs selected by the speaker (*buy, sell, pay* etc.) denote a particular perspective in the frame, a way for relating various participants in order to highlight certain aspects of the frame. In the sentence *Shareholders bought new shares from the company* the frame is viewed from the perspective of the buyer's while in the sentence *The company sold new shares to shareholders* the frame focuses on the perspective of seller's. The frame establishes relationships that define how lexical items *pay*, *buy* etc. are understood and how they can be used, this has impact on the grammatical behaviour of these lexical items (Evans & Green, 2006, p. 227). To know the meaning of any of these verbs one needs to know what take place in a commercial transaction, on the other hand, if one knows the meaning of the verb, he/she has access to the meaning of verbs connected to this frame. The knowledge and experience structured by the frame COMMERCIAL TRANSACTION provide the background and motivation for the categories represented by the words.

The semantic research of Fillmore and his colleagues gave birth to the project FrameNet which now functions as an open database constantly updated by new research findings. The FrameNet is a lexical resource of modern English based on semantically and syntactically annotated sentences; it is also a lexicographic project (Fillmore & Baker, 2001, p. 1). FrameNet provides cognitive frames of English lexical units, which are based on annotated evidences of lexical units extracted from the actual texts. More than 200 000 sentences were manually annotated in order to establish cognitive frames. Now there are more than 1 200 frames. FrameNet is available freely online and easily downloaded. Students, teachers, lexicographers and researchers all over the world can use FrameNet. This project has aroused

great interest among scholars and inspired many other research projects in the world. As frames are semantic, they are often similar across languages; therefore, FrameNet principles are applicable to description of lexical units in various languages. Similar projects already exist in French, Chinese, Japanese, Spanish, German, Swedish and Korean.

FrameNet project, developed as a corpus-based lexicon, provides a precious source for the description of semantic and syntactic combinatorial properties of lexical units that belong to the same semantic domain. Moreover, the project is available in English and other languages, thus, it opens great problematics for description of various languages. As it was already mentioned, the theoretical background for FrameNet was provided by Frame Semantics, as a descriptive and analytical framework (Boas, 2005, p. 1-2). Description of each lexical unit in FrameNet is performed in the following steps: first, project developers identify the semantic frame under which the lexical unit can be described and to which it belongs. Each frame contains vocabulary for the description of the frame elements. The following step presupposes the syntactic description of lexical unit in question, i.e., its distributional possibilities/combinations within and around phrases headed by that word: types of phrases, grammatical function, and annotated examples. In order to illustrate a fragment of syntactic analysis accomplished in FrameNet, the examples discussed by Boas are going to be provided. Boas took examples from the Communication-Statement frame; this frame involves such frame elements as the Speaker, the Addressee, the Message and the Topic. Each frame element more or less differs in syntactic realization, e.g., the Speaker can be expressed as an external argument (***Nancy** announced her retirement*) or as a genitive modifier of the noun (***Nancy's** announcement that she would retire*); the Addressee can be expressed as a direct object (*Nancy told **Collin** about what happened*) or a prepositional phrase introduced by *to* (*Nancy announced the sale **to the staff***), etc. (Boas, 2005, p. 2). Each frame element undergoes granular analysis in order to establish the combinatorial syntactic properties of lexical units. The further work consists on the organization of the data into tables to illustrate the multiple ways in which frame elements are realised by the verbs. Table 3 below shows the syntactic realisation of argument structure with the verb 'to announce' and Table 4 provides the syntactic realisation of the frame element Addressee:

Table 3. *The syntactic realisation of argument structure with the verb 'to announce' (as cited in Boas, 2005, p. 2)*

	Message	TARGET	Speaker
1.	NP.Ext	announce.v	CNI
2.	NP.Ext	announce.v	PP._by Comp.
3.	QUO.Comp + QUO.Comp	announce.v	NP.Ext
4.	QUO.Comp	announce.v	NP.Ext

This table illustrates the phrase types and syntactic realisation of the semantic roles (Message and Speaker) evoked by the verb 'to announce'. The Message can be realised by noun phrase, syntactically it is marked as external argument or complement without preposition while the Speaker can be expressed by a noun phrase, a prepositional phrase or it

can be implicit. This information was extracted from annotated examples. The example of annotation is provided below.

> On November 5 [<message> her pregnancy] is officially *announced* [<speaker> CNI]

Table 4. *Syntactic realisation of the Addressee (as cited in Boas, 2005, p. 2)*

1.	*admit*	PP_in Comp, PP_to. Comp
2.	*announce*	PP_to. Comp
3.	*comment*	PP_to. Comp
4.	*mention*	PP_to. Comp
5.	*proclaim*	PP_to. Comp
6.	*propose*	PP_to. Comp
7.	*remark*	PP_to. Comp
8.	*tell*	AVP.Comp, NP. Ext., NP.Obj., PP_to. Comp, Sfin.Comp
9.	*talk*	NP. Ext., PP_at.Comp, PP_to. Comp

The table above illustrates the variety of syntactic realisation of the semantic role of the Addressee with different verbs.

In the FrameNet project this information is hidden in each frame, but the user can see it by pressing on lexical entry report in the chosen frame. Such detailed analysis ensures reliable representation of information about lexical units and their semantic and syntactic combinatorial properties. This information can later be used for syntactic parsers in text understanding.

Perception of the meaning of English sentences is multidimensional; it involves not only understanding of the meaning of words, which evoke certain frames, but also understanding of grammatical constructions, which establish syntactic hierarchy of the sentence as well as the order of words. Grammatical constructions are meaningful on their own; hence, they could be viewed as frame-evoking units. Grammatical constructions also establish relations between the frame-evoking elements and the role-filling elements (Ruppenhofer et al., 2016, p. 7).

The FrameNet project records 'the range of semantic and syntactic combinatory possibilities (valences) of each word in each of its senses, through computer-assisted annotation of examples of sentences and automatic tabulation and display of annotation results' (Trohin, 2009, p. 2). FrameNet annotations for each frame element are threefold: annotation of a frame element (e.g., Food), of a grammatical function (e.g., Object) and annotated of a phrase type (e.g., NP). To avoid visual clutter, the grammatical function and phrase type layers are not displayed in the web-based report system. The full data is available as part of the data download (Ruppenhofer et al., 2016, p. 7-8). Atkins asserts that the valence patterns provided by the FrameNet are far more granular than those usually applied in lexicography or terminography (Atkins, 2003, p. 340).

To sum up, in contrast to the dictionary view of the meaning in a formalist approach

to semantics, the theory of Frame Semantics embraces an encyclopaedic view of meaning. The encyclopaedic meaning emerges from the context of use, so that the selection of the encyclopaedic meaning is based on the contextual factors where lexical items are considered to be as a key to access to the encyclopaedic knowledge. The word meaning can be understood only 'with reference to a structured background of experience, beliefs, practices etc. and these background frames activate the concept encoded by the lexeme' (Fillmore & Atkins, 1992, p. 77). Frame Semantics theory dwells on three main concepts: prototype, valence, and perspective. The main workspace of Frame Semantics research is a corpus which enables to observe the whole variety of co-occurring words of investigated lexical units and the predominant co-occurrence patterns and, thus, to describe their semantic meanings (Atkins, Rundell, Sato, 2003, p. 340-341). Frame Semantics being one of Cognitive Linguistics theories shares the basic premises about language connection to the other cognitive functions (vision, other perception systems, reasoning etc.); humans construct meaning from their encounter with the world; and concepts form a network by constructing the meaning of a word (López & Valenzuela, 1998, p. 1-2).

1.1.4. Frame-based research on terminology

Frame Semantics is a theoretical framework developed for the general language. However, linguists (L'Homme, Faber) have uncovered that lexical units of the specialised language have the same linguistic features and the same relationship to human cognition (L'Homme, Subirats & Robichaud, 2016, p. 157). For the first time linguistic theory reconciled two different areas of the lexicon that were traditionally separated artificially – general and specialised – proving that the same processes lead to the construction of meaning. Hence, the methodology of Frame Semantics started to be used by terminology researchers to describe meaning relations among terms of different domains. In specialised language, a frame is understood as 'a type of mental representation, involving the organization of knowledge about a concept or a set of related concepts' (Faber & Cabezas-García, 2019, p. 9).

Thus, Frame Semantics and the FrameNet project enabled terminologists to describe specialised knowledge structures and to supplement the existing set of frames with new ones evoked by lexical units of various specialised fields. FrameNet research has been already carried out in various specialised areas ranging from legal domain to soccer and tourism.

Researchers of conceptual frameworks of specialised domains distinguish two types of frames: *concept frames* and *predicative frames* (Busse, 2012; Faber & Reimerink, 2019). *Concept frames* represent concepts designated by nouns and noun phrases; they consist of elements that specify properties by which the entity is characterised. In the present study the concept 'frame' is also viewed as the micro-context of terms with the nominal base *risk*. *Predicative frames* are the ones evoked by verbs and their nominalisations. They represent events and states of affairs and depend on the situation type and participants (Faber & Cabezas-García, 2019, p. 10). In this research predicative frames are seen as the macro-context of terms with the nominal base *risk/risque/rizika*. *Predicative frames* link together various *concept frames*, thus, the observation of relations between a verb and attached

arguments as a fusion of meanings in a single semantic space provides new insights about knowledge constructions underlying specialised texts. Thus, *predicative frames* present the expansion of knowledge that allows to understand better the text of specialised language.

Analysis of *predicative frames* adds a new dimension to terminology analysis as it enables to reveal a broader picture of the conceptual framework of the relevant domain. The importance of their analysis is emphasised in the works of the most prominent modern terminologists (Faber 2014, L'Homme 2003 and others). In sentences, terms usually depend syntactically on certain verbs that attach them and form argument structures which set the number of arguments, their syntactic functions and semantic roles (Levin, 2013). The ability of terminological units to correlate with other words in a particular form is called *combinatorial value* of terms, which means that the structural relations of the sentence also determine the meaning of the term (Faber, 2014, p. 21; L'Homme, 2003, p. 6).

The Frame Semantic theory and the project FrameNet gave impetus for the development of new generation dictionaries, which approach terms by the means of frames taking into account semantic and syntactic properties of corpora data. The research not only focuses on nouns and noun phrases, but also encompasses predicative lexical units (verbs, adjectives, adverbs, etc.) which play a meaningful role in construction of specialised knowledge structures of domains in question. The concept of 'frame' has a potential to be useful for terminology of any field; furthermore, such dictionaries reveal new information about terms that cannot be found in traditional dictionaries. New generation dictionaries have been developed in the following areas: environment – EcoLexicon (Fraber et al., 2016), DiCoEnviro (L'Homme, 2016); informatics – DiCoInfo (L'Homme, 2008, 2015), computer science (Ghazzawi, 2016); law – JuriDiCo (Pimentel, 2012), soccer ‑ Kicktionary (Schmidt, 2009), aviation terminology (Anič, Lončar, Pavič, 2020) etc. All these dictionaries are based on certain aspects of Frame Semantics. Specialised language units activate the conceptual structure of a knowledge domain which exists in both languages-cultures - the source and the target (Faber & Cabezas-García, 2019, p. 2).

There are two main schools of frame-based terminological research: the Canadian school led by Marie-Claude L'Homme and the Spanish school led by Pamela Faber.

Marie-Claude L'Homme's scientific interests are mainly focused on the application of lexical semantic models to the description of terms as well as on opportunities of various forms of integration of Corpus Linguistics methods into terminological analysis. Most of Marie-Claude L'Homme and her colleagues' terminological research is based on the original principles of Frame Semantics and FrameNet adapted to investigation of specialised languages. As stated above, L'Homme emphasises the role of syntax in terminology. She claims that the argument structure is a necessary part of description of terms as it reveals new information about term semantics and contributes to the perception of specialised knowledge. Obligatory arguments of the predicate that form the argument structure disclose the typical terms that occur in a given syntactic position and acquire a given semantic role and, thus, enable to capture the relationships between semantically related predicative structures (L'Homme & Zhicho, 2015, p. 1, 7, 9).

The practical realisation of Frame Semantics principles found its ground in new generation dictionaries such as DiCoEnviro and DiCoInfo initiated and led by L'Homme. In

DiCoEnviro and DicoInfo L'Homme applies the methodology of annotation of context of lexical units developed by the project FrameNet that enables to select the appropriate conceptual scenario adapted to the domains of environment or computer science and the Internet. In these dictionaries, the users can find not only some traditional pieces of information (e.g., sources, contexts, synonyms), but also some more unusual pieces of information (e.g., an explanation of the term meaning provided by the slot filling mechanism, representations of structures in which terms appear, collocates, and related terms). In addition, such dictionaries focus on single-word terms that can be combined with other words to form more specific multi-word terms, rather than listing each individual combination of these items. DiCoInfo provides equivalents of the English terms in French and Spanish, while DiCoEnviro is even more multilingual as it encompasses English, French, Spanish, Italian, Portuguese and Chinese. The example of entry for the term *risk* in DiCoEnviro is provided in Figure 1.

risk $_1$, n
a risk: ~ of *impact* $_1$ ⊕ on *ecosystem* $_1$, *species* $_1$ ⊕ from *change* $_{1a,1}$ ⊕
Contexts
Lexical relations

Explanation	Related term
Related Meanings	
Related meaning	danger hazard $_1$ threat $_1$
Other Parts of Speech and Derivatives	
A *species* or an *ecosystem* that can undergo a r.	at ~
Types of	
That is important	high ~ increased ~ significant ~
Combinations	
A *change* can be a r.	pose a ~
A *species* or an *ecosystem* undergoes a r.	be at ~
A *change* causes a r. to be more important	enhance a ~ increase ~
The r. becomes more important	the ~ increases

Figure 1. Entry for term *risk* in DiCoEnviro

Another prominent example of an online new generation dictionary based on Frame Semantics and FrameNet project principles is a multilingual dictionary of law JuriDiCo (2012) by Pimentel. She applies similar methodology of dictionary compilation elaborated by L'Homme. The dictionary is devoted to specialised verbs, which are considered to be terms: 200 English verbs and their Portuguese and French equivalents and 40 frames group semantically related verbs within each language. The goal that Pimentel raised for herself when developing this dictionary was to verify if the theoretical and methodological framework of Frame Semantics is applicable for the analysis of specialised verbs that occur in legal texts. She assumed that the description of specialised verbs by means of semantic frames can help lexicographers to capture their equivalents in other languages. JuriDiCo conveys the information about equivalents of verbs as well as the linguistic and extralinguistic information related to terms. The linguistic information is encoded in syntactic structures in which verbs occur, while the extralinguistic information is represented as a conceptual scenario or background knowledge to which verbs refer, in other words, a frame (see Figure 2). Without any doubts, this dictionary has become a useful resource for

drafting and translating legal texts as well as for ordinary users who need to understand legal terminology (Pimentel, 2012, p. 2-3). The example of entry for the term *assess* in JuriDiCo is provided in Figure 2.

Figure 2. Entry for term *assess* in JuriDiCo

Frame Semantics gave birth to *Frame-Based Terminology* elaborated by Pamela Faber. This theory combines certain premises from the Communicative Theory of Terminology, Sociocognitive Terminology and Frame Semantics.

Frame-based Terminology focuses on conceptual organisation of a specialised domain, the multidimensional nature of terms and extraction of semantic and syntactic information by means of multilingual corpora.

The goal of *Frame-Based Terminology* is to develop a universal conceptual-cognitive organisation of a specialised field based on the data of multilingual corpora. Faber combines the bottom-up and top-down methods in order to shape the conceptual structure of a domain in question. The bottom-up approach consists of information extraction from multilingual corpora taking into account semantic and syntactic information, while the top-down approach encompasses information provided by specialised dictionaries, term bases and other sources. The synthesis of both approaches enables a granular description of conceptual network of specialised domains based on the events that occur in them.

The events generate templates for actions and processes with entities that participate in them. These templates serve as prototypes and provide frames for organization of more specific concepts.

Thus, *Frame-Based Terminology* investigates units of the specialised language by a progressive expansion of meaning from a single term to a knowledge frame. The core notion of *Frame-Based Terminology* is *frame*; it is defined as 'a scheme or knowledge structure, which relates elements and entities associated with a particular scene, situation that is part of human experience' (Faber & Cabezas-García, 2019, p. 3). A frame is a set of knowledge that humans evoke from memory to make sense of the world.

Cabezas-García and Faber (2019) highlight the importance of predicative frames for the understanding of terminological units as verbs link concepts in specialised texts and reflect how entities interact. Thus, *Frame-Based Terminology* research is event-based. When events are transferred into language, they usually take the form of predicate argument structures. The nature of an event depends on the meaning of the predicates that activate the relationships between participants of the event (Faber, 2014, p. 21).

Faber and her scientific team have developed a terminological resource EcoLexicon

based on principles of *Frame-Based Terminology*. EcoLexicon is a visual terminological thesaurus that represents the structure of terminological concepts from the domain of environment. Concepts appear in a specialised frame, which visually illustrates their inter-relationships. All concepts are presented with their terminological denotations in English, Spanish, German, French, Russian, and Greek. The synthesis of the conceptual, linguistic and graphic information in EcoLexicon facilitates the perception units of the specialised language as well as the conceptual relations within the domain of environment (Faber et al., 2012, p. 124-125). Figure 3 illustrates lexical unit *risk* in EcoLexicon.
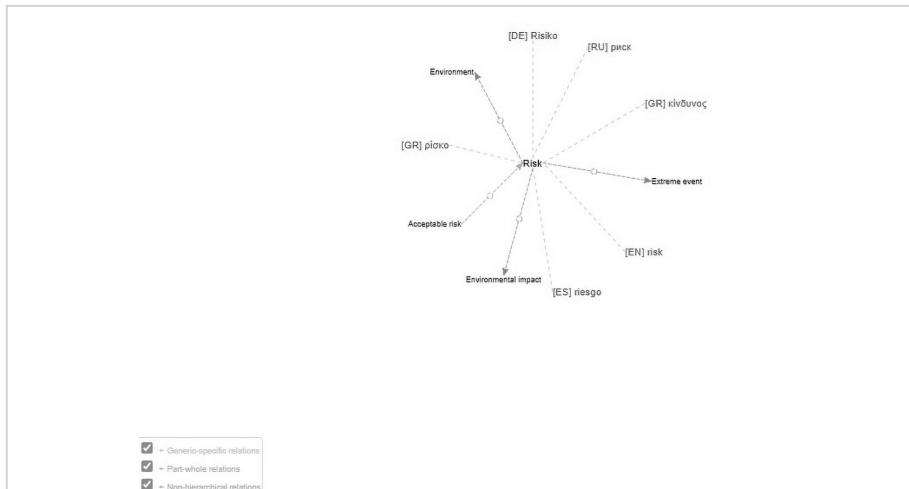
Figure 3. Illustration of lexical unit *risk* in EcoLexicon

Other researchers address frames from various points of view: Temmerman (2003) emphasises the usefulness of embedding concepts in a situation as a way of enriching conceptual representations; Kecskes (2014) and León-Araúz (2016) discuss the importance of situations and events in the understanding of terminological units. Busse (2012) points out a useful distinction between concept frames and predicative frames. Martin (2006) discusses the difference between Fillmorian and Minskyan frames; he describes the methodology of frame-based lexicon and demonstrates how learner's dictionaries can profit from frame-based lexicons.

In Lithuania, there are only few works in which the principles of Frame Semantics are applied to terminology and conceptual research. Laukaitis (2008) applied FrameNet methodology for developing SUMO ontology. Bernotaitytė et al. (2013) applied FrameNet methods for creation of lexical ontology of Business vocabulary. According to FrameNet statistics, there have been only 4 downloaders of FrameNet data from Lithuania, whereas the number of downloaders from other countries is much higher (Spain-47, France-49, the Great Britain-91, and USA-635). These numbers show that the FrameNet project in Lithuania is not well-known, and it is yet to be discovered.

The present research applies the principles of Frame Semantics and cognitive scenarios

of the FrameNet project adapted to the financial field for the analysis of the micro- and macro-contexts of the term *risk* and development of criteria for classification of term-forming and term-embedding syntactic structures activated by cognitive frames reflecting RISK situations.

1.2 Corpus Linguistics theory and its application in terminology research

As the object of interest in Cognitive Linguistics is a real language in use, the Corpus Linguistics methodology is considered to be the most appropriated for the linguistic analysis or description. It can be clearly said that the term 'corpus linguistics' has a double interpretation: a) a field of linguistics which is related to the analysis of very large electronic textual data processed by computer software; b) a methodology used for the language analysis (Baker, 2010, p. 94). In the present study the term 'corpus linguistics' designates the methodology used for the language analysis.

The idea of a corpus emerged in the 1960s; it was connected to the lexicographic needs. Before the examples for the illustration of meaning were taken from famous writers, modern linguists started collecting a good variety of language in use by ordinary people in order to study the grammar and vocabulary better. The technological advances stimulated the development of corpora: the emergence of computers, the invention of scanners, which improved access to the printed texts and finally the digitalisation of documents (Tognini Bonelli, 2010, p.15). The first electronic corpus of written language was the Brown Corpus, compiled in the 1960s at Brown University by Nelson Francis and Henry Kučera. This corpus contains a million words of American English from documents which had been published in the year 1961. It is still extensively used (Tognini Bonelli, 2010, p. 15).

The technological advances go along with the emergence of Corpus Linguistics. In the beginning, the computer was seen as a tool to process a quantity of information in real time. This is still the most prominent contribution of corpora to language research. As computer technologies progressed, the means of retrieving information were getting more and more sophisticated, and the results required more and more skilled interpretations (Tognini Bonelli, 2010, p. 17). Corpus Linguistics, which was started as a methodology, evolved into a linguistic science as new insights provided by corpus into the language questioned the underlying assumptions of many well-established linguistic theories. The observation of new evidence affects systematically the statements about the language system in general, thus, the language is considered as 'a living body' under constant change (Tognini Bonelli, 2010, p. 17).

Thus, Corpus Linguistics methodology is connected to empirical, inductive forms of analysis, relying on real-word instances of language use in order to shed light on rules or main tendencies about the ways in which people produce language. Humans' abilities are restricted regarding the capacity of handling big amount of data and providing objective judgements based on observation of the language, while computers can treat a large quantity of textual discourse that enables researcher to explore particular phenomena of interest. Corpus Linguistics methodology provides tools for calculating frequencies, carrying out statistical tests quickly and accurately, giving access to linguistic patterns and trends

such as collocational information that used to be inaccessible before. This methodology enables researchers to provide conclusions that are more reliable (Baker, 2010, p. 93-94). Moreover, corpus analysis can provide the researcher with the necessary data in order to confirm or reject the hypotheses about the language use as well as to set new questions and theories about the language that previously were not possible, e.g., instead of making a claim that 'financial documents mostly discuss different risks', a corpus analysis not only allow researchers to support or reject this hypothesis, but also it would show the frequency of the use of the term *risk*, the range of its collocates, the types of risks which usually occur in financial field as well as the evidence in which this word occurred. A large corpus allows researcher to find instances of rare or unusual cases of the language as well as to reveal frequent phenomena. In Corpus Linguistics there are two directions of the analysis – corpus-driven or corpus-based. In the corpus-driven approach a corpus serves as a source to form hypotheses about the language and not as a reference for the existing phenomena, while the corpus-based approach uses corpora in order to test or update the existing hypotheses taken from other sources.

A corpus is any text or a collection of texts compiled according to certain criteria. The compilation of an appropriate and representative corpus relies on many criteria: 1) the size of the corpus; 2) the type/aim of the corpus; 3) the type of the language; 4) the availability of texts (Baker, 2010, p. 95). A corpus must be large enough in order to reveal something about frequencies of certain linguistic phenomena to enable researchers to examine what is typical, as well as what is rare, in the language. However, there are no strictly defined rules regarding the volume of a corpus. It is commonly accepted that the size of a corpus depends on the aspect which is going to be analysed. Kennedy (1998) states that for the analysis of prosody a corpus of 100.000 words could be satisfactory. Biber (1993) assumes that for lexicography and grammatical studies a corpus of at least a million words is considered as large enough. The aim for which the corpus is compiled also determines the size of the corpus. If one aims to represent a particular language in the corpus, such general corpus must contain about 100 million words. It becomes a useful source for a wide range of research purposes (The British National Corpus (100 million words), le Corpus de référence du français contemporain (CRFC, 310 million words), Dabartinės lietuvių kalbos tekstynas (100 million words)). A specialised corpus can be smaller and contains a more restricted set of texts, e.g., it can be restricted by genre (only newspapers), time (texts published during the period 2000-2015), domain (sport, finances, economics etc.) etc. Specialised corpora focus on specific research questions. The type of the language influences the building of a corpus as well; the more varied the language, the larger the corpus is required. Before compiling a corpus, one needs to decide where texts can be taken from. Some texts can not be freely downloaded from the internet, in some cases, even the permission from copyright holders is needed. Finally, the compilation of a corpus takes much time and requires a certain competency in computational technologies.

In addition to representativeness, sampling and balance have to be regarded in the compilation of a corpus. In order to compile a representative corpus of a particular language, the texts within it must be chosen and balanced carefully. A corpus can be compiled of full texts as well as of parts of texts. If a corpus does not contain full texts, in this case, it

is important to balance samples, it means, if one decides to take 10.000 words from each of ten sources, the samples must be balanced by taking them from different places of the texts, we would need to ensure that text was equally samples from beginnings, middles and ends of different documents. If we collect texts from one source, samples do not need to be balanced as we include all texts (Baker, 2010, p. 96).

Any kind of a carefully designed corpus provides metadata, e.g., the authors, the date of publications, the genre, etc. As for legal texts or newspaper articles, the date of publication is most relevant while the authors are usually not so important. This information helps researchers to find particular types of texts according to their interests (e.g., newspaper articles) or carry out comparative analysis of variation of language use across genders, age groups, social classes, etc.

Another important notion in corpus linguistics is annotation. It is tagging of the language data with additional information which allows the researcher to perform a more complex analysis. Corpus annotation can be carried out at different levels from the phonological level to the discourse level. Thus, annotation can be not only linguistic, but also stylistic, when the analyst labels the text with stylistic features such as speech and thought presentation, or pragmatic, when the analyst labels the text with pragmatic information such as speech acts (McEnery, 2006, p.33-34). The linguistic annotation can take different forms such as part-of-speech, parsing, semantic annotation, etc. The most widespread linguistic annotation is tagging the parts of speech. Tagging can be manual or automatic. It may seem paradoxal, but neither a machine nor a human can guarantee the high accuracy of annotation. Hunston states that automatic annotation does not ensure 100% result; likewise even an experienced linguist can make mistakes. Sinclair asserts that manual annotation affects the consistency of annotation (in McEnery, Xiao and Tono, 2006, p.33). On the other hand, the accuracy of annotation depends on the degree of annotation needed for the analysis as well as on the size of the corpus. If the number of mistakes is low and they do not affect the results of the analysis, the corpus is usable without corrections. If an annotated corpus is too big for a human correction, it can also be used as it is or without annotations (cf. McEnery, 2006).Taking into consideration the fact that the value of corpus annotation is well recognized, the quality of annotation can be reached with a balanced approach of automatic and manual annotation (Baker, 2010, p. 99). Annotation is interpretation of the text by an annotator, in other words, a corpus undergoes a linguistic analysis by an annotator who encodes linguistic information in the corpus, and thus annotation adds value to the corpus. There are many advantages of the annotated corpus: it facilitates extraction of linguistic data, allows very quick extraction of information on the usage of various linguistic units, and constitutes a standard reference resource as well as an example of the language variety (McEnery, 2006, p.33).

Given that annotation is of an interpretative nature and despite its numerous advantages, in some way it imposes a linguistic approach on a corpus user. Annotation also creates an impression that the corpus is loaded with information. Researchers, who seek to analyse patterning of words, also need to investigate the plain text or raw corpus. There are corpora without any annotation and such corpora could be successfully used for language description, because an unannotated corpus opens new space for multiple interpretations. The present

research is based on the data extracted from the unannotated parallel corpus. In the process of the research, the extracted data were annotated according to the selected criteria.

One of the main methods applied in Corpus Linguistics is collocational analysis as collocations are frequent co-occurrences, while frequency in Corpus Linguistics is considered as one of the most important parameters for language analysis (Marcinkevičienė, 2010, p.70, p.140). Collocations refer to syntagmatic attraction between lexical units. According to Lehecka (2015), 'the concept of collocation is based on the notion that each word in a language prefers certain lexical contexts over others, i.e. that any given word tends to co-occur with certain words more often than it does with others' (Lehecka, 2015, p. 2). Collocations are usually used in a fixed grammatical form and they can be considered as ready-made phrases (Marcinkevičienė, 2010, p. 91). Collocations consist of *the base* and the words co-occuring with it called *collocates*. Statistical analysis of corpus data is used to measure the degree of attraction between the words; its results enable to determine which word combinations appear together significantly more often than it would be expected by chance given the words' total frequency in the corpus (Lehecka, 2015, p. 2). In this way the most significant collocations of the chosen words in the analysed corpus are established. This method is used mostly for the contextual semantic analysis of lexical units as it enables to observe the whole variety of co-occurring words of the investigated words, establish the predominant co-occurrence patterns and thus to describe their meanings based on their contextual environment (Atkins, Rundell, Sato, 2003, p. 340-341). Collocational analysis has become an indispensable tool for lexicographers; it is also extensively applied in Computational Linguistics for the purposes of machine translation, natural language processing and other areas (Lehecka, 2015).

The collocational analysis is often used in combination with the colligational analysis. The concept of colligation refers to attraction of a lexical unit and a grammatical pattern. It is based on the notion that words prefer to be used in certain grammatical patterns and avoid other grammatical patterns (Sinclair, 1998; Lehecka, 2015). The colligational analysis may be extended and encompass the relationship between the lexical unit and its position in a phrase, clause, sentence, text or discourse where the lexical unit can be used (Hoey, 2005, p. 49). Colligational analysis has been extensively employed in combination with collocational analysis to study the meanings of near synonyms as Corpus Linguistic studies have revealed that they are often used in different lexical and grammatical contexts (Lehecka, 2015). Corpus Linguistic analyses have shown that even different senses of polysemous words may have different collocational and colligational patterns (Aston, Burnard, 1998, p. 8). Thus, collocational and colligational analyses have proved that semantics and grammar should not be treated as independent, but rather as closely interconnected systems (Lehecka, 2015). The pragmatic aspect should also be taken into consideration in the analyses as collocational and colligational preferences of a lexical unit vary significantly between different domains and different types of texts (Butler, 2004; Newman & Rice, 2006).

The growing interest in Corpus Linguistics and its possibilities has inspired researchers to create parallel corpora and comparable corpora in order to realise different comparative and contrastive analyses of languages in question (Baker, 2010; Marcinkevičienė, 2002). The results of such researches are especially important in language teaching, language

testing, and translation. Initially, the development of bilingual and multilingual corpora was connected to the needs of mechanical translation.

Multilingual corpora usually contain the same amount of texts from a number of different languages in the same genre; they do need to be translations from one language to another. When translations are not available or they are not numerous or even rare, corpora can by compiled with similar kinds of texts and topics in different languages. Such corpora are referred to as comparable corpora. Parallel corpora are a type of multilingual corpus where texts are exact equivalents (translations) of languages in question. Parallel corpora are often sentence-aligned, the correct alignment is reached by the right software using tags as markers to indicate which sentences are translations of each other, and the tags allow readers to view translations at the same time. The first parallel corpus was compiled in Canada, named *Canadian Hansard*. The corpus is constituted of Canadian Parliament proceedings in English and French (1980) in the electronic form. It is not accidental that the first parallel corpus appeared in Canada because Canada is a state with two official languages and at this period it was well-equipped technologically.

The Corpus Linguistics methodology can be applied in different fields as translation, language teaching/learning, and lexicography. Parallel corpora are usually used in order to identify the differences between the original text and translations, to reveal which parts of text contain difficulties for translators and how these problems can be solved, etc. Corpora are also useful for teachers as the source to detect common errors at various stages of learning as well as to realise how the native language influences the way of learning a foreign language. Such corpora are named learner corpora. They are usually compiled with written essays or letters produced during the lessons.

As for lexicography domain, corpora can help in linguistic description providing lexicographers with real life examples, e.g., Hudson (2002) analysed the meanings of the verb *know* and compared the results in three dictionaries compiled by the traditional and corpus methodologies: the 1987 *Longman Dictionary of Contemporary English* compiled without a corpus, the 1995 version of the *Longman Dictionary* and the *COBUILD* 1995 created with a corpus. She revealed that *Longman* 1987 gives 20 meanings of the verb *know*, *Longman* 1995 provides over 40 meanings while *COBUILD 1995* gives over 30 meanings. This information enables researchers to observe and examine the evolution of the use of the verb *know* as well as its real use (Baker, 2010, p. 101).

In recent years, a growing number of lexicographic and terminological resources have started to provide information on collocations, for example, Oxford Collocations Dictionary: For Students of English (2012), Longman Collocations Dictionary and Thesaurus (2013), Lxinthe Lexicon of Cooccurrents ('Le Lexique de cooccurrents: Bourse et conjoncture économique' Cohen 1986, 2011), the Dictionary of Business French - DAFA ('le Dictionnaire d'apprentissage du français des affaires', Binon et al., 2000), the Active Lexicon of French -LAF ('Le Lexique actif du français', Mel'čuk and Polguère 2007), Antidote software (Antidote 8, 2013), Dictionary of Lithuanian Phrases ('Lietuvių kalbos daiktavardinių frazių žodynas', 2012), Lithuanian Collocations Dictionary ('Lietuvių kalbos kolokacijų žodynas', 2019).

The major advantage of the corpus approach is its fast and accurate techniques to

identify patterns that researcher would not notice. It is also important to emphasise that a corpus is a large amount of naturally occurring data; moreover, corpus approach offers no reason or motivation for the selection of some evidence and ignorance of the rest. Therefore, corpus analysis offers a high degree of reliability and validity to linguistic research. The information gathered from a corpus enables researchers to make generalisation about the language as a whole.

Although corpus linguistics methodology has many advantages for the linguistic analysis, however, it poses particular challenges to linguists. First, compilation of a corpus requires a lot of time as well as certain knowledge and competencies in computer science. Second, corpus linguistics is usually seen as a quantitative form of analysis as computer programs automatically provide statistic data about the language, while interpretation of the extracted data is reserved for the researcher. The researcher has to interpret huge amounts of information, select the most prominent examples and provide objective generalisations of the data.

In conclusion, Corpus Linguistics methodology opens new possibilities to approach the language or languages in the perspective of the real use; it allows researcher to work with big amounts of data and provides objective conclusions. Corpus analysis provides answers to questions about how people use the language both in general and in specialised communication. Corpus application enables researchers to test the existing claims or theories about the language or raise new ones. Also Corpus Linguistics methodology is effective in comparative analysis of languages in question. Results of any research based on corpus analysis can be particularly important not only in lexicography, syntax, and translation, but also in language teaching, sociolinguistics, and psycholinguistics.

Corpus-driven analysis of the natural language has become one of the most widely used methodologies in linguistic research and has many applications, including lexicography, compilation of linguistic databases, language teaching and learning, machine translation, etc. The terminology is not an exception. Communicative Theory of Terminology, as well as other modern terminological frameworks, encouraged researchers to analyse behaviour of terms in corpora. This approach enabled researchers to broaden the concept of a term beyond noun and include verbs and adjectives, to investigate how collocations are used for term extraction from a corpus and their analysis; to elaborate lexical models for capturing typical structures of terms, etc. (Biel, 2014, p. 34).

According to Cabré, Montané, and Nazar (2012), the goal of modern terminology is to produce formal, semantic and functional descriptions of lexical units having terminological value as well as to explain their relationship with the rest of the units of the linguistic system. The object of terminology research is 'the living terminology' (terminology that naturally occurs in specialised texts) and the communicative aspect of the use of terms which is best instantiated in a corpus (Cabré, Montané, Nazar, 2012).

Digital corpora allow terminologists to work with a big amount of documents, observe particular features of a specialised language, collect information about real usage of terms and their evolution, capture new terms which could not be intuitively felt or predicted as well as to carry out contrastive analysis of data of several languages. Corpus analysis software, automatic and semiautomatic term extractions tools also contribute to terminology

standardisation, for example, the frequency count of synonyms can provide useful distributional evidence indicating statistically preferred terms (Khurshid & Rogers 1992, p. 36). Thus, digital corpora enable terminologists to revise terminographical information about terms in the existing databases and constantly update them.

Corpus-driven terminology analysis also contributes to knowledge engineering (development of conceptual ontologies) which describes concepts denoted by terms and classifies them into structured, hierarchically related conceptual models. Such conceptual models represent the knowledge of specialised domains. Ontologies are seen as a medium through which the natural language information is transformed into a conceptualised model of knowledge that may be used by natural language processing programs (Bielinskienė et al., 2015, p. 122-123).

1.3. Contrastive linguistics theory and its application in terminology research

Contrastive Linguistics is a branch of linguistics, which aims to analyse description of two or more languages and to determine language-specific, typological and/or universal patterns, categories, and features. The contrastive approach to the language can open new space for the scientific research on linguistic description, Computational Linguistics, machine translation or information extraction. Contrastive Linguistics is a theory, which is tightly connected to the Descriptive Linguistics as before contrasting languages they have to be described (Principles and trends of contrastive linguistics, 2016, p. 5-6, Kuczok, 2017, p. 169). In linguistics the term *contrastive* designates inter-linguistic and inter-cultural comparisons. In the linguistic literature along with the term *contrastive linguistics* the terms *contrastive studies* and *contrastive analysis* are often used. These three terms differ in their scope. *Contrastive studies* designate the most general field involving linguistic and extra-linguistic dimensions of contrastive analysis. *Contrastive analysis* is a way of comparing languages; it is often used interchangeably with other two terms (Principles and trends of contrastive linguistics, 2016, p. 5-6).

Contrastive analysis was generated from the comparison study of grammatical and phonological systems of two languages for pedagogical purposes. At present, contrastive analysis is considered to be 'the systematic synchronic study of similarities and differences in the structure and use of two or more languages varieties, carried out for theoretical and practical purposes' (Bugarski, 1991, p. 77). Contrastive analysis focuses on exploration of universal linguistic features and observes how these features are realized in L1 and L2.

The contrastive approach enables researchers to create the conceptual organisation of the world differentially instantiated by lexical units in two or more languages under investigation (Bugarski, 1991, p. 75). The comparison lies at base of the contrastive analysis and the object of the analysis is similarities and differences among the languages. The results of the contrastive analysis reveal important findings which could be used for language teaching and learning; communication, translation and interpretation; theoretical, descriptive and applied linguistics.

The interest of contrastive analysis has grown especially in the last two decades; it has

been generated by extensive application of multilingual corpora in language analysis and development of quantitative methodologies for empirical research. Parallel and comparable corpora provide data for contrastive analysis necessary to establish differences and similarities between languages (Marzo, Sutter, Heylen, 2012, p. 1).

Although the contrastive analysis is very efficient for the language investigation, its application in terminology was not widespread until the last decades. Bugarski indicates two reasons that explain less interest of scholars in the contrastive analysis in terminology: 1) its pedagogical origin, i.e. the contrastive analysis generated from the comparison study of grammatical and phonological systems of two languages for pedagogical purposes; 2) the internationalisation of scientific terminology, i.e. the researchers considered the scientific terminology as the field there was not much to compare. However, it was a wrong viewpoint as the terminology is not unified; it constantly undergoes synchronic and diachronic changes (Bugarski, 1991, p. 73).

However, scientists who were focused on the analysis of scientific and technical terminology, its development, application and translation revealed that contrastive analysis can provide new information about terminology from different perspectives: uncover semantic, pragmatic and structural peculiarities of terminology in different languages (Bugarski, 1991, p. 73). It enables researchers to disclose similarities and differences of terminology on different levels of language and provides new insights for term developers, translators, users and teachers of specialised languages. With increasing internationalisation of professional communication, the necessity for the contrastive analysis of specialised language terminology has been growing.

To the author's knowledge, there are no contrastive studies on financial terminology in different languages. However, there are numerous contrastive studies on terminology of other fields; most of them are devoted to legal terminology as its incongruity in different legal systems is a big challenge for translators. This is especially relevant in the EU which unifies the main legal principles which regulate everyday relationship inside the union.

The most prominent expert, theoretician in comparative and contrastive analysis of legal languages and their terminology is Mattila (2013, 2016). In his books, he discusses legal language as a language for special purposes, describes the functions and characteristics of legal language and terminology of law. He examines the major legal languages: Latin, French, Spanish, German, Norwegian and English. Mattila has also collaborated with J.-C. Gémar, they co-authored several works in the field of legal terms (Mattila, Gémar, 2012). Numerous contrastive studies of legal terminology are devoted to semantic non-equivalence and translation issues. De Groot & van Laer revised law dictionaries of the EU, discussed the semantic peculiarities of legal terms and translation difficulties of terms of different legal systems (2006, 2007, 2011). Sandrini (1996), Kocbek (2006) provided principles of a contrastive legal terminology, and also examined the issue of equivalence. Pommer (2008), Chromá (2011, 2016) and Harvey (2002) highlighted the role of legal translation in intercultural communication, identified factors leading to difficulties in legal translation, and analysed translation strategies used in the legal field. Onufrio (2009) addressed the problem of unification and harmonisation of European Private Law in the field of contract. The most prominent bilingual dictionaries of legal terminology of the

European languages are English-French Dictionary of Legal terms by Houbert (2015); LEO online English - German dictionary (2011) compiled by the team from Munich's technical university; Dictionary of Legal Terms Spanish - English - Spanish (2008) by ROBB or Merl Bilingual Law Dictionary - Diccionario Juridico Bilingue (2017) by Gallegos, English-Russian Dictionary of Legal terms by Degtiariov or online English-Russian-English Law Dictionary(2015) by Bujalskij. In Lithuania, contrastive research on legal terminology deals with two aspects: semantic non-equivalence of legal terms and formation principles of legal terms in different legal systems. Semantic non-equivalence issues are investigated in the works by Rackevičienė and other scholars (Rackevičienė, Janulevičienė, 2011; Rackevičienė, Šliogerienė, 2014; Rackevičienė, Janulevičienė 2016; Rackevičienė, Valūnaitė Oleškevičienė, Galkutė, 2016; Rackevičienė, Janulevičienė, Mockienė, 2019). Formation of legal terminology is analysed in the doctoral thesis by Mockiene (2016) and scientific articles by Rackevičienė, Janulevičienė and Mockienė (Rackevičienė, Janulevičienė, 2010, 2014; Mockienė, Rackevičienė, 2014, 2015, 2016, 2018).

The number of researches on other fields of terminology by using contrastive methodology is still growing up: Bugarski (1985) contrasted socio-political terminology in English and Serbo-Croatian; Mossa (1992) carried out a contrastive trilingual French-Arab-English analysis of banking terminology; contrastive analysis of surveying terminology in English and Polish was performed by Kwiatek (2013); Platonova (2011) applied the contrastive methodology in the doctoral thesis on environment and ecology terms in English and Latvian; Ivanovska et al. (2012) performed the contrastive analysis of kinship terms in German and Macedonian; Piccato (2012) carried out a contrastive trilingual Italian-French-English analysis of terms from the domain of tourism; Zermane (2017) contrasted e-commerce terms in English, French and Arab, Mécemmène (2019) approached economic and financial terms in English, French and Arab applying the contrastive methodology in the doctoral thesis. Thus, contrastive analysis is considered to be very productive and inspires researchers to approach terms from different specialised domains.

All in all, contrastive analysis of terminology focuses on various aspects of language for the specific purpose and allows to establish language-specific typological and/or universal patterns and to make generalisations. Moreover, interaction of corpus linguistics and contrastive methods contributes to generating knowledge about specialised languages and their terminology based on information extracted from multilingual corpora.

The present research contributes to contrastive terminology analysis by providing investigation of terminology of the financial domain. It seeks to uncover similarities and differences of semantico-syntactic structures in English, French and Lithuanian as well as to establish the universal semantico-syntactic models.

2. METHODOLOGY OF THE RESEARCH

The methodology of the research is presented in three chapters. The first chapter describes the process of collection of data sources and compilation of the ad hoc corpora, as well as the software chosen for the corpora analysis. The second chapter presents the principles of selection of the research object (the term *risk*), while the third chapter focuses on the principles of extraction and analysis of the research data (multi-word terms with the nominal base *risk/risque/rizika* and argument structures that include the single-word and multi-word terms with the nominal base *risk/risque/rizika*).

2.1. Development of the ad hoc corpora and choice of the corpus analysis software

The present study is a corpus-driven analysis. The corpus-driven approach is a methodology which enables researcher to use the corpus as an empirical basis in order to extract necessary data and uncover linguistic phenomena without making anterior assumptions, in other words, it is a more inductive approach for the investigation of language variation and use (cf. Tognini Bonelli, 2010; Biber, 2012).

First of all, a researcher of terminology has to become familiar with the chosen domain (field of knowledge). In the given research, it is the financial domain of the EU. The main database which allows user to get acquainted with the EU documents is EUR-Lex that contains legal acts and other documents issued by the European Parliament, Council of the European Union, European Commission, Committees, Courts of the European Union and other institutions. The database provides access to the authentic Official Journal of the European Union which every working day publishes the EU legal acts, judgements of the Courts of the EU and other documents. The publications of this Journal were overviewed in order to get familiar with the domain of interest.

The performed overview allows to formulate the following criteria for selection of documents for the ad hoc trilingual parallel corpus compilation:

- Language of the documents,
- Types of the documents,
- Period of the documents,
- Size of the corpus.

Three languages were selected for the research: English and French, which are main working languages of the EU institutions, and Lithuanian, which is also an official language of the EU. The Lithuanian documents are always translations (i.e. the target language texts), while the origin of the English and French documents is often difficult to assess as the original document (the source language text) may be drafted either in English or French.

The corpus was compiled of various types of documents issued by different EU institutions. The choice and the proportion of types of documents were not preliminary evaluated. Two main criteria were set for the selection of documents: relevance of the documents to the research, i.e. they have to deal with issues relevant to the financial domain, and the date of publication, i.e. they have to be enacted within the last five years, i.e. encompass the

period of 2013-2018. The size of the corpus was also taken into consideration – it had to consist of not fewer than one million words in English.

In total, 154 legislative documents in English, French and Lithuanian were collected. One parallel sentence-aligned English-French-Lithuanian corpus was compiled from three monolingual plain text versions; the size of the parallel corpus reaches about three million words.

All three subcorpora consist of the same number of legislative documents (154 texts), however, the number of word tokens and types differs. In the English subcorpus the number of word tokens comes to a total of 1,006,485 with 10 205 types, the French subcorpus represents 1,181,647 tokens and 13 662 types,while the Lithuanian corpus has 803,845 tokens and 28 171 types.

To summarise, the compiled corpus can be described as a multilingual parallel corpus, composed of three subcorpora in English, French and Lithuanian. The subcorpora consist of the parallel source and target language texts. Moreover, it is a specialised corpus related to financial issues. As regards the time period, the corpus is synchronic, since texts date from 2013 to 2018.

Two diagrams below illustrate the proportion between the institutions involved in the drafting of legislative documents (see Figure 4) and the types of the issued documents (see Figure 5) which composed the corpora.
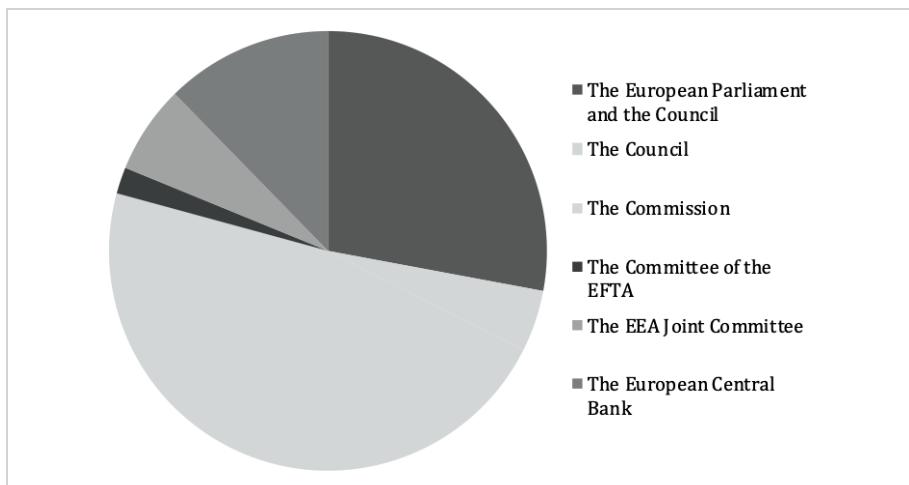
Figure 4. The proportion of institutions issuing legislative documents

Figure 4 presents the institutions which issue financial legislative documents. There are six institutions, which participate in the process of adoption of the legal acts, selected for the given research: the European Parliament and the Council, the Commission, the Committee of EFTA, the EEA Joint Committee, The European Central Bank. The majority of documents were issued by the European Commission (EC) (72 of 154 documents). The second most frequent institutions are the European Parliament and the Council (43 of

154 documents), the least frequent is the Committee of the EFTA (3 of 154 documents). The Council, the EU Parliament and Commission are the principal EU bodies which are responsible for the whole law-making and law-implementing process in the EU, while the EFTA (the European Free Trade Association), the EEA (the European Economic Area) Committees and the European Central Bank deal mostly with the issues related to the field of finance.
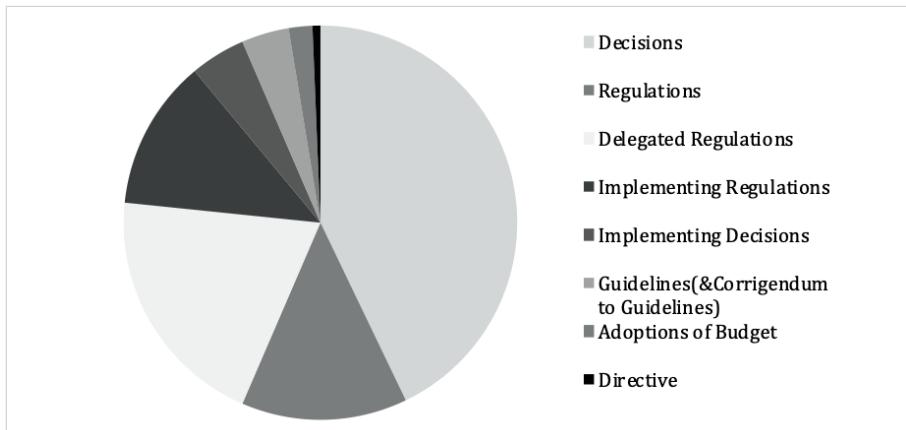
Figure 5. The proportion of types of legislative documents used in the corpus

The figure 5 presents the types of legislative documents which have formed the corpus. Most of the documents represent the main types of secondary legislation:

- Decisions
  The EU decisions constitute the biggest part of documents (66 of 154 documents). A *decision* is 'a legal instrument which regulates the relationships between those individuals or member states to which it is addressed'. '*Implementing decisions* address specific legal entities (EU Monitor, 2020)'.

- Regulations
  Other two important groups of legislative documents are delegated regulations (31 of 154 documents) and regulations (19 of 154 documents). *Delegated regulation* is 'a legal act that can be modified by the EU Commission in order to elaborate more precise measures while *regulation* is a law which is proceeded immediately to the execution'. '*Implementing regulation* is a legally binding act of the European Union directly applicable in all member states of the European Union; it deals with very specific policies and often addresses highly technical details of legislation (EU Monitor, 2020)'.

- Directive
  Directive is 'a legislative act that sets out a goal that all EU countries must achieve (European Union, 2020)'. In the selected data only one directive entered into the corpora.

As it can be seen from the Figure 5 the compiled corpora are composed of a great variety of legislative documents that can provide multitude of instances for the analysis.

The selected EU legislative documents were transformed into plain texts and aligned for extraction of terms and their analysis. Three programs were used to compile, and align the texts and extract the necessary data from them: *AntConc* (2014), *AntPConc* (2017) created and certified by Laurence Anthony and *NOVA Text Aligner* (2014). *AntConc* is a freeware multiplatform toolkit for carrying out Corpus Linguistic research and data-driven learning, while *AntPConc* is intended for creating a parallel corpus of several languages. Both programs enable the researcher to deal with a big amount of data and carry out a comprehensive multilingual linguistic analysis.

The tools, which are provided for users by AntConc program, are the following: *Word list, Collocates, Clusters, Keywords, Concordance, Concordance plot, File view tool.* In the given research, four tools of *AntConc* were applied:

- *Wordlist* determined the most frequent words in the corpora;
- *Collocates* enabled the researcher to determine the dominant collocates of the term *risk* and measure the degree of their syntagmatic attraction to the term *risk*;
- *Clusters* allowed the revelation of the most dominant multi-word terms with the term *risk* as the nominal base;
- *Concordances* gave a wide variety of samples which illustrate the usage of the terms in the texts.

Before compiling a parallel corpus, the downloaded texts in the three languages were aligned manually with the help of the program NOVA Text Aligner. After alignment of the texts, a parallel corpus was built by means of the AntPConc program.

The AntPConc program allowed to expose on the screen the examples of the three languages at the same time: one can click on a chosen sentence to see the equivalents in other languages. The program also enabled the researcher to distinguish the keyword and its left or right collocates by different colours. However, it was not possible to see the document from which the example was extracted. By using the parallel corpus, French and Lithuanian equivalents of 70 English terms were extracted.

2.2. Selection of the research object (the term *risk*)

In order to determine the most frequent words in the corpus of the selected financial legislative documents, the tool *Word list* of the program AntConc was used. It provided the word frequency results in the English, French and Lithuanian corpora, which enabled the researcher to compare the word frequencies in the investigated languages and develop a trilingual list of 10 most frequent words (see Table 5). *Word list* also provided information on the number of word tokens and word types there were in the corpora and gave access to the context in which the terms were used (see Table 5).

Table 5. *10 most frequent words in the corpora*

	EN (corpus/ word tokens - 100 6485, word types - 10 205)	FR (corpus/ word tokens - 118 1647, word types - 13662)	LT (corpus / word tokens - 803 845, word types - 28 171)
1.	*risk* (3666), *risks* (684)	*risque* (3186), *risques* (1174)	*rizikos* (2946), *riziką* (1102), *rizika* (592), *rizikai* (372), *rizikomis* (5), *rizikas* (4)
2.	*credit* (3840), *credits* (112)	*crédit* (3993), *crédits* (402)	*kredito* (3707), *kreditų* (121), *kreditą* (39), *kreditu* (35), *kreditas* (29), *kreditai* (17), *kreditus* (16), *kreditams* (14), *kreditais* (4)
3.	*exposures* (1652), *exposure* (1387)	*expositions* (1694), *exposition* (1010)	*pozicijų* (1363), *pozicijos* (1267), *pozicijoms* (501), *pozicija* (379), *pozicijas* (356), *poziciją* (186), *pozicijai* (106), *pozicijomis* (95), *pozicijose* (10), *pozicijoje* (9)
4.	*services* (1571), *service* (1169)	*services* (2291), *service* (554)	*paslaugų* (1574), *paslaugas* (592), *paslaugos* (290)*, paslaugą* (189), *paslaugomis* (109), *paslauga* (75), *paslaugoms* (60), *paslaugai* (13)
5.	*assets* (1778), *asset* (907)	*actifs* (1876), *actif* (668)	*turto* (1768), *turtas* (804), *turtu* (498), *turtą* (473), *turtui* (157)
6.	*amount* (1937), *amounts* (703)	*montant* (2036), *montants* (679)	*suma* (1359), *sumos* (862), *sumą* (451), *sumas* (309), *sumai* (112), *sumoms* (73), *sumomis* (18), *sumoje* (4)
7.	*market* (2141), *markets* (448)	*marché* (2112), *marchés* (513)	*rinkos* (1712), *rinkoje* (355), *rinkų* (321), *rinka* (266), *rinką* (85), *rinkose* (84), *rinkai* (58), *rinkoms* (19), *rinkas* (9), *rinkomis* (2)
8.	*instruments* (1680), *instrument* (666)	*instruments* (1741), *instrument* (661)	*priemonės* (1900), *priemonių* (1658), *priemones* (746), *priemonė* (427), *priemonėmis* (313), *priemone* (195), *priemonėms* (189), *priemonėse* (10), *priemonėje* (5)
9.	*value* (2073), *values* (199)	*valeur* (2595), *valeurs* (371)	*vertės* (1036), *vertė* (847), *verte* (544), *vertei* (97), *vertėmis* (13), *vertėms* (7), *vertėje* (6)
10.	*securities* (1600), *security* (385)	*titres* (1613)	*vertybinių popierių* (1201), *vertybiniais popieriais* (699), *vertybiniai popieriai* (523), *vertybinius popierius* (219), *vertybinio popieriaus* (67), *vertybiniuose popieriuose* (2), *vertybiniam popieriui* (1)

The findings of this analysis reveal that the most frequent words in the corpora in all three investigated languages are *risk* and *credit* while the word *exposure(s)* takes the third position in the frequency lists. All three words, and, in particular, the words *risk* and *credit* often appear together in the financial legislative documents. This could be explained by a tight semantic relationship between the words, i.e. that any money transaction implies danger, in other words, *credit* generates *risk.* Most commonly, the words are used in their singular form, though, plural is also used in the investigated languages. In Lithuanian, which

is a synthetic language with a rich inflectional system, the words are used in different grammatical cases, the dominant of which is the Genitive singular.

The findings of the analysis allow to state that the words *risk*, *credit* and *exposure(s)* are to be assessed as the lexical items which denote the fundamental concepts of the financial domain. The term *risk*, which is the most frequent in the corpora, was chosen as the object of the research of the given thesis.

2.3. Principles of data extraction and analysis

2.3.1. Collocational method and its application in the research

Although the concept of collocation is very important in corpus linguistic analysis it is still obscure and can be viewed from two perspectives: contextual-statistical or lexicographical. Adherents of the first school describe collocations as 'one item collocates with another that appears somewhere near it in a given text' (Marcinkevičienė & Grigonytė, 2005, p.229). In order to search for collocations, one previously needs to select a *base* (node) word. Such description focuses on the structure of the collocation. Statistical data reveal lexical relationship between two or more items. Scientists who support the second school take into consideration grammatical acceptability of collocations. They define collocation 'as a fragment of a text with its natural word order'. Such collocational strings can be transformed into autonomous phrases which are grammatically well-formed and semantically sufficient (Marcinkevičienė & Grigonytė, 2005, p. 230). The present analysis of collocations combines both approaches; first, the analysis focuses on the search of collocations with the nominal base *risk/risque/rizika*, which can be extracted from the compiled corpus for the analysis of micro- and macro-context of the term *risk/risque/rizika*, thus there is a previously selected node word (*base*). Second, during the extraction of collocations some of collocations needed to be manually corrected in order to acquire the correct grammatical form and become semantically sufficient.

The concept of collocation is widely used in terminology analysis as it enables researcher to analyse terminology from various perspectives and disclose its multidimensional nature. Collocational analysis is used in the study of the predominant co-occurrence patterns including single-word terms, establishment and extraction of multi-word terms, and their syntactic and semantic structure, determination of term synonyms, investigation of similarities/differences of their usage, phrases/sentences in which terms are used, and their relation with other words in the surrounding context.

Corpus-driven collocational analysis is also used for the semantic investigation of the terminological framework of a specialised domain. One of the main tasks of corpus-driven semantic research is a determination of collocations as collocational data are considered to be a privileged source of information on word meaning. The projection of collocates onto meaning components is one of the methods of semantic description. It is based on the observations of statistically significant co-occurrences of a word or a complex lexical item (Cabré, Montané, Nazar, 2012, p.1).

L'Homme, who devoted much of her research to collocations in the specialised language, asserts that collocations are conventional combinations of words that are considered

to be important elements for text construction, understanding, production and evaluation, they introduce terms into linguistic environment and in this way convey the specialised knowledge (L'Homme, 2015, p. 3-4). Man (1998) and L'Homme (1998) have even proposed a new term *specialised lexical combinations* (SLC) to designate collocations used in specialised languages. Table 6 below summarises the characteristics of collocations of general language and SLCs (L'Homme, 2015, p. 4) (see Table 6).

Table 6. *Collocations vs. SLCs (according to L'Homme 1998)*

Characteristics	General language collocation	Specialised lexical combination
Conventionality/ Convention	Convention established within a linguistic group	Convention established within a group of specialists
Form	Two lexical units: the base and the collocate	Two lexical units: the base (which is a terminological unit) and the collocate
Compositionality/ composition	Semi-compositional	Semi-compositional or totally compositional

Modern terminology assumes that if the base of a collocation is a term, such collocation is considered to be a terminological unit, as it conveys specialised knowledge in the discourse (Castells & Gallen, 2017, p.204). The base activates the other linguistic element (the collocate) with which it is combined in a restrictive manner and often in an unpredictable way. Collocations are regulated by syntactic and semantic rules of the language. Given that a specialised lexicon is not considered as an autonomous system of the language, but is rather viewed as its lexical component, collocations can be defined as restrictive lexical combinations. Two notions are important for collocations: stability and restriction. Collocation stability is measured by its repeated and frequent use. In a specialised domain, professionals follow the established conventions of the language within a specialised field. Collocations are regulated by conventional rules of use set by the specialised community, which takes preferences for certain phrases over others. Since collocations are part of the communicative competence of language users, combinatorial conceptual restrictions allow establishing the typical lexical classes of collocates, while the degree of attraction between the base and its collocates can be revealed through a statistical analysis of association (Castells & Gallen, 2017, p. 203, 206).

Biel (2014), who investigated legislative and legal languages, used the same term *collocations* for lexical combinations in specialised language. She distinguished two types of collocations (Biel, 2014, p. 46-47):

1. Term-forming collocations – the ones which participate in formation of more specific prolix (multi-word) terms, usually: Adj. + N (term base), Noun + N (term base), V+N (term). Such collocations denote subclasses of objects designated by the base term or their typical properties.
2. Term-embedding collocations – the ones which embed terms into context (usually V+N

(term)) and establish links between terms and elements of cognitive frames. The verb constructs an argument structure and evokes a frame which uncovers relations between lexical units. The realisations N (term) +V or V+N (term) mean 'what one can do with or to the object denoted by the noun' (Biel, 2014, p.47).

In the present research, the collocational analysis was used for a twofold purpose:

1. **investigation of the micro-context of the term *risk*** with the aim:
   - to extract the dominant collocations with the term *risk* by AntConc software tools;
   - to select term-forming collocations from the whole list of the extracted collocations, i.e. to select syntactically and semantically autonomous phrases with the nominal base *risk* which have terminological value (multi-word terms);
   - to establish French and Lithuanian equivalents of the English multi-word terms by means of AntPConc software;
   - to reveal formal structure models of terms with the nominal base *risk* in the investigated languages in order to contribute to contrastive multilingual studies of term formation patterns on the level of micro-context.

2. **investigation of the macro-context of the term *risk*** with the aim:
   - to extract the verbal collocates of the single-word and multi-word terms with the nominal base *risk*, i.e. the term-embedding verbal collocations;
   - to transform the collocations into predicative argument structures in which one of the arguments is a term with the nominal base *risk*;
   - to reveal the relationship between terms with the nominal base *risk* and their position in a phrase in order to contrast syntactic patterns of argument structures in the three languages.

To sum up, the methodology of the collocational analysis enabled the researcher to investigate the micro-context and the macro-context of the term *risk* and extract all necessary material for further research of the multi-word terms and argument structures.

2.3.2. Frame Semantics methodology and its application in the research

Frame Semantics theory asserts that people understand the meaning of words by frames which the latter evoke. According to Fillmore, the frames represent story fragments with events, relations, or entities and participants. The frames connect a group of words to their meanings, e.g., the concept of cooking is composed of a person who cooks something (Cook), the food that is to be cooked (Food), an item, which holds the food during the process of cooking (Container), and a source of heat (Heating_instrument). In the FrameNet project, this scenario is represented as a frame called Apply_heat. The Cook, Food, Heating_instrument and Container are called frame elements (FEs). Words that evoke this frame, such as *fry, bake, boil, and broil,* are called lexical units (LUs) of the Apply_heat frame (Ruppenhofer et al., 2016, p.8).

A lexical unit is a frame-evoking word, while frame elements are role-filling words which provide information about the semantic structure of a lexical unit and are divided into core and non-core elements. Core FEs are essential to the meaning of the frame, while non-core FEs are generally descriptive (such as time, place, manner etc.)

Usually a frame-evoking word is a verb and FEs are its syntactic dependents (role-filling words). The researchers recognise that nouns are most often dependents. However, they can have a minimal frame structure of their own, e.g., the names of artefacts often occur together with expressions indicating their sub-type, the material of which they are made, their manner of production and their purpose or use (Ruppenhofer et al., 2016, p. 8).

According to Frame Semantics theory, the meaning of a word can be understood only when having knowledge of the situation and its participants. The research material of the thesis, which is based on collocational patterns, can be treated as a linguistic expression of various risk-related situations and their participants. Therefore, the methodology of Frame Semantics proved to be suitable for the analysis of semantic relations between the term *risk* and its collocates.

In the present research, the methodology of Frame Semantics was used for a twofold purpose:

1. **investigation of the micro-context of the term *risk*** with the aim:
   - to establish the most appropriate frame from the FrameNet project (RISK_scenario) and adapt it for the semantic classification of the financial multi-word terms with the nominal base *risk/risque/rizika;*
   - to classify financial multi-word terms according to the meaning of the modifiers of their nominal base *risk/risque/rizika* into semantic categories representing different elements of RISK_scenario.
2. **investigation of the macro-context of the term *risk*** with the aim:
   - to detect and analyse the semantics of verbs evoking argument structures where one of the arguments is a single-word or a multi-word term *risk/risque/rizika* ;
   - to annotate the verbs and arguments of the predicative structures with the semantic roles (Agent, Experiencer, Effect, Cause, Amount, Means);
   - to establish the frames evoked by the annotated verbs and describe them;
   - to analyse syntactic and lexical realisation of the frames.

The selected sentences were annotated manually in order to identify the frame elements and their position in the argument structure. In the annotated sentences, the relevant verbs usually take the central place of the sentence. However, in the legislative language, which is characterised by long and complex sentences, there are multitudes of predicative constructions that do not constitute the nucleus of the sentence, i.e. infinitive constructions, gerund constructions, and participial constructions. Sometimes the link between the verb and the term is interrupted by other words in the sentence and can be established only by the semantic analysis of the sentence. Such links were also annotated because they constitute a considerable part of the data, and in the research they are considered to be indirect links.

Examples of annotation:

EN <…> a lessor shall disclose its risks management strategy for the rights it retains in underlying assets, including **any means** [Means] by which **the lessor** [Agent] *reduces* **that risk** [Effect].< *Commission Regulation (EU) 2017/1986 of 31 October 2017*>

FR Certaines précisent que **la solution de rechange** [Agent] aura des répercussions plus rapides sur la concurrence, **atténuera le risque** [Effect] lié à l'exécution et permettra de

renforcer plusieurs entités challenger (et non pas une comme dans le cas de la cession de Rainbow).*<DÉCISION (UE) 2018/119 DE LA COMMISSION du 18 septembre 2017>*

LT Komisija [Agent] tiksliau ***nustatė* tris rizikas: pajėgumų sulaikymo riziką, pajėgumų garantijų sulaikymo riziką ir kainų skirtumo mažinimo riziką** [Effect].*<KOMISIJOS SPRENDIMAS(ES) 2017/503 2016m. lapkričio 8d.>*

All in all, the frame methodology enabled the researcher to establish semantic relations between the concept RISK and other concepts in the financial domain and to perform semantic classification of the multi-word terms with the nominal base *risk/risque/rizika* as well as to reveal what situations related to risk occur in the financial domain. Moreover, the annotated material provided multidimensional data on the real usage of the terms in the financial field and enabled the researcher to generate abstract conceptual and syntactic models related to the term *risk/risque/rizika* that provided new insights into meanings of the specialised lexical units and construction of the specialised language of the EU legal acts of the financial field.

2.3.3. Contrastive methodology and its application in the research

Contrastive analysis is used in cross-linguistic and/or cross-cultural studies. They enable researchers to accumulate linguistic and non-linguistic knowledge necessary for better understanding of cognitive perception of the universe in different language and/or cultural communities. Gomez and Doval state that researchers who apply the contrastive method seek to establish language-specific, typological and/or universal patterns, categories and features (Gomez & Doval, 2005, p.19).

According to James (1980), the contrastive method presupposes the following steps: data collection and description, data juxtaposition and comparison. The description includes two stages: collection of data from two or more languages under comparison and description of obtained information. The second process is the juxtaposition of obtained information; this method allows to establish cross- or intra-linguistic peculiarities. The final step is comparison when researcher compares obtained results and evaluates the degree and the type of correspondence between items under comparison. (James, 1980 as cited in Gomez & Doval, 2005, p.19).

In the present research all stages mentioned above were completed before the application of the contrastive analysis to the selected data. As semantics of investigated terms is universal for the three analysed languages, this method was applied to contrast syntax. The contrastive analysis was used for two purposes:

1. **investigation of the micro-context of the term *risk*** with the aim to contrast formal structures of multi-word terms with the nominal base *risk/risque/rizika* in order to establish the most typical ones for each language in question as well as to unveil the structural differences of multi-word terms in the three languages under investigation and to evaluate the degree of correspondence between the three languages;
2. **investigation of the macro-context of the term *risk*** with the aim to contrast syntactic models of argument structures where one of the arguments is a term with the nominal base *risk/risque/rizika* in order to establish the most typical semantico-syntactic models

of argument structures for each language in question as well as to unveil the differences of argument structures in the three languages under investigation and to evaluate the degree of correspondence between the three languages.

To summarise, the contrastive analysis is an efficient tool for the investigation of terminology as it enables researcher to uncover not only what is typical in languages, but also what is different. The results of the contrastive analysis of the present study may have practical application, e.g., for the multi-words term formation and for the computer programs devoted to term extraction from any texts.

3. THE ANALYSIS OF THE FINANCIAL TERMS
WITH THE NOMINAL BASE *RISK/RISQUE /RIZIKA*

3.1. Micro-context of the nominal term *risk/risque/rizika*

The present part of the thesis provides the investigation of the closest context of the nominal term *risk/risque/rizika*, i.e. its collocates which are considered to be its micro-context. The following objectives are pursued in this part of the research: 1) analysis of collocations with the nominal base *risk/risque/rizika* and extraction of term-forming collocations (multi-word terms) with the nominal base *risk/risque/rizika*; 2) selection and adaptation of the appropriate concept frame (also called micro-frame in the thesis) and frame-based semantic classification of MWTs *risk/risque/rizika*; 3) analysis of the formal strcuture of the multi-word terms in English, French and Lithuanian.

3.1.1. The analysis of collocations and extraction of multi-word terms with the nominal base *risk/risque/rizika*

In this research, the extraction of English, French and Lithuanian multi-word terms is based on the assumption that complex terms are made of existing simple terms (Nakagawa 2001). Therefore, the extraction is organized in the following stages: a) automatic establishment of the dominant English collocations of the key term *risk*; b) semi-automatic extraction of the noun phrases with the nominal base *risk* from the collocation lists and selection of the phrases having terminological value and c) establishment of French and Lithuanian equivalents.

In the first stage of term extraction, the dominant collocations of the term *risk* in the English corpus were established. The AntConc tool *Collocates* helped with this objective. This tool provided left and right collocates of the chosen keyword and allowed the researcher to analyse the non-sequential patterns in the language.

The tool provided total frequencies of the collocates as well as their frequencies on the left and on the right of the term *risk.* It also provided the values of statistical measures (mutual information (MI) scores), which showed the degree of syntagmatic attraction between the keyword and its collocates. The results of the collocational analysis are provided in Table 7. Table 7 presents the exhaustive data about the collocates with the highest MI scores (10 most frequent collocates). The extended list of collocates is conveyed in Appendix 1.

Table 7. *10 most frequent collocates of the term* risk *in the English corpus*

	Total frequency	Freq.(L)	Freq.(R)	MI score
1. dilution	51	37	14	8.3
2. mitigation	118	12	106	8.1

	Total frequency	Freq.(L)	Freq.(R)	MI score
3. weight	341	14	327	8.1
4. systemic	122	121	1	7.8
5. profile	89	1	88	7.2
6. low	69	62	7	7.2
7. assigned	130	98	32	7
8. exposure	494	72	422	6.6
9. specific	181	151	30	6.1
10. operational	129	114	15	6

The findings reveal the closest lexical environment of the term *risk* in the English language and allow for envisaging the dominant two-word nucleus of multi-word terms including the term *risk* in the investigated corpus.

Further corpus analysis and term extraction focused on the collocations of the certain formal structure – the noun phrases with the term *risk* as the nominal base. They were extracted from the English corpus using the tools *Clusters* and *Concordance*.

The tool *Clusters* enabled the search for the clusters (word combinations) including the term *risk* with its left and right collocates. It allowed for the selection of the minimum and the maximum length (number of words) of the clusters and the minimum frequency of the clusters displayed. The ordered clusters could be displayed either according to their frequency in the corpora and the number of files in which the clusters appeared.

The following parameters were set for the extraction of noun phrases with the term *risk* as the nominal base: cluster size from 2 to 5, minimum frequency 5, sorting by frequency. The position of the keyword also had to be selected. First clusters with the keyword on the right and second, clusters with the keyword on the left were ordered. Under the parameter 'search keyword on right', the tool displayed 5084 cluster tokens and 158 cluster types; under the parameter 'search keyword on left' 4666 cluster tokens and 146 cluster types.

Out of the displayed cluster lists, noun phrases with the term *risk* as the nominal base were extracted manually. Their wider context was analysed using the tool *Concordance*, which enabled the researcher to determine the boundaries of the noun phrases and the noun phrases with both left and right collocates of the term *risk*. The examples provided in Table 8 illustrate the most frequent right and left collocates of the term *risk*.

Table 8. *The most frequent right and left collocates of the term* risk

Noun phrases (*risk* on the right)	Freq.	Noun phrases (*risk* on the left)	Freq.
1. credit risk	506	*1. risk of excessive leverage*	18
2. systemic risk	115	*2. risk of debt instrument*	12

Noun phrases (*risk* on the right)	Freq.	Noun phrases (*risk* on the left)	Freq.
3. operational risk	102	*3. risk of loss*	12
4. liquidity risk	98	*4. risk to third parties*	8
5. specific risk	88	*5. risk of capacity withholding*	7
6. market risk	76	*6. risk of payment interruption*	6
7. country risk	64	*7. risk of disruption*	6
8. interest rate risk	51	*8. risk of a CSD-banking service provider*	5
9. counterparty credit risk	41	*9. risk of a borrower*	5
10. dilution risk	34	*10. risk of the obligor*	5

The results reveal that the noun phrases with the term *risk* on the most right position are much more frequent (frequency varies from 506 to 34) than the noun phrases with the term *risk* on the most left position (frequency varies from 18 to 5). Only some examples of the noun phrases with both left and right collocate of the term *risk* were found in the corpus: *credit risk of repurchased transactions, credit risk of securization position, dilution risk of purchased receivables.* As the present research is based on the real use of terms where frequency is considered to be an essential feature to mark stability of the terms, the terms which occur less than 5 times were not ascribed to the list of terms for the analysis, as they are rarely used in the financial documents, e.g., *risk to financial stability (freq.2), risk to the management body (freq.1), risk in the trading book (freq.2), etc.*

A list of 70 most frequent English noun phrases with the term *risk* as the nominal base was made for further research (see Appendix 2). The selection of the relevant noun phrases was also checked on terminological information provided in the EU termbase IATE, Cambridge Dictionary and consultations with a specialist in the financial domain.

The main criterion of determining the terminological value of the phrase was its conceptual meaning – whether it denotes a concept of the financial domain. The list encompassed both the phrases denoting various types of risk (e.g., *default risk)* and the phrases denoting the general concept of risk, but referring to its different degrees of intensity *(*e.g., *low risk, high risk, medium risk).* The latter category was included due to its high frequency in the corpora. In the research, both types of phrases are called multi-word terms (MWTs).

In the final stage of term extraction, the French and Lithuanian equivalents of the selected English terms were established. This objective was pursued by using AntPConc software developed for the analysis of parallel corpora. The corpora of the three investigated languages were uploaded to the program. As the selected English terms were searched in the English corpus, the program displayed the parallel strings of the French and Lithuanian texts and thus enabled the manual selection of the necessary equivalents. In total, 67 French and Lithuanian equivalents of the selected English terms were established. Table 9 presents 10 most frequent English terms and their French and Lithuanian equivalents.

Table 9. *10 most frequent English terms and equivalents in French and Lithuanian*

EN	FR	LT
credit risk	risque de crédit	kredito rizika
systemic risk	risque systémique	sisteminė rizika
operational risk	risque opérationnel	operacinė rizika
liquidity risk	risque de liquidité	likvidumo rizika
specific risk	risque spécifique	specifinė rizika
market risk	risque de marché	rinkos rizika
interest rate risk	risque de taux d'intérêt	palūkanų normos rizika
counterparty credit risk	risque de crédit de contrepartie	sandorio šalies kredito rizika
dilution risk	risque de dilution	gautinų sumų rizika
business risk	risque économique	verslo rizika

However, during the extraction of French and Lithuanian equivalents from the parallel corpus some interesting facts were observed, e.g., the English term *business risk* in the French subcorpus was represented by the terms *le risque économique* and *le risque d'entreprise,* moreover, the English term *economic risk* was represented by an equivalent French term *le risque économique.* In the Lithuanian subcorpus two distinct terms were provided *business risk - verslo rizika* and *economic risk - ekonominė rizika.* Another example includes the English term *entrepreneurial risk* which in the French subcorpus was provided as an equivalent of the terms *le risque commercial* and *le risque d'entreprise,* while the English term *commercial risk* was represented by an equivalent French term *le risque commercial.* As for the Lithuanian data, the term *commercial risk* was translated as *komercinė rizika.* The terms *foreign exchange risk* and *currency risk* have one equivalent in French and Lithuanian *risque de change – valiutos kurso rizika* as well as the terms *significant risk* and *material risk.* In order to shade the light on such use of the terms the database IATE was consulted (see Table 10).

Table 10. *Equivalents in the ad hoc parallel corpus and in IATE*

The ad hoc parallel corpus	IATE
business risk – risque économique/ risque d'entreprise – verslo rizika	entrepreneurial risk /business risk – risque entrepreneurial/risque industriel/risque d'entreprise – verslo rizika
entrepreneurial risk – risque commercial/risque d'entreprise – verslo rizika	entrepreneurial risk/business risk – risque entrepreneurial/risque industriel/risque d'entreprise – verslo rizika
commercial risk – risque commercial – komercinė rizika	commercial risk – risque commercial – komercinė rizika

The ad hoc parallel corpus	IATE
economic risk – risque économique– ekonominė rizika	*economic risk – risque économique–* **no equivalent**
foreign exchange risk – risque de change – valiutos kurso rizika	*foreign exchange risk /currency risk– risque de change – valiutos kurso rizika*
currency risk – risque de change – valiutos kurso rizika	*foreign exchange risk /currency risk– risque de change – valiutos kurso rizika*
significant risk – risque significatif – reikšminga rizika	*significant risk – risque significatif – reikšminga rizika*
material risk – risque significatif – reikšminga rizika	*material risk – risque important/risque flagrant – **no equivalent***

As can be seen from Table 10 the equivalents provided by the parallel corpus almost overlap in the three languages with those found in IATE, except for the terms *business risk* and *entrepreneurial risk* for French. IATE does not provide *le risque commercial* or *le risque économique* as equivalents for the mentioned English terms. Moreover, there are no equivalents in Lithuanian in IATE for the English terms *material risk* and *economic risk*. In order to clarify the difference in the use of the terms throughout the three languages, the conceptual analysis of the terms was performed:

1. *business risk/entrepreneurial risk – risque économique/risque d'entreprise – verslo rizika*
   - **EN** risk resulting from significant conditions, events, circumstances, actions or inactions that could adversely affect an entity's ability to achieve its objectives and execute its strategies, or from the setting of inappropriate objectives and strategies (IATE).
   - **FR** 'risque économique regroupe l'ensemble des risques associés à l'activité économique des entreprises. Le risque économique comprend des risques d'origine externe à une entreprise tels que le risque politique ou le risque d'inflation mais aussi des risques spécifiques à l'entreprise tels que le risque opérationnel ou le risque d'escroquerie (Mataf)'. [economic risk includes all the risks associated with the activity business economics. Economic risk includes risks of origin external to a business such as political risk or inflation risk but also company-specific risks such as operational risk or risk of fraud.]
   - **LT** rizika, kylanti dėl svarbių aplinkybių, įvykių, sąlygų, veiksmų ar neveikimo, galinčių padaryti neigiamą įtaką įmonės galimybėms pasiekti savo tikslus ir įgyvendinti strategiją, arba kylanti dėl nustatytų netinkamų tikslų ir strategijų (IATE).

2. *commercial risk – risque commercial – komercinė rizika*
   - **EN** risk that a debtor will be unable to pay its debts because of business events, such as bankruptcy (IATE).
   - **FR** risque que le débiteur soit défaillant à la suite d'une dégradation de sa situation financière (insolvabilité déclarée ou présumée)(IATE)
   - **LT** komercinė rizika, susidaro įmonei perkant išteklius rinkoje, parduodant savo

pagamintas ar iš kitų įmonių įsigytas prekes (Aiškinamasis ekonomikos anglų lietuvių žodynas). 'Commercial risk arises when a company buys resources in the market by selling its own goods manufactured or purchased from other companies'

3. *economic risk – risque économique– ekonominė rizika*
- **EN** economic risk can be described as the likelihood that an investment will be affected by macroeconomic conditions such as government regulation, exchang rates, or political stability, most commonly one in a foreign country. (Financial Dictionary, Farlex).
- **FR** 'risque économique regroupe l'ensemble des risques associés à l'activité économique des entreprises. Le risque économique comprend des risques d'origineexterne à une entreprise tels que le risque politique ou le risque d'inflation mais aussi des risques spécifiques à l'entreprise tels que le risque opérationnel ou le risque d'escroquerie (Mataf)'. 'Economic risk includes all the risks associated with the activity business economics. Economic risk includes risks of origin external to a business such as political risk or inflation risk but also company-specific risks such as operational risk or risk of fraud.'
- **LT** Ekonominė rizika, pasireiškia kai įmonės aktyvi ir pasyvi vertė gali svyruoti dėl būsimų valiutos kurso pasikeitimų (Aiškinamasis ekonomikos anglų-lietuvių žodynas). 'Economic risk occurs when a company's assets and liabilities may fluctuate due to future exchange rate changes.'

After having analysed the definitions of the above-mentioned terms, one can assume that across the three languages the terms *business risk/entrepreneurial risk* and *economic risk/commercial risk* designate the same concept, i.e., a risk occurring from internal and external factors that affects an entity's ability to achieve its objectives; however, the terms *business risk/entrepreneurial risk/ economic risk* encompass a broader concept than the term *commercial risk*, as they embrace more possible factors (political, economic, business, etc.) which can initiate the risk, while the term *commercial risk* focuses only on business issues, which can cause the risk. However, they can be used interchangeably as synonyms, because all terms are related to the activity of enterprise. The context also confirms this idea:

1. *business risk- risque d'entreprise/risque économique-verslo rizika*

'In recital 113 of the Opening Decision, the Commission expressed doubts on the capacity of Alki LP to bear and control *any business risk*. When a company assumes a risk, it should be able, on the one hand, to control the risks (166) and, on the other hand, to financially assume such a risk (167).' <*Commission Decision (EU) 2017/502 of 21October 2015*>

'Au point 113 de la décision d'ouvrir la procédure, la Commission exprime des doutes quant à la capacité d'Alki LP à supporter et à contrôler *les risques d'entreprise*. Lorsqu'une entreprise prend un risque, elle doit d'une part pouvoir contrôler les risques (166) et, d'autre part, pouvoir assumer financièrement un tel risque (167).' <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015* >

'Sprendimo pradėti procedūrą 113 konstatuojamoje dalyje Komisija išreiškė abejones dėl „Alki LP" pajėgumo prisiimti ir valdyti bet kokią *verslo riziką*. Kai bendrovė prisiima riziką, ji turėtų galėti, iš vienos pusės, valdyti riziką (166), o iš kitos pusės – finansiškai

prisiimti tokią riziką (167).' *<KOMISSIJOS SPRENDIMAS (ES) 2017/502 2015 m. spalio 21d.>*

'Given the nature of the activities of CSDs, a CSD assumes *business risk* due to potential changes in general business conditions that are likely to impair its financial position following a decline in its revenues.' *<Commission Delegated Regulation (EU) 2017/390 of 11 November 2016>*

'Étant donné la nature de ses activités, un DCT supporte *un risque économique* lié aux changements potentiels du contexte économique général qui sont susceptibles de compromettre sa situation financière par suite d'une diminution de ses recettes ou d'une augmentation de ses dépenses et qui débouchent sur une perte qui devrait être imputée sur le capital.' *<RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016>*

'< ...> dėl CVPD veiklos pobūdžio CVPD prisiima *verslo riziką* dėl bendrųjų verslo sąlygų galimų pokyčių, kurie galėtų pakenkti jo finansinei būklei sumažėjus jo pajamoms arba išaugus jos išlaidoms ir dėl to susidarius nuostolių, kurie turėtų būti dengiami iš jo kapitalo.' *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.>*

The examples provided above illustrate that the French terms *risque d'entreprise/risque économique* are used interchangeably in order to designate the English term *business risk*.

2. *entrepreneurial risk - risque d'entreprise/risque coomercial-verslo rizika*

'For example, a company undertaking all strategic decisions for a group, in particular, investment and R & D decisions, which would in principle be considered as a complex function concentrating *entrepreneurial risk*, could be considered as 'low risk' <...>' *<Commission Decision (EU) 2017/502 of 21October 2015>*

'Troisièmement, et c'est là le point le plus important, la Commission est d'avis que si l'argument avancé par les autorités néerlandaises était accepté, *le risque d'entreprise* de n'importe quelle entreprise du groupe pourrait être supprimé sur base d'un simple contrat par une réaffectation des risques au sein du groupe.' *<DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015 >*

'Trečia ir visų svarbiausia, Komisija mano, kad, jeigu Nyderlandų reikalavimas būtų patvirtintas, bet kurios grupės bendrovės *verslo rizika* būtų pašalinta, perkeliant riziką grupės viduje paprastomis sutarties priemonėmis.' *<KOMISSIJOS SPRENDIMAS (ES) 2017/502 2015 m. spalio 21d.>*

'Starbucks argues that since SMBV is only engaged in routine execution activities in the areas of roasting, packaging and supporting logistic and administrative services, while Alki LP licenses the valuable intellectual property and bears *the entrepreneurial risk*, SMBV is the least complex entity.' *<Commission Decision (EU) 2017/502 of 21October 2015>*

'Starbucks fait valoir que SMBV n'exécute que des tâches d'exécution journalières dans le domaine de la torréfaction du café, de la mise sous emballage du café et de l'offre de services logiques et administratifs, alors qu'Alki LP prend la précieuse propriété intellectuelle sous licence et supporte *le risque commercial* de sorte que SMBV est l'entité la moins complexe.' *<DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015 >*

'„Starbucks" tvirtina, kad, kadangi SMBV dalyvauja tik įprastine skrudinimo, pakavimo ir remiančios logistikos bei administracinių paslaugų veiklose, o „Alki LP" suteikia

licencijas, susijusias su vertinga intelektine nuosavybe, ir prisiima *verslo riziką*, SMBV yra mažiausiai sudėtingas ūkinis subjektas.' <*KOMISSIJOS SPRENDIMAS (ES) 2017/502 2015 m. spalio 21d.*>

The examples show that the French terms *risque d'entreprise* and *risque commercial* are used interchangeably in order to designate the English term *entrepreneurial risk.*

3. *economic risk- risque économique- ekonominė rizika*

'Starbucks argues that SMBV's role as contracting and invoicing entity is just of an administrative nature and does not result in any transfer of risks or commercial responsibilities to it as under the Roasting Agreement it is rather Alki LP, supported by Starbucks US, that bears all *the economic risk of SMBV*, including the inventory risk.' <*Commission Decision (EU) 2017/502 of 21October 2015*>

'Starbucks affirme cependant que le rôle dont est investi SMBV en tant qu'entité chargée de la conclusion de contrats et de la facturation n'est que de nature administrative et n'engendre aucun transfert de risques ou de responsabilités commerciales puisqu'en vertu du contrat de torréfaction du café, c'est plutôt Alki LP qui, avec l'aide de Starbucks US, supporte tous *les risques économiques de SMBV*, y compris le risque lié aux stocks.' <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015* >

'Tačiau „Starbucks" tvirtina, kad SMBV, kaip perkančiosios ir sąskaitas pateikiančios organizacijos, vaidmuo yra tik administracinio pobūdžio ir jai neperduodama jokia rizika arba komercinės atsakomybės, nes pagal Susitarimą dėl skrudinimo visą *ekonominę SMBV rizika*, įskaitant apyvartinių atsargų riziką, prisiima „Starbucks US" remiama.' <*KOMISSIJOS SPRENDIMAS (ES) 2017/502 2015 m. spalio 21d.*>

To sum up the context as well as the definitions provided by specialised dictionnaries or databases enable the researcher to draw the conclusion that the terms *business risk* and *entrepreneurial risk* in the French material have three equivalents *risque économique/ risque d'entreprise/risque commercial,* while in Lithuanian only one – *verslo rizika.*

In the following examples, the equivalence of terms steams from the definition provided in IATE.

4. *foreign exchange risk/currency risk* – *risque de change* – *valiutos kurso rizika* definitions in IATE:

    EN   risk that [an entity's] financial performance or position will be affected by fluctuations in the exchange rates between currencies;

    FR   risque propre à un élément d'actif ou de passif libellé en monnaie étrangère;
           risque tenant à la fluctuation des taux de change ;

    LT   rizika, kad finansinio turto ar įsipareigojimo tikroji vertė pasikeis dėl valiutos kurso pasikeitimo

In IATE *foreign exchange risk/currency risk* are considered to be synonyms, thus, the French and Lithuanian equivalents for both of English terms are respectively *risque de change* – *valiutos kurso rizika.*

5. *significant risk* – *risque significatif* – *reikšminga rizika* definitions in IATE:

    EN   a risk that requires special audit consideration;

    FR   risque requérant une attention particulière dans le cadre de l'audit ;

    LT   rizika, kuri atliekant auditą reikalauja ypatingo dėmesio.

6. *material risk – risque significatif – reikšminga rizika*

Material risk 'indicates that a certain risk is of sufficient significance for an organization that it must be managed following certain minimum criteria' (Financial Dictionary, Farlex). According to the definition, the term *material risk* can be viewed as a synonym of the term *significant risk*, thus, the same French and Lithuanian equivalents *risque significatif – reikšminga rizika* are valid for the term *material risk*.

These special cases illustrate the real use of terms. To summarise, in total, there are 70 English terms extracted from the corpus and 67 French and 67 Lithuanian equivalents.

The full list of terms of the three languages with frequency index is provided in Appendix 2. The extracted terms fall under multidimensional analysis in the chapters below.

The performed work, described in this chapter, proved that collocational methodology enables researcher to carry out the analysis of the micro-context of a pre-chosen keyword – a word of potential terminological relevance characteristic of the domain that the corpus belongs to. The analysis of the micro-context of the keyword allows the establishment of the predominant co-occurrence patterns, based on statistical corpus data analysis, to identify the nominal phrases which have terminological value (multi-word terms) and to determine their equivalents in other languages.

3.1.2. Frame-based semantic classification of the multi-word terms with the nominal base *risk/risque/rizika*

The semantics of the extracted multi-word terms with the nominal base *risk/risque/rizika* was investigated by applying Frame Semantics principles elaborated by Fillmore and developed by the FrameNet project that allowed for organizing them under the categories of the frame RISK_scenario (concept frame RISK). First, the short overview of the development of Risk_scenario in the previous frame-based research is discussed. Second, the criteria for the selection of the appropriate cognitive frame for the semantic analysis of the MWTs are discussed and semantic classification of the MWTs is performed.

3.1.2.1. The analysis of the concept RISK in Fillmore's work and the FrameNet project

The word *risk* played a historical role in the development of Frame Semantics. It was annotated in the texts of general English and analysed using Frame Semantics approach by Fillmore and Atkins in 1992 (Fillmore, Atkins, 1992). By this analysis, Fillmore and Atkins sought to present an innovative description of word meanings in the context of the Frame Semantics theory with aspirations to create an online database in the future following the same methodology. They extracted 1700 instances including the word *risk* as a noun and as a verb from 25 000 000-word corpus of general English. Their analysis focused on words and phrases occurring around the word *risk* and sought to establish the categories of the frame *Risk*.

In order to elaborate the frame *Risk*, Fillmore and Atkins distinguished two crucial notions (Chance and Harm) which functioned as the key nodes in construction and

description of the conceptual-cognitive models of the *Risk_running* and the *Risk_taking* subframes.

Fillmore and Atkins established the following categories of the frame *Risk*: Chance, Harm, Victim, Valued object, (Risky) situation, Deed and Actor. In addition, they distinguished four secondary categories related to Actor's intentions: (Intended) Gain, Purpose, Beneficiary and Motivation.

The description of the frame *Risk* served as an example of a dictionary entry that informed a user about the concepts needed for understanding of the word meaning.

FrameNet researchers have developed further the conceptual-cognitive models of the word *risk*. Four different frames have been distinguished: Risk_scenario, Risky_situation, Run_risk, Being_at_risk. Risk_scenario is the background (basic) frame while other frames are considered as subframes. The background frame and subframes are interrelated by various relations (see Figure 8).
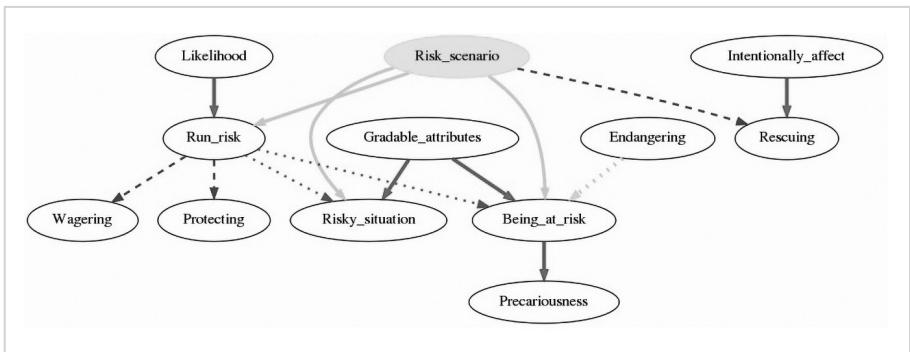
Figure 6. Frames relations in the FrameNet

The labels for the categories suggested by Fillmore and Atkins were partly changed by others, e.g.: **Valued object→Asset, Victim→Protagonist, Deed→Action; Harm→Harmful_event**; **Motivation→Explanation. Gain** and **Chance** are omitted, many new categories are introduced, e.g.: **Cirumstances, Frequency, Place, Time, Degree, Domain**, etc.

Fillmore and Atkins' idea of elaborating scenarios and assigning lexical units according to scenarios aroused great interest among scholars. This innovative approach to language developed the world-known project FrameNet that found a large audience of users and became a new way for the organisation of the lexical units not only of the general language, but also of specialised ones.

3.1.2.2. RISK _scenario for the financial field and semantic frame-based classification of the multi-word terms with the nominal base *risk/risque/rizika*

In order to perform semantic classification of the financial MWTs with the nominal base *risk/risque/rizika*, the most appropriate frame from the FrameNet project has been selected and adapted to the financial field. Pursing this objective, the preparatory work has

been carried out: 1) analysis of the general concept RISK in the financial domain based on the overview of the definitions of the word *risk* in dictionaries and databases; 2) analysis of the relationships between the general concept RISK and specific concepts referring to its various types based on the investigation of the semantics of the words modifying the meaning of the nominal base *risk/risque/rizika* in MWTs.

In general language, the noun *risk* denotes the state of not being protected from injury, harm or evil (Merriam-Webster thesaurus). In specialised languages, this noun is used as a term with specific meanings depending on the domain.

IATE provides definitions of the term *risk* as a denotation of a general concept of the domains of employment, transport and industry. However, it does not provide the definition of the term *risk* as a denotation of a general concept of the financial domain, it only includes entries of financial multi-word terms including the noun *risk (currency risk, credit risk, loan risk, systemic risk)* (IATE).

Meanwhile, **Cambridge Dictionary** provides both the general meaning of the noun *risk* and its more specific meanings in various fields including the financial domain. *Risk* is defined as the possibility that an investment will lose money (Cambridge Dictionary).

Investopedia also gives explanations of the meanings of the word *risk* in general language and in specialised domains. In broad terms, *risk* involves exposure to some type of danger and the possibility of loss or injury; it can apply to physical health or job security. In finance and investing, *risk* often refers to the chance that an outcome or investment's actual gains will differ from an expected outcome or return. *Risk* includes the possibility of losing some or all of an original investment (Investopedia, financial dictionary).

Business Dictionary provides the definition of term *risk* for the financial field as the probability that an actual return on an investment will be lower than the expected return. Financial risk is divided into the following categories: *basic risk, capital risk, country risk, default risk, delivery risk, economic risk, exchange rate risk, interest rate risk, liquidity risk, operations risk, payment system risk, political risk, refinancing risk, reinvestment risk, settlement risk, sovereign risk, and underwriting risk* (Business Dictionary).

Thus, the overview of the definitions of the word *risk* in the dictionaries and databases allow concluding that the concept RISK acquires special features in the financial domain and refers to situations related to the loss of any kind of asset (mostly investment).

In order to disclose the multifaceted nature of the general concept RISK in the financial domain and its relations with specific concepts of various risk types, the micro-context of the term *risk/risque/rizika* (i.e. the words modifying the meaning of the term *risk/risque/rizika*) was analysed.

This analysis was based on the slot-filling mechanism elaborated by frame-terminology developers (Faber & Cabezas-García, 2019, p. 4-5). In the investigation of noun phrases, the slot-filling mechanism enables the user to incorporate the modifiers of the nominal base into slots of the semantic scheme generated by the nominal base *risk/risque/rizika* and to disclose the number and nature of modifiers and their semantic relation with the nominal base. Thus, the slot-filling mechanism allows for the revelation of the typical micro-context of the nominal base. According to Rigelet and al. (2009), in a noun phrase, modifiers (adjectives, adjective groups, prepositional phrases, nouns, nominal groups) have the

objective to characterising the nominal base by specifying or modulating its semantics (Rigelet, 2009, as cited in L'Homme, 2015, p.17). The aspects of a noun that can be modified depend on its meaning: the meaning of a noun that denotes a particular entity can be modified as to its form, content or function, but these aspects are irrelevant for nouns that designate an action or a state.

Thus, the extracted multi-word terms with the nominal base *risk/risque/rizika* were decomposed to perform the semantic analysis of the modifiers and reveal what information they carry and how it changes the meaning of the nominal base *risk/risque/rizika*. This analysis proved that the term *risk* manifests some preferences in attaching nouns and adjectives of certain meaning. Their combination acquires new semantic features and denotes new concepts.

The analysis of MWTs with the nominal base *risk/risque/rizika* in the financial field allowed researcher to distinguish the following slots opened by the term *risk/risque/rizika* and specify its meaning:

- *risk/risque/rizika* arises from **a harmful event** [Slot 1];
- it negatively affects **an asset** [Slot 2] or **a protagonist** [Slot 3];
- it is of a certain **intensity or extension** [Slot 4];
- it lasts for certain **time** [Slot 5]

The previously described analysis provided the information which was necessary to select the most appropriate frame for the classification of the MWTs. Relying on this information, the most abstract frame **RISK_scenario** distinguished by FrameNet was selected.

The frame **RISK_scenario** was chosen from four frames (**Risk_scenario, Risky_situation, Run_ risk, Being _at _risk)** as being more abstract than the other frames as well as having the core element *Asset* that is the most important notion in the financial domain. Money is the crucial asset for the participants of the exchange, which could be lost or affected by a harmful event. Thus, the term *risk/risque/rizika* evokes a frame focusing on an asset in danger and the state of affairs which must be in some way managed or adjusted by introducing techniques or standards of risk mitigation.

FrameNet provides the following definition of **RISK_scenario:** 'An Asset is in a particular Situation, which has a likelihood of leading to or inviting a Harmful_event that will negatively affect the Asset (FrameNet, 2016)'.

The described **RISK _scenario** was adapted to the financial field. However, the list of frame elements was extended. If in Risk_scenario there are three core frame elements, i.e. *Asset, Harmful_event*, and *Situation*, some modifications were carried out to form a set of frame elements relevant for the financial field. To do this the definitions of all frame elements that belong to different frames connected to risk or risky situation were analysed. However, the problem arose with some frame elements, as they denote the same concept, but are named differently, e.g., the frame element of *Harmful_event* in Risk_scenario and Being_at_risk is described as 'an event that may occur or a state which may hold which could result in the loss of or damage to the Asset', while in the frame Run_risk there are two frame elements *the Action* and *the Bad_outcome*, which together denote the concept of *Harmful_event*, e.g., the concept of *the Action* designates 'the action that creates the

risk', *the Bad_outcome* designates 'a situation that the Protagonist would like to avoid'. The choice was made in favour of *Harmful_event*, as risk can be stimulated not only by actions, but also by some specific situations, therefore, the frame element *Harmful_event* is considered to be more complex and relevant for the financial field. The frame was supplemented with one new element *Protagonist*, because in four frames related to risk only this element was found to designate the person who is 'at risk of some bad outcome'. However, in the financial field, specific people who undergo the risk are rarely indicated. Ususally, the domain/sector which is at risk is indicated, thus the frame element *Protagonist* in the modified RISK_scenario frame encompasses physical and institutional actors under risk; the elements *Harmful_event* and *Situation* were fused into one element (*Harmful_event*) and the element *Degree* was split into two elements (*Intensity of risk* and *Extension of risk*). The investigated material inspired to split the element *Degree* which designates 'the deviation of the actual level of security from the expected value given to the Asset', because in the financial field it is important to distinguish two notions: the importance of the risk for *the Asset* or *the Protagonist* (a vertical notion), e.g., *high risk, low risk* and the extension of the risk, i.e. the number of entities affected by the risk (a horizontal notion): *specific risk, general risk*. The adapted frame is composed of the following elements:

- Core elements: **Asset, Protagonist, Harmful_event**.
- Non-core elements: **Intensity, Extension, Time.**

The types of elements of the elaborated frame were used for the semantic classification of the MWTs with the nominal base *risk/risque/rizika*. The present part of the thesis is devoted to the analysis of the microcontext of collocations with the nominal base *risk/risque/rizika*, with the focus on the collocates or modifiers which can be activated by the term *risk*. Classification of the terms was carried out in the following way: each term was decomposed into collocate(s) (modifier(s)) and the base in order to establish the meaning of the modifier, next, the meaning of the modifiers was looked up in the Cambridge Dictionary, e.g., in *liquidity risk*, the modifier *liquidity* designates '*money, rather than investments or property, or assets that can be changed into money easily*', thus, liquidity is money or other asset, so the term *liquidity risk* was classified into the group of terms under the frame element *Asset*. In another example, the noun *dilution* designates '*the process or action of making a company's shares less valuable by making more shares available*', thus *dilution risk* was classified into the group of terms under the frame element *Harmful_event*. Classification of terms composed of a noun and the nominal base *risk/risque/rizika* did not pose any significant difficulty, however, the most complicated task was to classify terms composed of a relational adjective and the nominal base *risk/risque/rizika*. Nonetheless, the solution was found. As relational adjectives denote not a property of the noun they modify, but a relation between two entities, the relation expressed by the relational adjectives involves an entity denoted by the modified noun and an entity denoted by the adjective itself. Relational adjectives are usually derived from nouns, thus, they can be paraphrased (cf. Broekhuis, 2020), e.g.:

- *financial risk → risk related to finances → risk of/to finances*, as the noun *finances* denotes *money*, the term *financial risk* was ascribed to the group of terms denoting *Asset*;

- *political risk → risk related to politics → risk in politics,* as the noun *politics* denotes '*the government, members of law-making organizations, or people who try to influence the way a country is governed*', in other words, the domain or people who are affected by the risk, the term *political risk* was ascribed to the group of terms denoting *Protagonist*;
- *specific wrong-way risk → risk of specificity,* as the noun *specificity* means '*the quality of being particular to one person or thing*' and the term *specific wrong-way risk* designates the amount of entities under the risk caused by wrong-way decisions, the term was ascribed to the group of terms expressing *Extension*;

The same principle was applied in classification of the terms *commercial risk, economic risk etc.(commercial risk → risk related to commerce → risk in commerce; economic risk → risk related to economics(business activities/business) → risk in economics/in business)*

The classification is presented below. Definitions of the frame elements were taken from the FrameNet project.

FEs:

Core:

Asset [ass]	Something judged to be desirable or valuable which might be lost or damaged:
	credit risk ‒ risque de crédit ‒ kredito rizika, liquidity risk ‒ risque de liquidité ‒ likvidumo rizika, investment risk ‒ risque d'investissement ‒ investicinė rizika, interest rate risk ‒ risque de taux d'intérêt ‒ palūkanų normos rizika, commodities risk ‒ risque sur matières premières ‒ biržos prekių kainos rizika, foreign exchange risk (currency risk) ‒ risque de change ‒ valiutos kurso rizika,(gold) price risk ‒ risque de prix(risque de variation du cours de l'or) ‒ (aukso) kainos rizika, inventory risk ‒ risque sur stocks ‒ atsargų rizika, transfer risk ‒ risque de non-transfert ‒ lėšų pervedimo rizika, ultimate stock risk ‒ risque final lié aux stocks ‒ pagrindinių išteklių rizika, risk of debt instruments ‒ risque sur titres de créance ‒ skolos finansų priemonių rizika, financial risk ‒ risque financier ‒ finansinė rizika;
Protagonist [Protagonist]	The person (group of people) or domain which is at risk of some bad outcomes. The physical and institutional actors which are at risk of some bad outcomes.
	country (credit) risk ‒ risque (de crédit) de pays ‒ šalies (kredito) rizika, counter-party (credit) risk ‒ risque (de crédit) de contrepartie ‒ sandorio šalies (kredito) rizika, sovereign risk ‒ risque souverain ‒ valstybės rizika, risk of the borrower ‒ risque de l'emprunteur ‒ skolininko rizika, risk of the obligor ‒ risque au débiteur ‒ įsipareigojančiojo asmens rizika, risk of a CSD-banking service provider ‒ risque d'un DCT-prestataire de services bancaires ‒ CVPD bankinio tipo paslaugų teikėjo rizika, business risk (entrepreneurial risk) ‒ risque économique (risque commercial/risque d'entreprise) ‒ verslo rizika, market risk ‒ risque de marché ‒ rinkos rizika, risque to third parties ‒ risque à des tiers ‒trečiųjų šalių rizika, legal risk ‒ risque juridique ‒ teisinė rizika, political risk ‒ risque politique ‒ politinė rizika, commercial risk ‒ risque commercial ‒ komercinė rizika, economic risk ‒ risque économique (risque d'entreprise) ‒ ekonominė rizika;

Harmful_ event [har]	An event that may occur or a situation which may hold which could result in the loss of or damage to the Asset :
	default risk ‒ risque de défaut ‒ įsipareigojimų neįvykdymo rizika, operational risk ‒ risque opérationnel ‒ operacinė rizika, risk of a price squeeze ‒ risque de ciseau tarifaire ‒ kainų skirtumo mažinimo rizika, migration risk ‒ risque de migration ‒ pasikeitimų rizika, model risk ‒ risque de modèle ‒ modelio rizika, risk of disruption ‒ risque de perturbation ‒ finansų sistemos sutrikimo rizika, cva risk (credit valuation adjustment risk) ‒ risque d'adjustement de l'évaluation de crédit ‒ kredito vertinimo koregavimo rizika, concentration risk ‒ risque de concentration ‒ koncentracijos rizika, risk of capacity withholding ‒ risque de rétension de capacités ‒ pajėgumų sulaikymo rizika, custody risk ‒ risque de garde ‒ saugojimo rizika, settlement risk ‒ risque de règlement ‒ atsiskaitymo (-ų) rizika, shortfall risk ‒ risque de défaillance ‒ nepakankamumo rizika, dilution risk ‒ risque de dilution ‒ gautinų sumų sumažėjimo rizika, risk of excessive leverage ‒ risque de levier excessif ‒ pernelyg didelio sverto rizika, risk of loss ‒ risque de pertes ‒ nuostolio rizika, risk of payment interruption ‒ risque d'interruption de paiement ‒ mokėjimų sustabdymo rizika;
Non-Core:	
Intensity[int]	A modifier expressing the strength of danger (vertical notion):
	high risk ‒ risque élévé ‒ didelė rizika, low(credit) risk ‒ risque (de crédit) faible/ modéré ‒ maža (kredito) rizika, position risk ‒ risque de position ‒ pozicijų rizika, significant wrong-way risk ‒ risque significatif de corrélation ‒ didelė klaidingų sprendimų rizika, material risk ‒ risque significatif ‒ reikšminga rizika, minimal credit and market risk ‒ risque de crédit et de marché minimal ‒ minimali kredito ir rinkos rizika, medium risk ‒ risque moyen ‒ vidutinė rizika, significant (credit) risk ‒ risque significatif (de crédit) ‒ reikšminga (kredito) rizika, basis risk ‒ risque de base ‒ pagrindinė rizika, potential risk ‒ risque potentiel ‒ galima rizika, undue risk ‒ risque excessif‒ pernelyg didelė rizika, residual risk ‒ risque résiduel ‒ liku-tinė rizika, delta risk ‒ risque delta ‒ delta rizika;
Extension [ext]	A modifier expressing the amount of affected entities (horizontal notion):
	systemic risk (macroprudential risk) ‒ risque systémique (macroprudentiel) ‒ siste-minė (makroprudencinė rizika), specific risk ‒ risque spécifique ‒ specifinė rizika, general risk ‒ risque général ‒ bendroji rizika, specific wrong-way risk – risque spécifique de corrélation ‒ specifinė klaidingų sprendimų rizika, general wrong-way risk – risque général de corrélation ‒ bendroji klaidingų sprendimų rizika;
Time[tim]	The Time during which the degree of danger holds:
	intraday credit risk ‒ risque de crédit intrajournalier ‒ dienos kredito rizika, intraday and overnight credit risk ‒ risque de crédit intrajournalier et à vingt-quatre heures ‒ dienos ir vienos nakties kredito rizika, intraday and overnight liquidity risk ‒ risque de liquidité ‒ intrajournalier et à vingt-quatre heures ‒dienos ir vienos nakties likvidumo rizika.

The classification of the MWTs presents the specific concepts of various types of *risk/ risque/rizika* and their interrelations. The disclosed semantic groups of MWTs enable the construction of conceptual models of term-forming collocations with the nominal base *risk/risque/rizika*: **Event→RISK, Intensity/Extension→RISK, Asset→RISK,**

Protagonist→RISK, Time→RISK. These models reveal cognitive mechanisms of knowledge acquisition about the financial situations related to risk. They facilitate perception of different dimensions of risk and perspectives from which risk can be approached.

In order to highlight the ratio of the elements of the conceptual models of the term *risk/risque/rizika*, two quantitative analyses were conducted.

Figure 7 represents the distribution of the modifiers according to the elements of the adapted RISK_scenario. The terms denoting the concepts ascribed to the frame elements are distributed in the following way: *Harmful_event* (16 terms, 22,8%), *Protagonist* (16 terms, 22,8%), *Intensity* (15 terms, 21,4%), *Asset* (14 terms, 20%). Other terms are distributed as follows: *Extension* (6 terms, 8,5%), *Time* (3 terms, 4,2%). The largest group of terms belongs to the concept denoting *Harmful_event* and *Protagonist*. An almost equal number of terms represents the concepts *Asset* and *Intensity*. The least represented group is the one denoting the concept of time.
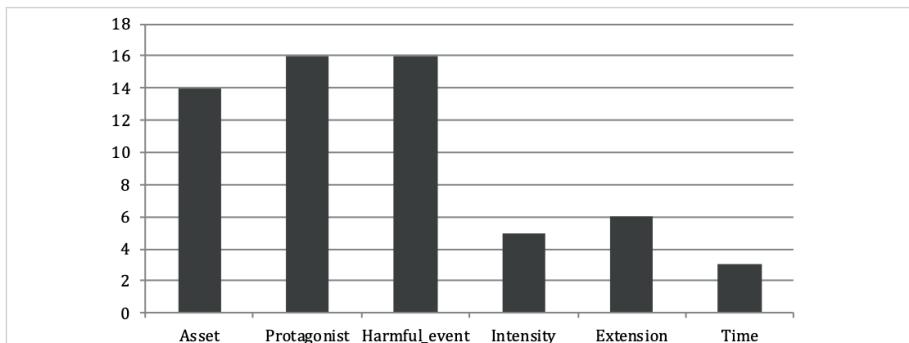
Figure 7. Distribution of the modifiers according to the elements of RISK_scenario.

Figure 8 reveals the frequency of the usage of terms according to the meaning of the attached modifiers. The highest column represents the most frequent terms denoting risk related to *Asset* (freq. 766). Terms denoting risk related to *Harmful_event* (freq. 297), *Protagonist* (freq.284) and *Extension* (freq. 270) are on the second frequency level. The group of terms that include the element *Intensity* (freq. 152) and *Time* (freq. 42) are the least frequent. Figure 8 presents quite a different picture from Figue 7. The real usage of the terms shows that in legislative documents the most frequently discussed is *Asset* of different kinds, which is under the risk arising from a *Harmful_event*, whereas the *Protagonist* who undergoes the risk and the *Extension* of the risk are also important, while the *Intensity* of the risk as well as the *Time* during which the risk occurs seem to be of least importance.
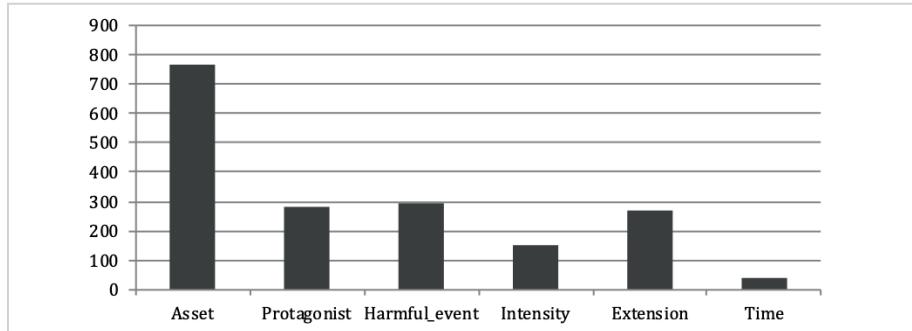
Figure 8. Frequency of the terms with the nominal base *risk/risque/rizika*

In summary, the term-forming collocations with the nominal base *risk/risque/rizika* play an essential role in the construction of the conceptual structure of the financial domain. The findings confirm that in the financial domain the focus is directed towards the *Asset* and the *Harmful_event* which causes the risk on the *Asset* as well as to the *Extension* of the risk affecting the *Asset* or the *Protagonist* who performs the exchange. It is crucial to know which *Harmful_event* can affect the *Asset* if the risk occurs and how many entities undergo the negative outcome; the *Intensity* and *Time* during which the risk lasts are of secondary importance. As a harmful event or situation lead to the risk, the main task of financial experts is to detect the factors that initiate the risk and to prevent the possible danger, thus the majority of the EU legislative documents is related to the risk management.

To sum up, MWTs reveal relationships between and within the semantic categories. The process of decoding term-forming collocations is similar to cognitive processes, which our brains perform in order to understand the concept; moreover, it allows the researcher to reach the deepest level of semantic meaning, to generalise knowledge and to organise it in the form of a cognitive map.

3.1.3. Contrastive analysis of the formal structure of the multi-word terms with the nominal base *risk/risque/rizika* in English, French and Lithuanian

Semantic relationships are universal, while their syntactic-morphological expression is language-specific. Thus, in order to reveal the diversity of linguistic expression of the universal conceptual models in different languages, the analysis of the syntactic structure of the extracted terms was performed.

The structural analysis focuses on the following aspects of formation of the terms: number of constituents of the terms, modification patterns and syntactic structures. Modification patterns were distinguished according to the position of modifiers in respect to the nominal base *risk/risque/rizika*: pre-modification (in which modifiers take the place before the base) and post-modification (in which modifiers take the place after the base). Meanwhile, syntactic structures were established according to the position and word classes of the modifiers. Tables 11 and 12 present the summarised findings of the analysis.

Table 11. *Syntactic structures of the **pre-modification** patterns of the terms*

Syntactic structures	EN	FR	LT
N+*risk*	**24 terms, e.g.**, *credit risk, concentration risk, liquidity risk, business risk*	–	**22 terms, e.g.**, *skolininko rizika, modelio rizika, saugojimo rizika*
(Adv.)+ Adj.+*risk*	**20 terms, e.g.**, *entrepreneurial risk, legal risk, potential risk*	–	**15 terms, e.g.**, *sisteminė rizika, operacinė rizika, investicinė rizika, pernelyg didelė rizika*
N+N+*risk*	**4 terms, e.g.**, *gold price risk, interest rate risk, counterparty credit risk*	–	**13 terms, e.g.**, *įsipareigojimų neįvykdymo rizika, palūkanų normos rizika, sandorio šalies rizika*
N+N+N+*risk*	**1 term:** *credit valuation adjustment risk*	–	**6 terms, e.g.**, *sandorio šalies kredito rizika, kredito vertinimo koregavimo rizika, kainų skirtumo mažinimo rizika*
(Adv.)+ Adj.+N+*risk*	**8 terms, e.g.**, *significant credit risk, low credit risk, foreign exchange risk*	–	**5 terms, e.g.**, *nedidelė kredito rizika, klaidingų sprendimų rizika, pernelyg didelio sverto rizika*
Adj.+N+N+*risk*	**1 term:** *minimal credit and market risk*	–	**2 terms, e.g.**, *minimali kredito ir rinkos rizika, gautinų sumų sumažėjimo rizika*
N +Num.+N+N+*risk*	–	–	**2 terms, e.g.**, *dienos ir vienos nakties likvidumo rizika, dienos ir vienos nakties kredito rizika*
Adj.+Adj.+N+*risk*	**2 terms**, e.g., *intraday and overnight credit risk, intraday and overnight liquidity risk*	–	**2 terms, e.g.**, *specifinė klaidingų sprendimų rizika, didelė klaidingų sprendimų rizika*

Table 12. *Syntactic structures of the **post-modification** patterns of the terms*

Syntactic structures	EN	FR	LT
risk+ Prep.+N(+N)	**7 terms, e.g.,** risk of loss**,** risk of disruption, risk of the borrower, risk of the obligor, risk of debt instruments	**24 terms, e.g.,** risque de crédit, risque de concentration, risque de modèle	–
risk+Prep.+N+ Prep.+N+(Prep.+N)	–	**10 terms, e.g.:** *risque de crédit de contrepartie, risque de variation du cours de l'or*	–
risk+Adj.	–	**18 terms, e.g.,** risque systémique, risque opérationnel, risque spécifique	–
risk+Adj.+Prep.+N	–	**5 terms, e.g.,** risque spécifique de corrélation, risque significatif de corrélation, risque général de corrélation	–
risk+Prep.+N+.(+N) +Adj.(+Num.)	**3 terms, e.g.,** risk of capacity withholding, risk of excessive leverage	**8 terms, e.g.,** risque de levier excessif, risque de crédit faible, risque de liquidité intrajournalier et à vingt-quatre heures	–
risk + N	–	**3 terms, e.g.,** *risque pays, risque delta, risque souverain*	–

The findings presented in the tables reveal that the terms with the nominal base *risk/risque/rizika* have different modification patterns in the investigated languages. In order to identify the dominant modification patterns across the investigated languages the quantitative analysis was performed; its results are presented in Figure 9.
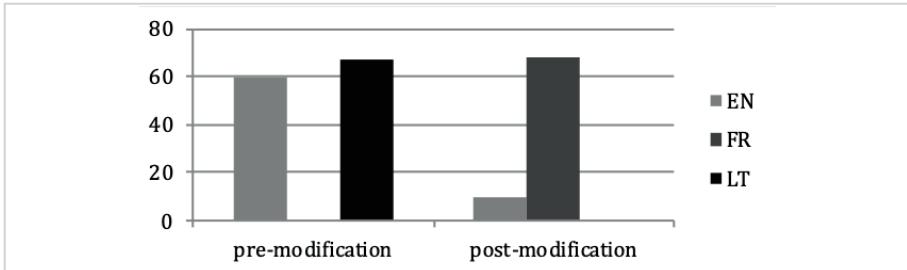
Figure 9. Modification patterns of the terms

The results show that the pre-modification is dominant in the English and Lithuanian languages, while the post-modification is characteristic of the French language. No terms of the post-modification patterns were detected in Lithuanian. While English terms were of both types, the number of terms with post-modifiers is rather low (10 terms, 14%), which is typical of the financial field. In comparison, multi-word terms of constitutional law comprise 39% of the terms with post-modification (Mockienė, 2016, p.182). The finacial multi-word terms belong to the patterns **risk+PP** and **risk+PP+Adj.(+Num)**. The investigated English, French and Lithuanian material did not contain terms with both pre- and postmodifiers (modifier + *risk/risque/rizika* + modifier).

All investigated terms include one or several modifiers, which are nouns, adjectives, adverbs and adjectives taking different positions in the terminological units. The nature of modifiers also depends on the language. The results of the analysis reveal that the dominant modifiers of the three languages are nouns and adjectives, however, in French they usually form the prepositional phrases (see Figures 10-11). The results of the analysis reveal that the dominant modifiers of the English and the Lithuanian terms are nouns and adjectives, while in the French terms, the term *risque* is modified by the prepositional phrases or adjectives (see Figures 10-11). Thus, the most typical patterns for the English and Lithuanian languages are **(Adv.)+Adj.+*risk*** and **N+*risk***. The number of terms for both languages varies between 20-24, while the French language is characterised by the patterns as **risk+Prep.+N(+N)** instantiated by 24 terms and **risk+Adj**. with 18 terms. The pattern **risk+Prep.+N(+N)** is also present in English, but it is illustrated only by 7 terms. Thus, this pattern, in contrast to the French language, is not very typical. The visual illustration of patterns suggests the idea that, syntactically, English and Lithuanian terms more often overlap than French ones, moreover, it proves that syntactic-morphological expression is language-depending.
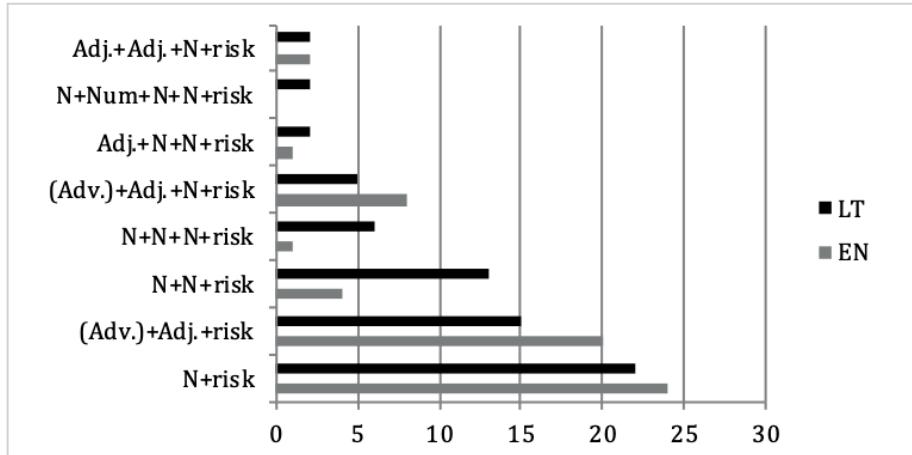
Figure 10. Patterns of the pre-modification
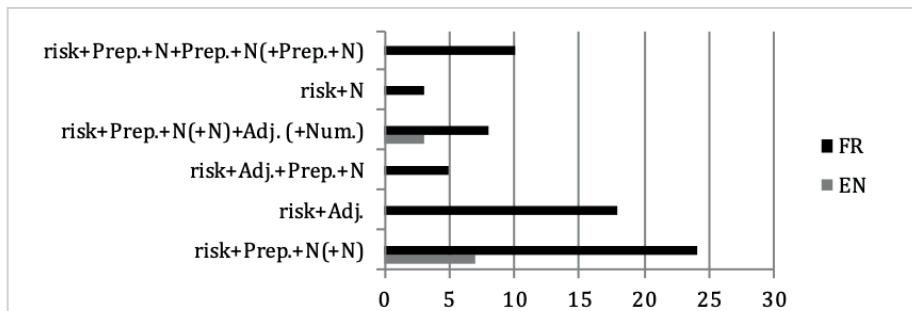
Figure 11. Patterns of the post-modification

The terms differ in the number of their constituents. In order to establish the dominant number of term constituents in the investigated languages, the quantitative analysis was performed; its results are presented in the diagram (see Figure 12).
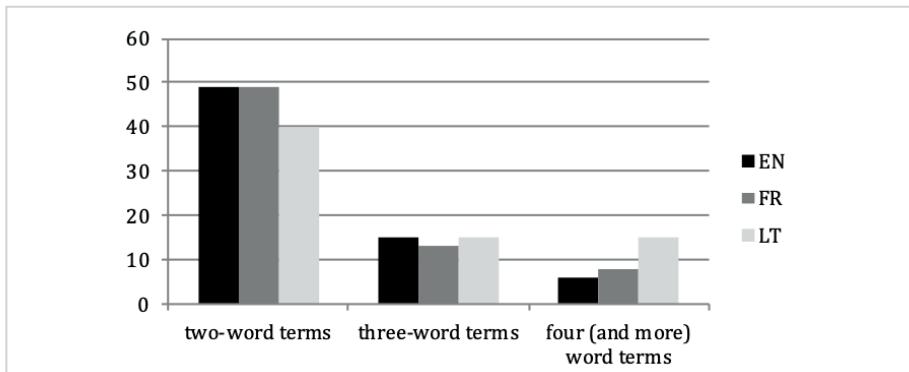
Figure 12. The number of term constituents

The diagram reveals two main tendencies. First, the EU term developers respect the main requirement of language economy (brevity of terms): two-word terms are prevalent in the three languages. Second, only a few English (6) terms and French (8) terms have more than 4 words, while in Lithuanian terms including 4 and more words constitute a significant part of the selected data (15 of 70).

In the investigated terms, the modifiers are nouns, adjectives or prepositional phrases taking different positions in the terminological units. In all two-word terms, the modifier modifies directly the nominal base *risk/risque/rizika*, while in the terms with more constituents, modification may be of one or several levels:

- One-level modification (detected among the terms of the three languages with more than two constituents), e.g.:

in the English term *intraday and overnight credit risk*, the nominal base *risk* is modified directly by three constituents *intraday*, *overnight* and *credit*;

in the French term *risque significatif de crédit*, the nominal base *risque* is modified directly by two constituents *significatif*, *crédit* where the noun *crédit* is connected via the preposition *de* which specifies the noun *risque*;

in the Lithuanian term *minimali kredito ir rinkos rizika,* the nominal base *rizika* is modified directly by three constituents *minimali*, *kredito*, *rinkos* where nouns *kreditas, rinka* are in Genitive form which expresses the possession;

- Two-level modification (detected among the terms of the three languages with more than two constituents):

in the English term *gold price risk*, the nominal base *risk* is directly modified by the noun *price* which is in turn modified by another noun *gold*;

in the French term *risque de taux d'intérêt*, the nominal base *risque* is directly modified by the noun *taux*, which is in turn modified by another noun *intérêt* with preposition *de* which which specifies the noun *taux*;

in the Lithuanian term *dienos ir vienos nakties likvidumo rizika*, the nominal base *rizika* is modified directly by the constituents *dienos, nakties* and *likvidumo*, while the nominal constituent *nakties* is in turn modified by the numeral *vienos*.

The tendency of prevalence of short (two-word) terms coincides with the tendencies established by other terminology researchers. The contrastive research on Constitutional Law terminology by Mockienė reveals the same tendency in the three different languages. In the investigated English, Russian and Lithuanian legal acts of a constitutional nature, the majority of the extracted multi-word terms consisted of two constituents: they constituted 78.5% of the English multi-word terms, 62% of the Russian multi-word terms and 74.5% of the Lithuanian multi-word terms (Mockienė, 2016, p. 43-45). The research on the automatic extraction and definition of education and science terminology by Bielinskienė et al. reveal that most Lithuanian terms of this domain are two-word terms: they constituted more than two-thirds of the terms selected from the term candidates automatically extracted from a specialised corpus (Bielinskienė et al., 2015, p. 62). Houbert emphasises the conciseness of French terms of economic and financial domains in order to ensure the fluid translation and the clear transmission of the concept (Houbert, 2001, p. 1). Thus, developers of terms of different domains and different languages tend to adhere to the same principle of language economy and user-friendliness.

The findings of the syntactic structure analysis contribute to the contrastive multilingual studies of term formation patterns. They disclose term formation trends in English, French and Lithuanian and provide terminological information, which might be useful for term developers and translators. Syntactic patterns, established in the research, may be used for the development of automatic linguistic methods of term extraction without any pre-chosen keywords.

3.2. Macro-context of the nominal base *risk/risque/rizika*

The present chapter of the research seeks to investigate SWT and MWTs with the nominal base *risk/risque/rizika* from a new perspective, i.e. their position in predicative structures in the texts, and to reveal their relationships with other concepts of the domain. Thus, the investigation focuses on the verbs attaching the terms with the nominal base *risk/risque/rizika* and configuring argument structures, which represent cognitive frames including the concept RISK. These argument structures are considered to be a macro-context of the investigated terms. The following objectives are pursued in this part of the research: 1) analysis of the semantics of the annotated verbs; 2) establishment of predicative frames (also called macro-frames in the thesis) evoked by the verbs and their semantic, syntactic and lexical analysis.

3.2.1. Semantic analysis of the verbs attaching
the term *risk/risque/rizika*

In order to distinguish the cognitive frames evoked by the extracted verbs, the semantics of the verbs was analysed, and their classification was performed to get a more generalised picture of relational potential of the verbs and their arguments.

The semantic classification was based on the criteria elaborated on by Faber and Mairal (1999). These researchers ascertain that a verb's combinatorial possibilities and syntactic

potential are semantically motivated (Faber & Mairal, 1999, p. 143). They provided a detailed analysis and categorisation of the semantico-syntactic structure of 12,000 verbs of the general language of English. They elaborated on a set of lexically realised parameters that establish boundaries for verb meanings and serve as measures for verb classification. The parameters are related to duration, temporal sequence, interaction, inception, achievement, cessation, causation, connotation and activity. According to these parameters, the following general lexical domains can be distinguished: EXISTENCE (*be, happen*), CHANGE (*become, change*), POSSESSION (*have*), SPEECH (*say, talk*), EMOTION (*feel*), ACTION (*do, make*), COGNITION (*know, think*), MOVEMENT (*move, go, come*), PHYSICAL PERCEPTION (*see, hear, taste, smell, touch*), MANIPULATION (*use*), CONTACT/IMPACT (*hit, break*) and POSITION(*put, be*). Some particular classes are LIGHT, SOUND, BODY, FUNCTIONS, WEATHER, etc. (Faber & Cabezas-García, 2019, p. 14).

During the annotation, 47 English verbs, 54 French verbs and 25 Lithuanian verbs were detected in the extracted sentences. These verbs were classified into four semantic categories taken from Faber and Mairal's works and adapted to the financial field: EXISTENCE, EXPERIENCE, PERCEPTION, and ACTION (see Table 13). The attribution of the annotated verbs to the appropriate semantic categories was based on the definitions of the verbs in *Cambridge Dictionary* of the English language, in *Dictionnaire Larousse* for the definition of French verbs and in the dictionary of the Lithuanian language *Lietuvių kalbos žodynas* for the definition of Lithuanian verbs.

Table 13. *Organisation of the annotated verbs into semantic categories*

Lexical domain	Verbs examples
EXISTENCE	**EN** *cause, pose, create, expose, generate, give rise to, lead to, arise from, result from, entail, involve, constitute, determine, suggest;*
	FR *entraîner, (re) présenter, créer, poser, faire apparaître, engendrer, comporter, impliquer, survenir, faire peser, faire courir, donner lieu à, exposer, s'exposer, être exposé, découler, résulter;*
	LT *atsirasti, (su)kelti, kilti, grėsti.*
EXPERIENCE	**EN** *bear, face, incur, take on, undertake, have, capture;*
	FR *encourir, courir, prendre, assumer, supporter, détenir;*
	LT *patirti, prisiimti, susidurti, tekti*
PERCEPTION	**EN** *identify, disclose, detect, ascertain, point out, understand, underestimate, overestimate, assess, measure, evaluate, calculate, report, address;*
	FR *déterminer, détecter, comprendre, identifier, déceler, indiquer, relever, repérer, appréhender, évaluer, mesurer, apprécier, procéder à une évaluation, quantifier, calculer ;*
	LT *nustatyti, identifikuoti, nurodyti, pristatyti, suprasti, įvertinti, apskaičiuoti*

Lexical domain	Verbs examples
ACTION	**EN** *mitigate, reduce, minimize, absorb, hedge, constrain, control, limit, manage, cover, monitor, eliminate, address, prevent;*
	FR *atténuer, diminuer, limiter, supprimer, prévenir, maîtriser, modifier, traiter, éliminer, gérer, suivre, effectuer un suivi, contrôler, faire face à, couvrir;*
	LT *sumažinti, apriboti, pašalinti, panaikinti, užkirsti kelią, padengti, apdrausti, stebėti, valdyti, kontroliuoti*

The classification of verbs into lexical domains allows for the detection of the most prominent actions and processes within finances as well as the semantic categories of typical participants in these event frames. The verbs in the same lexical domain tend to attach the same or similar semantic categories of terms.

The analysis of the verbs disclosed an important tendency of the usage of the verbs in the financial field. All extracted verbs have a general meaning; none has a specialised meaning characteristic of the financial domain; however, it is worth noticing that some verbs from the list above are often used in other specialised domains, e.g. such English verbs as *monitor, hedge, detect, diclose, identify, measure* etc.; such French verbs as *effectuer un suivi, procéder à une évaluation, quantifier* etc., such Lithuanian verbs as *identifikuoti, kontroliuoti, padengti* etc. This proves that general language verbs play an important role in linking concepts in specialised texts. Their meaning expresses what happens in the financial field and how legal drafters address the situations related to risk. Thus, such verbs reveal how financial entities interact. Furthermore, general language verbs can be regarded as semantic primitives across cultures as they are lexicalised in most languages. Such approach enables researchers to view verbs as universal constants enabling the construction of cognitive structures of world perception.

3.2.2. Establishment and analysis of the frames evoked by the annotated verbs

The previously described investigation enabled the establishment of the frames evoked by the annotated verbs. In order to define a frame of specialised language, one needs to describe the space and the events that occur within the domain in question as well as the entities that participate in those events. The project FrameNet provides users with a large number of frames. In order to select the corresponding scenarios for the extracted data one needs to compare lexical units which appear in the corpus with those classified in frames in FrameNet. The choice of an appropriate frame was based on the criterion that the content of the frame would represent the same general situation and contain the same premises about it. If such a frame exists in FrameNet, its elements were directly transferred into the financial field. However, sometimes some modifications had to be done within the frame. For example, the verb *cause* evokes the frame **Cause_harm** and **Cause_to start** provided in FrameNet. The frame **Cause_harm** describes a situation when *an Agent or a Cause injures*

a Victim, the frame puts emphasis on the completed action, as the result of the action is an injured *Victim*, while the concept of *Result* or *Harm* is of second importance, this frame element is non-core in the frame. The concept RISK designates a dangerous state which occurs and lasts for certain time; hence, it stresses the process rather than a completed action. Although the frame **Cause_harm** describes the situation connected to the harm, it is less abstract in contrast to the frame **Cause_to start** which describes the situation in the following way: *Cause causes a process, the Effect, to begin.* This frame was applied to the financial field and is called **CAUSE_RISK.** In this frame (and other frames) *Effect* embodies the concept RISK.

In order to choose the appropriate frame that expresses the situation when somebody or something undergoes the risk, two frames **Start_to_experience** and **Experience_bodily_harm** need to be discussed. **Start_to_experience** can be described as follows: '*an Agent seeks to bring about an internal mental or emotional state in the Experiencer* (FrameNet)'. This frame stresses the *Agent's* action on the *Experiencer*, while the frame **Experience_bodily_harm** concentrates on the object or person who undergoes harm. The actions are seen from the perspective of the *Experiencer* who is involved in a bodily injury. Thus, the frame **Experience_bodily_harm,** which designates a particular situation and describes the physical harm, was adapted to the financial field where the *Experiencer* is a being or an entity connected to the financial field which bears the *Effect* (Risk). This frame was called **EXPERIENCE_RISK.**

The annotated verbs designate the steps that risk passes from the beginning when it arises until the moment when professionals take measures to manage it. The frames evoked by the verbs were grouped into two broad categories:

- **The frames representing the first stage of the cognitive perception of risk.** This stage encompasses situations in which something or somebody causes risk, it affects something or somebody, or the affected entity experiences risk. These frames are activated by the verbs belonging to the semantic categories of EXISTENCE and EXPERIENCE.
- **The frames representing the second stage of the cognitive perception of risk.** This stage encompasses situations in which specialists identify risk, assess its importance and apply measures to reduce it and take control on it. These frames are activated by the verbs belonging to the semantic categories PERCEPTION and ACTION.

Such a logical chain reflects a specialised knowledge representation related to the term *risk/risque/rizika*. The frames, selected and adapted to the investigated empirical material, are as follows:

Table 14. *Scheme of frames activated by verbs attaching terms with the nominal base* risk/ risque/rizika
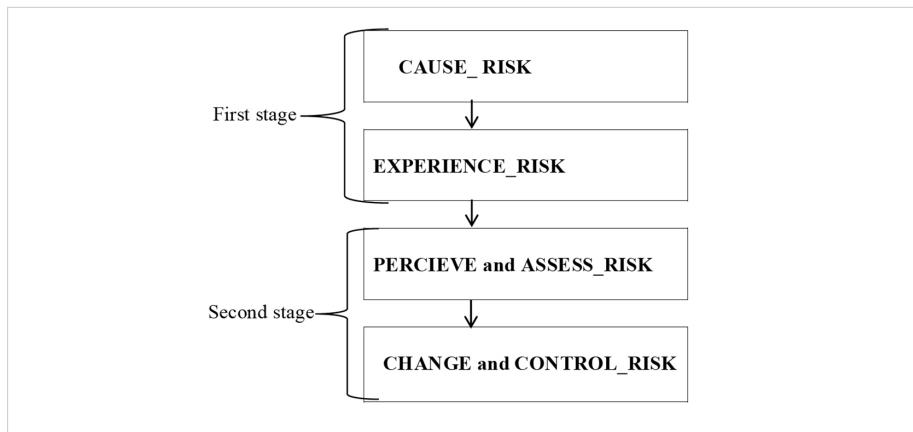
All frames manipulate with five main elements that refer to participants of the situations represented by the frames. In the sentences, these elements serve as semantic roles of the arguments of the investigated arguments structures: Cause, Effect, Agent, Means and Experiencer. These elements refer to the following conceptual information (definitions of the semantic roles are based on the ones in the FrameNet project):

- **Cause** refers to an animate or inanimate entity, a force, or event that produces an Effect.
- **Effect** indicates the process or state that the Cause initiates. In the investigated material, **Effect** refers to the concept of RISK.
- **Agent** is an animate or inanimate entity that perceives, assesses, changes and/or controls Effect.
- **Experiencer** is an animate or inanimate entity that experiences **Effect**.
- **Means** refers to an action or financial tool that produces change in **Effect**.

All annotated argument structures were ascribed to appropriate frames. The analysis of two dimensions has been performed: syntactic expression of the frames (the analysis of the argument structures and their semantico-syntactic models) and lexical expression of the frames (analysis of the lexical items denoting the participants of the frame).

English, French and Lithuanian differ in their structure (analytic and synthetic). Therefore, the words, performing the same syntactic functions, differ grammatically in these languages. In Lithuanian, syntactic functions of the arguments of the verbs are expressed by different case endings of nouns and prepositional phrases, while in English and French they are expressed by strict word order and prepositional phrases. The research does not deal with the given language peculiarities and focuses only on differences of semantico-syntactic models in the investigated languages.

3.2.3. The analysis of frames of the first stage
of the cognitive perception of RISK

3.2.3.1. CAUSE_ RISK frame for English, French and Lithuanian

---

Definition:

A **Cause** causes an **Effect** (RISK) on a **Experiencer**

(based on the definition of the frame Cause_to_strat from FrameNet: A Cause, animate or inanimate, causes a process, the Effect, to begin.)

Examples:

EN   **Access would *cause* systemic risk**. < *Commission Implementing Regulation (EU)2017/394 of 11 November 2016>*

FR   < ....> s'**il (le marché)** est susceptible de ***créer* un risque systémique** affectant la stabilité financière, par exemple un risque de dénouement d'une position dominante sur le marché, ou si les obligations de règlement n'étaient pas respectées dans un volume significatif. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016>*;

LT   **Dėl prieigos *būtų sukelta* sisteminė rizika**. <*Komisijos įgyvendinimo reglamentas (ES) 2017/394 2016 m. lapkričio 11d.>*

The CAUSE_RISK frame encompasses all verbs extracted from the financial corpus with the semantic meaning *'to cause something unpleasant'* attaching the terms with the nominal base *risk/risque/rizika*. The frame involves three participants performing the semantic roles of Cause, Effect, and Experiencer.

The first participant labelled as Cause embraces a person, a thing or a process that produces an Effect on a Experiencer. The Effect refers to the negative impact; it is expressed by the terms with the nominal base *risk/risque/rizika*, which can play different syntactic roles in the sentence (subject, object or complement). The Experiencer indicates an entity affected by *risk/risque/rizika*.

Syntactic expression of the frame

The CAUSE_RISK frame is represented by the three types of argument structures that have several subtypes (semantico-syntactic models):

Type I 'Cause causes Effect(RISK) to Experiencer' has five semantico-syntactic models:

a) Cause (Sbj.)+V+Effect (RISK)(Obj.);

b) Cause (Sbj.)+V+Effect (RISK)(Obj.)+ Experiencer (Compl.);

c) Cause (Sbj.)+V+Effect (RISK)(Compl.);

d) Effect (RISK)(Sbj.) +V+Cause (Obj./Compl.);

e) Effect (RISK)(Sbj.) +V+Experiencer (Compl.)

Type II 'Cause exposes Experiencer to Effect(RISK)' has two semantico-syntactic models:
a) Cause (Sbj.)+V+Experiencer (Obj.)+Effect (RISK) (Compl.);
b) Experiencer (Sbj.)+V+ Effect (RISK) (Compl.)

Type III 'Effect(RISK) arises from Cause' has two semantico-syntactic models:
a) Effect (RISK)(Sbj.)+V+Cause (Compl.);
b) Effect (RISK)(Sbj.)+V+Experiencer(Compl.)+Cause (Compl.)

The realisation of these argument structures in English, French and Lithuanian differ. In the Lithuanian material, only argument structures of Type I and Type III were detected, while in the English and French material, all three types of argument structures were present. The majority of semantico-syntactic models of Type I and Type III are characteristic for the three languages. However, some of them are present only in one of the languages. Below, the tables demonstrate all argument structures and their models illustrated by the annotated examples. The extent list of the examples can be found in the appendix 3.

Type I *Cause causes Effect(RISK) to Experiencer*

This argument structure is evoked by the following verbs

EN pose, entail, create, cause, constitute, generate, involve; lead to, give rise to

FR entraîner, (re)présenter, créer, poser, (faire) apparaître, engendrer, comporter, impliquer, survenir, faire peser, faire courir, donner lieu à; the verbs (*poser, faire peser, faire courir, exposer à (from Type II))* are lexically restricted to danger and related notions such as *risque* 'risk', *danger* 'danger', *menace* 'threat', they suggest a negative cause, while others can be considered neutral. However, according to Colas the meaning of the words is determined within the framework of the sentences; the meaning of the verb is revealed by the appropriate descriptions of the types of subjects and complements; such approach to verb meaning is based on the principle of contextuality (Colas, 2006, p.1).

LT (su)kelti, grėsti

Model A

V

Cause (Sbj.)   Effect **RISK** (Obj.)

EN

1) Member States shall ensure that where a review shows that **an institution** [Cause] **may** *pose* **systemic risk** [Effect] in accordance with Article 23 of Regulation (EU) No 1093/2010 the competent authorities inform EBA without delay about the results of the review. <*Commission Delegated Regulation (EU) 2017/567 of 18 May 2016*>

2) < … > "tranche" means a contractually established segment of the credit risk associated with an exposure or a number of exposures, where **a position** [Cause] in the segment **entails a risk of credit loss** [Effect] greater than or less than a position of the same amount in each other such segment < … >." <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

3) **Access** [Cause] **would** *cause* **systemic risk** [Effect]. < *Commission Implementing Regulation (EU) 2017/394 of 11 November 2016*>

FR

1) < ...> le cas échéant, l'indication du fait que l'entreprise exécute des ordres en dehors d'une plate-forme de négociation et des conséquences que **cela**[Cause] *entraîne*, par exemple **le risque de contrepartie**[Effect] lié à une exécution en dehors d'une plate-forme de négociation, et, sur demande du client, un complément d'informations sur les conséquences de ce mode d'exécution. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMMISSION du 25 avril 2016*>

2) < ....> s'**il (le marché)**[Cause] est susceptible de *créer* **un risque systémique**[Effect] affectant la stabilité financière, par exemple un risque de dénouement d'une position dominante sur le marché, ou si les obligations de règlement n'étaient pas respectées dans un volume significatif. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMMISSION du 25 avril 2016*>;

3) < ...> tous **les éléments**[Cause] qui, parmi les expositions titrisées, sont considérés comme *présentant* **un risque particulièrement élevé** [Effect] au sens de l'article 128. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉENET DU CONSEIL du 26 juin 2013* >.

LT

1) Įstaiga deramai atsižvelgia į **pozicijas** [Cause], **kurios** *kelia* **didelę specifinę ir bendrąją klaidingų sprendimų riziką** [Effect]. <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr. 575/2013 2013m. birželio 26d.*>

2) <...> **finansinė priemonė, finansinė veikla arba finansinė praktika** [Cause] *kelia* **didelę finansų įstaigų,** kurios yra svarbios Sąjungos finansų sistemai, **veiklos sutrikdymo riziką**[Effect] <...>. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/567 2016 m. gegužės 18d.*>

3)<...> neatsižvelgiama į tuos kitus **dalyvius**[Cause], kurie turi mažiau galimybių **sukelti likvidumo riziką**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.*>

Model B
V
Cause (Sbj.)   Effect **RISK** (Obj.)   Experiencer (Compl.)

EN
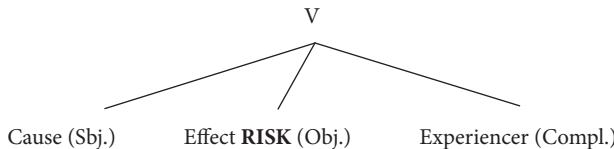
1) < … > whether **the financial instrument, financial activity** or **financial practice** [Cause] *poses* **a high risk of disruption** [Effect] **to financial institutions** [Experiencer] deemed to be important **to the financial system of the Union** [Experiencer]. <*Commission Delegated Regulation (EU) 2017/567 of 18 May 2016)*>;

2) **A concentration of assets and overreliance** [Cause] **on** market liquidity *creates* systemic risk [Effect] **to the financial sector** [Experiencer] and should be avoided. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

3) **A default of the obligor/guarantor** [Cause] *would constitute* **a huge reputational risk** [Effect] **to the group** [Experiencer], damage its franchise and could threaten its viability. <*Commission Delegated Regulation (EU) 2018/179 of 25 September 2017*>

FR

1) Le DCT identifie **les prestataires de services et fournisseurs de services de réseau essentiels** [Cause] susceptibles de *poser* **des risques**[Effect] **pour ses propres opérations** [Experiencer] en raison de sa dépendance à leur égard. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

2) < ...> **les risques**[Effect] **qu'un établissement** [Cause] *présente* **pour le système financier** [Experiencer] compte tenu de l'identification et de la mesure du risque systémique en vertu de l'article 23 du règlement (UE) no 1093/2010 ou des recommandations du CERS, le cas échéant. <*DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>;

3)Les scénarios des tests de résistance utilisés pour mettre à l'épreuve les ressources financières liquides tiennent compte de la conception et du fonctionnement du DCT-prestataire de services bancaires, et couvrent toutes **les entités**[Cause] susceptibles de *représenter* **pour celui-ci** (DCT-prestataire de services bancaires)[Experiencer] **un risque de liquidité significatif** [Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

LT

1) <...> **panašūs verslo modeliai arba panaši geografinė pozicijų padėtis** [Cause], *turi* arba *gali* įgyti panašios rizikos poziciją arba *sukelti* **panašią riziką** [Effect] **finansų sistemai** [Experiencer]. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA 2013/36/ES 2013m. birželio 26d.*>

2) CVPD bankinio tipo paslaugų teikėjas taip pat atsižvelgia į šiuos elementus: <...> su 30 straipsnio 2 dalyje **nurodytais subjektais ir susijusiomis finansų rinkos infrastruktūromis arba kitais subjektais** [Cause]**,** kurie **CVPD bankinio tipo paslaugų teikėjui** [Experiencer] *gali kelti* reikšmingą likvidumo **riziką** [Effect] <...>. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.*>

3) <...> Komisijos deleguotojo reglamento (ES) 2017/565 (9) 23 straipsnyje, suderinamu būdu iš anksto nustato, kada laikoma, kad **klientų pateikiamų pavedimų skaičius ar apimtis** [Cause] *kelia* įmonei [Experiencer] **pernelyg didelę riziką**[Effect]**.** <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/567 2016 m. gegužės 18d.*>

Model C

V

Cause(Sbj.)　　　　　Effect **RISK** (Compl.)

EN

1) < … > systemically important institution means an EU parent institution, an EU parent financial holding company, an EU parent mixed financial holding company or an institution **the failure or malfunction of which** [Cause] could *lead to* **systemic risk** [Effect]. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

2) In the Opening Decision, the Commission took the view that **the risk of excluding certain operators** [Cause] from the mechanism such as certain demand-side response capacities (due to possible discrimination against them), foreign capacities and new generation capacities, ***could lead to a risk*** [Effect]. <*Commission Decision (EU) 2017/503 of 8 November 2016*>

3) An institution shall give due consideration to **exposures** [Cause] that *give rise to* **Specific and General Wrong-Way risk** [Effect]. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

FR

1)L'établissement prend dûment en considération **les expositions** [Cause] ***donnant lieu à*** **un risque de corrélation général et spécifique** [Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

LT -

Model D

V

Effect **RISK** (Sbj.)   Cause (Obj./Compl.)

EN

1) < … > the **market risk** [Effect] **that** *is generated* **by the internal hedge** [Cause] shall be dynamically managed in the trading book within the authorised limits. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

2) **Operational risks** [Effect] that *may be posed* **by critical utilities and critical service providers** [Cause] < … >. <*Commission Delegated Regulation (EU) 2017/392 of 11 November 2016*>

3) < … > **business risk** [Effect] is highly dependent on the individual situation of each CSD and it ***can be caused*** by various factors [Cause] < … >. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

FR

1) < ...> **le risque cumulatif** [Effect] *résultant* **de défauts multiples** [Cause], y compris les différentes séquences de défauts, dans des produits subdivisés en tranches. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

2) Aux fins de l'article 45, paragraphe 3, point b), du règlement (UE) no 600/2014, les critères servant à déterminer **les situations** [Cause] **dans lesquelles un risque d'arbitrage réglementaire** [Effect] est susceptible de *survenir* sont les suivants < ...>. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>

3) Les autorités compétentes veillent à ce que **le risque de concentration** [Effect] *découlant* **de l'exposition à chaque contrepartie** [Cause], y compris des contreparties centrales, des groupes de contreparties liées ou des contreparties opérant dans le même secteur économique ou la même région ou dont l'activité porte sur le même métier ou le même produit de base. <*DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

LT

1) **Dėl prieigos** [Cause] *būtų sukelta* **sisteminė rizika** [Effect]. <*KOMISIJOS ĮGYVENDINIMO REGLAMENTAS (ES) 2017/394 2016m. lapkričio 11d.*>

2) < ...> **dėl netinkamų arba nepavykusių vidaus procesų, žmonių ir sistemų** [Cause] *sukelta* **rizika** [Effect]. <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr. 575/2013 2013m. birželio 26d.*>

3) Yra tikimybė, kad **kredito rizika** [Effect] *atsiras*, **kai skolininkas (garantas) susidurs su dideliais einamaisiais neaiškumais ar neigiamomis verslo, finansinėmis ar ekonominėmis sąlygomis** < ...> [Cause]. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2018/179 2017 m. rugsėjo 25d.*>

Model E

V

Effect **RISK** (Sbj.)   Experiencer (Compl.)

EN -

FR -

LT
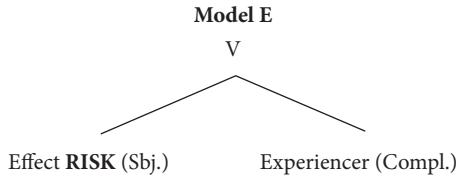
1) Politika, procedūros ir sistemos, kuriomis nustatoma, įvertinama, valdoma ir pranešama **rizika**[Effect]**, *galinti grėsti* paraišką teikiančiam CVPD**[Experiencer], ir rizika, kurią paraišką teikiantis CVPD kelia kitiems subjektams[Experiencer]. <*KOMISIJOS ĮGYVENDINIMO REGLAMENTAS (ES) 2017/394 2016m. lapkričio 11d.*>

2) <...> **subjektams** [Experiencer] kitais būdais *negresia* **didelė klaidingų sprendimų rizika**[Effect] , kaip apibrėžta Reglamento (ES) Nr. 575/2013 291 straipsnyje. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d* >

3) <...> įsipareigojimų neįvykdymo pagal pagrindinės šalies įsipareigojimų neįvykdymo atveju taikomas procedūras ir **pagrindinei sandorio šaliai** [Experiencer] *gresia* **nepriimtina rizika**[Effect] <...>.< *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016m. balandžio 25d.* >

Type II*: Cause exposes Experiencer to Effect(RISK)*

This argument structure exists only in the English and French languages. It is evoked by the verbs

EN expose

FR exposer, s'exposer, être exposé

LT -

Model A

V

Cause (Sbj.)   Experiencer (Obj.)   Effect **RISK** (Compl.)

EN

1) **The borrowing and lending operations** [Cause] related to the Union's macro-financial assistance shall be carried out in euro < … > and shall not involve the Union in the transformation of maturities, or *expose* **it (the Union)** [Experiencer] **to any exchange** or **interest rate risk** [Effect], or **to any other commercial risk** [Effect] < … >. <*Decision (EU) 2016/1112 of the European Parliament and of the Council of 6 July 2016*>

2) < … > **a systematic internaliser** [Cause] cannot execute the number or volume of those orders without *exposing* itself [Experiencer] **to undue risk** [Effect]. <*Commission Delegated Regulation (EU) 2017/567 of 18 May 2016*>

3) < … > when **the number or volume of orders** [Cause] sought by clients is considered *to expose* **the firm** [Experiencer] **to undue risk**[Effect]. <*Commission Delegated Regulation (EU) 2017/567 of 18 May 2016*>

FR

1) Les entreprises d'investissement < … > déterminent à l'avance, de façon objective et cohérente avec leur politique de gestion des risques et les procédures visées à l'article 23 du règlement délégué (UE) 2017/565 de la Commission (9), le point à partir duquel **le nombre ou le volume des ordres** [Cause] introduits par les clients est réputé *exposer* **l'entreprise** [Experiencer] à un risque excessif [Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>

2) **Les opérations d'emprunt et de prêt** [Cause] relatives à l'assistance macrofinancière de l'Union sont effectuées en euros, en appliquant la même date de valeur, et n'impliquent pas pour l'Union de transformation d'échéance, ni **ne l'(l'Union** [Experiencer]**)** *exposent* **à un quelconque risque de change ou de taux d'intérêt, ou à un quelconque autre risque commercial**[Effect]. <*DÉCISION (UE) 2016/2371 DU PARLEMENT EUROPÉEN ET DU CONSEIL du 14 décembre 2016*>

3) < ...> **une série de scénarios historiques**, **comprenant des périodes de mouvements extrêmes sur les marchés** [Cause] observés au cours des trente dernières années, ou sur des périodes aussi longues que possible pour lesquelles des données fiables ont été disponibles, qui *auraient exposé* **le DCT-prestataire de services bancaires** [Experiencer] **au plus grand risque financier**[Effect] < ...>.

<*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>.

LT-

EN

1) **An institution** [Experiencer], other than when acting as an originator, a sponsor or original lender, ***shall be exposed to*** **the credit risk of a securitisation position** [Effect] in its trading book or non-trading book only if the originator, sponsor or original lender has explicitly disclosed to the institution that it will retain on an ongoing basis, a material net economic interest < …>. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

2) **The ECA** [Experiencer] ***is normally not exposed to*** **the transfer risk** [Effect]. <*Commission Delegated Regulation (EU) 2018/179 of 25 September 2017*>

FR

1)Lorsque les autorités compétentes constatent, conformément à l'article 97, que **des établissements** [Experiencer]présentant des profils de risque analogues en raison de la similitude de leurs modèles d'entreprise ou de la localisation géographique de leurs expositions sont ou sont susceptibles ***d'être exposés* à des risques analogues** [Effect] ou de représenter des risques analogues pour le système financier. < *DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>.

2) Les États membres devraient veiller à ce que **les établissements de crédit et les entreprises d'investissement** [Experiencer] disposent, au regard **des risques**[Effect] **auxquels ils *sont ou peuvent être exposés***, d'un capital interne adéquat en termes de quantité, de qualité et de répartition<*DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

3) **Les établissements** [Experiencer] démontrent aux autorités compétentes qu›ils disposent de procédures adéquates de gestion des risques leur permettant de contrôler **les risques** [Effect] **auxquels ils** [Experiencer] ***peuvent s'exposer*** <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >.

LT-

Type III *Effect(RISK) arises from Cause*

This argument structure is evoked by the following verbs:

EN arise from, result from, arise+when-subordinate clause

FR découler, survenir, résulter

LT kilti, atsirasti

<table>
<tr><td colspan="2" align="center">**Model A**</td></tr>
<tr><td colspan="2" align="center">V</td></tr>
<tr><td align="center">Effect **RISK**(Sbj.)</td><td align="center">Cause (Compl.)</td></tr>
</table>
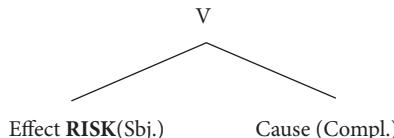
EN

1) **Liquidity risk** [Effect] **can potentially arise from any of the banking-type ancillary services** [Cause] performed by the CSD. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

2) < … > "operational risk" means **the risk of loss** [Effect] **resulting from inadequate or failed internal processes, people and systems or from external events** [Cause] and includes legal risk. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

3) **"General Wrong-Way risk"** [Effect] **arises when** [Cause] the likelihood of default by counterparties is positively correlated with general market risk factors. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

FR

1)**Risques/risques juridiques/financiers/opérationels** [Effect] *découlant* **de la prestation des services**[Cause]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/394 DE LA COMISSION du 11 novembre 2016*>

2) < ...> **le risque cumulatif** [Effect] *résultant* **de défauts multiples**[Cause], y compris les différentes séquences de défauts, dans des produits subdivisés en tranches. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

3) Aux fins de l'article 45, paragraphe 3, point b), du règlement (UE) no 600/2014, les critères servant à déterminer **les situations** [Cause] **dans lesquelles un risque d'arbitrage réglementaire** [Effect] est susceptible de *survenir* < ...>. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>.

LT

1) **Dėl paslaugų teikimo** [Cause] *kylanti* **finansinė rizika**[Effect]. <*KOMISIJOS ĮGYVENDINIMO REGLAMENTAS (ES) 2017/394 2016m. lapkričio 11d.*>

2) <...> sisteminės svarbos įstaiga– ES patronuojančioji įstaiga, ES patronuojančioji finansų kontroliuojančioji bendrovė, ES patronuojančioji mišrią veiklą vykdanti finansų **kontroliuojančioji bendrovė** arba įstaiga [Cause], dėl kurios, jei ji nevykdo įsipareigojimų arba jos veikla sutrinka, **galėtų** *kilti* **sisteminė rizika** [Effect]. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

3) <...> **likvidumo rizika** [Effect] *gali atsirasti* ir **dėl kitų dalyvių** [Cause], ne tik dėl paties didžiausio<...>. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016 m. lapkričio 11d* >

	Model B
V

Effect **RISK**(Sbj.)	Experiencer (Compl.)	Cause (Compl.)

EN -

FR

1)< ...> **les risques titrisés** [Effect] **sur des biens immobiliers résidentiels ou commerciaux** [Experiencer] **soient créés par un membre du groupe consolidé** [Cause] dont ľémetteur des obligations garanties est également membre < ...>. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

LT

1) <...> ar **dėl struktūrizuoto indėlio, finansinės veiklos arba finansinės praktikos** [Cause] **Sąjungos ekonomikai** [Experiencer] *kiltų* **rizika**[Effect]. <*KOMISIJOS DELEGUOTASIS RERGLAMENTAS (ES) 2017/567 2016m. gegužės 18d.*>

2) <...> kartotinis pakeitimas vertybiniais popieriais arba jeigu komercinį vekselį visiškai padengia finansuojanti įstaiga, kai **komercinio vekselio investuotojui** [Experiencer]iš esmės *kyla* **rizika** [Effect] , **kad rėmėjas neįvykdys įsipareigojimų** [Cause] <...> . <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr. 575/2013 2013m. birželio 26d.*>

3) **Investicinė rizika yra nuostolio rizika** [Effect]**, kuri** *kyla* **CVPD** [Experiencer], **kai jis investuoja nuosavus ar savo dalyvio išteklius, tokius kaip įkaitas** [Cause]. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016 m. lapkričio 11d* >

The findings presented in the tables reveal the following tendencies: the SWT/MWTs *risk/risque/rizika* always perform the semantic role of Effect. However, its syntactic positions in the sentences are different and depend on the verbs forming the argument structures:
- In English, SWT/MWT *risk* takes the following positions:
  - the position of the object in the argument structures formed by the verbs *pose, generate, entail, create, constitute, involve;*
  - the position of the subject in the arguments structures formed by the verbs *cause (passive form), arise;*
  - the position of the complement in the argument structures formed by the verbs *lead to, give rise to, expose to.*
- In French, SWT/MWT *risque* takes the following positions:
  - the position of the object in the argument structures formed by the verbs *entraîner, créer, (re)présenter, impliquer, apparaître, comporter, engendrer, peser, poser;*
  - the position of the subject in the arguments structures formed by the verbs *résulter, découler, créer;*

- the position of the complement in the argument structures formed by the verbs *donner lieu à, exposer à, être exposé à.*
- In Lithuanian, SWT/MWT *rizika* takes the following positions:
  - the position of object in the argument structures evoked by the verbs *kilti, atsirasti;*
  - the position of the subject in the argument structures evoked by the verbs *kelti, grėsti.*

The analysis reveals that most frequently in the three languages the SWT/MWTs *risk/risque/rizika* takes the position of the object.

Lexical expression of the frame

The predicative frame CAUSE_RISK reveals new information about the terms with the nominal base *risk/risque/rizika*. CAUSE_RISK frame uncovers relationships among three semantic roles Cause, Effect, Experiencer. The Cause initiates the Effect (RISK) which affects the Experiencer. The lexical analysis of the participants of the frame reveals the following tendencies:
- the Cause is denoted by nouns/noun phrases which might be classified into four semantic categories in the investigated languages: a) physical and institutional actors; b) financial tool; c) actions or processes.
- the Effect is denoted by the SWT/MWTs *risk/risque/rizika.* MWTs denote various types of risk, classified according to the elements of the frame RISK_scenario: a) *Asset*; b) *Protagonist*; c) *Harmful_event*; e) *Intensity/Extension of risk.*
- the Experiencer refers to physical and institutional actors, which are part of the financial system (see Figures 13-14).

Figure 13. CAUSE_RISK frame for English

Cause is expressed by the terms denoting:
a) physical and institutional actors: *obligors, client, users, two or more natural or legal persons, guarantor, other participants, CCP, systematic internaliser, people; institution(s), entities, CCP, systems, service provider(s), critical utilities;*
b) a financial tool: *business models, number or volume of orders, exposures, credit exposure, short positions, financial instruments (covered bonds, credit derivatives, contracts, investments of a CSD, credit default swap, obligations), bank-type ancillary services;*
c) actions or processes: *failure of an institution, malfunction of an institution, changes, deficiencies in information systems, internal processes, personnel's performance, disruptions, borrowing and lending operations, inadequate and failed internal processes, external events, potential changes, multiple defaults, risk of excluding, establishment of the issuer, financial practice, financial activities, non-trading book activities.*

verbs denoting risk causation
EN
pose/entail/create/cause/constitute/ generate/involve/lead to/give rise to expose arise from/result from

Effect is expressed by the terms denoting:
a) risk related to an *Asset*: risk of credit loss, credit risk, risk of securization;
b) risk related to a *Protagonist*: counterparty (credit) risk;
c) risk arising from certain *Harmful _event*: operational risk, settlement risk, default risk;
d) risk of certain *Intensity/Extension*: excessive risks, significant (higher) risk, material liquidity risk, a high risk of disruption, low risk, general risk, potentially high risk of contagion, higher risk of price abuse, material risk of damage, undue risk, unacceptable risk, single risk, huge reputational risk, material liquidity risk, similar risk, specific and general wrong-way risk, systemic risk.

Experiencer is expressed by the terms denoting:
physical and institutional actors: *third parties, other entities, group, interests of one or more users of the CSD, interests of one or more clients, sponsor, original lender, commercial paper investor, originator; financial institutions, financial system, CSD, financial sector, the Union, CCP, ECA, business model.*

Figure 14. CAUSE_RISK frame for French

Cause is expressed by the terms denoting:
a) physical and institutional actors : *les autres participants, le membre du groupe consolidé, le débiteur, le sponsor, le prêteur initial or individuel; l'émetteur, l'/les établissement(s), le prestataire de services, le fournisseur de services de réseau, les entités, l'établissement de crédit, le DCT-prestataire de services bancaires, le marché, les services de pilotage;*
b) a financial tool: *l'instrument financier, le modèle (interne), les instruments du marché monétaire, les éléments liés à des crédits commerciaux, les instruments financiers très liquides, le levier éventuel, le modèle d'entreprise, les garanties hautement liquides, la position détenue, les positions courtes, le dépôt structuré, les actifs financiers, les expositions, les obligations de société, les services de pilotage;*
c) actions or processes: *l'exécution des ordres, le dysfonctionnement ou la défaillance, la modification des conditions de marché, l'activité ou la pratique financière, les livraisons de services de télécommunication, l'exclusion de certains acteurs du mécanisme, l'accès, la concentration des actives, le nombre et le volume des ordres, les contributions au fonds, l'utilisation de sûretés, l'interaction avec le profil de risque global de l'établissement, la prestation des services, les défauts multiples, la mise en oeuvre de technique d'atténuation du risque de crédit, les actifs financiers.*

verbs denoting risk causation
FR
entaîner/créer/ poser/comporter/(re)prés enter/ engendrer/exposer/s'expo ser/être exposé/résulter/survenir/ impliquer/découler/ (faire) apparaître/faire peser/faire courir/donner lieu à

Experiencer is expressed by the terms denoting institutional actors and their activity (or asset): *le marché, l'infrastructure des systèmes de paiement, les systèmes de paiement, les systèmes de négociation/ de compensation/de règlement, le système financier/de propres opérations, les biens immobiliers/ résidentiels/commerciaux; l'entreprise, l'organe central ou régional.*

Effect is expressed by the terms denoting:
a) risk related to an *Asset*: *le risque de liquidité, le risque de crédit, le risque de perte de crédit, le risque de pertes, le risque financier;*
b) risk related to a *Protagonist*: *le risque de contrepartie, le risque juridique;*
c) risk arising from certain *Harmful _event*: *le risque opérationnel, le risque de surcompensation des acteurs, le risque de concentration, le risque d'arbitrage réglementaire, le risque de fraude;*
d) risk of certain *Intensity/Extension*: *le risque systémique, le risque significatif, le risque de base, le risque de concentration significatif, le risque de crédit faible/peu élevé/ élevé, le risque de marché faible/peu élevé/ élevé, le risque important, le risque cumulatif, le risque excessif, le risque analogue, le risque de levier excessif.*

Figure 15. CAUSE_RISK frame for Lithuanian

Cause is expressed by the terms denoting:
a) physical and institutional actors: *du ir daugiau fizinių ar juridinių asmenų, kiti dalyviai, paslaugų teikėjai, žmonės, sandorio šalis, emitento įsteigimas, dalyviai ir kiti naudotojai, kiekviena sandorio šalis; finansų rinkos infrastruktūra, sistema, įstaiga(-os), nacionalinė rinka;*
b) a financial tool: *finansinė priemonė (struktūrizuotas indėlis, sandoris, padengtos obligacijos), pozicijos, finansinė veikla, finansinė praktika, politika, procedūrų ir kontrolės priemonių pakeitimas, dinamiška apsidraudimo strategija, bankinio tipo paslauga, apskaitos informacijos forma, nacionalinis turtas;*
c) actions and processes: *prieiga, netinkami arba nevykusi vidaus procesai, išorės įvykiai, įstaigos įsipareigojimų neįvykdymas, CVPD vykdoma veikla, naudojamų duomenų nenuoseklumas, neprakybos veikla, pasikeitusios rinkos sąlygos, turto koncentracija, piniginiai atsiskaitymai.*

verbs denoting causation risk
LT
(su)kelti, grėsti/kilti/atsirasti

Effect is expressed by the terms denoting:
a) risk related to an *Asset*: *kryžmininių subsidijų rizika, investicinė rizika, palūkanų normos rizika, likvidumo rizika;*

b) risk related to a *Protagonist*: -

c) risk arising from certain *Harmful_event*: *sisteminė rizika, teisinė risk, operacinė rizika, su atsiskaitymu susijusi rizika, pajėgumų sulaikymo rizika, vėlavimo rizika, konkurentų šalinimo rizika, koncentracijos rizika, perkėlimo rizika;*

d) risk of certain *Intensity/Extension*: *nepriimtina rizika, didelė klaidingų sprendimų rizika, panaši rizika, reikšminga rizika, panašaus lygio rizika, pernelyg didelio sverto rizika.*

Experiencer is expressed by the terms denoting:
physical and institutional actors: *CVPD naudotojas ar jo klientas, CVPD bankinio tipo paslaugų teikėjas, paraišką teikiantis CVPD, subjektas, pagrindinė sandorio šalis, operatorius, CVPD ir kiti naudotojai, komercinio vekselio investuotojas; finansų sistema, CVPD, Sąjungos ekonomika, bankai.*

The predicative frame CAUSE_RISK uncovers the fact that risk can be caused by physical and institutional actors, a financial tool, or actions and processes (usually unsuccessful or failed). The category of physical and institutional actors designates institutions or individuals who cause risk. The category of a financial tool is larger than financial instruments; financial instruments designate assets or packages of capital that can be traded; these assets can be cash or a contractual right, a real or virtual document, while a financial tool encompasses more than liquid assets or contracts (Investopedia).

Each semantic category of the frame concepts is represented by terms; however, the lexical content of the categories coincide only partially in the investigated languages, e.g.:

- the semantic category 'physical and institutional actors' representing the concept Cause is instantiated by the English nouns/noun phrases *guarantor, clients, systematic internaliser, CCP* which are not present in the Lithuanian material neither in French;
- the semantic category 'financial tool' referring to the concept Cause is expressed by the Lithuanian nouns/noun phrases *struktūrizuotas indėlis* 'structured deposit', *nacionalinis turtas* 'national asset' which were not detected in the English material, while the majority of terms in the English and French material coincide *exposures-expositions, obligations-obligations, financial activities-actifs financiers, short positions-positions courtes*;
- although the semantic category ' action or processes' referring to the concept Cause is equally instantiated in number of terms for English and French (16 terms for English and French), some terms do not overlap, in French there are *l'utilisation de sûretés* ' the use of collateral', *l'interaction avec le profil de risque global de l'établissement* ' the interaction with the institution's overall risk profile', *la mise en oeuvre de technique d'atténuation du risque de crédit* 'the use of credit risk mitigation techniques', these terms were not detected for English; the terms *borrowing and lending operations, external events* were captured in English, but they were not found in French material;
- the semantic category 'risk of certain *Intensity/Extension*' representing the concept Effect is the most largely instantiated in English (18 terms) and in French (15 terms), while in Lithuanian there are not numerous evidence (7 terms);
- in the French material, the semantic category 'risk of certain *Intensity/Extension*' referring to the concept Effect usually provides examples with different degrees of intensity of risk related to one term, e.g., *le risque de crédit faible/peu élevé/* élevé 'high/medium/low credit risk', *le risque de marché faible/peu élevé/* élevé 'high/medium/low market risk', while for other languages this tendency was not captured;
- in the semantic category 'risk of certain *Intensity/Extension*' representing the concept Effect, only two terms overlap in the investigated languages: *similar risk – risque analogue – panaši rizika, significant risk – risque significatif – reikšminga rizika*, the rest is not the same.
- in the semantic category '*Asset*' referring to the concept Effect only one term overlaps in French and Lithuanian *le risque de liquidité* 'liquidity risk' – *likvidumo rizika*, however this term was not found in the English material;
- the semantic category '*Protagonist*' representing the concept Effect contains one or

two terms for English and French, while in Lithuanian this category was not detected;

- the category '*Harmful_ event*' of the concept Effect for French provides two new terms *un risque de fraude* 'the risk of fraud', *le risque d'arbitrage réglamentaire* 'risk of regulatory arbitrage' which were not detected in either English or Lithuanian;
- in the category '*Harmful_ event*' of the concept Effect, only one term *operational risk* overlaps in the three languages, while the term 'legal risk' was found in the French and Lithuanian material *risque juridique – teisinė rizika*;
- in the category of the concept Experiencer, only three terms overlap in English and Lithuanian: *financial system – finansinė sistema, entity – subjektas, commercial paper investor – komercinio vekselio investuotojas,* while in French this category is usually expressed by the terms denoting a certain type of financial system, e.g., *le système de paiement* 'payment system', *le système de compensation* 'compensation system', thus, only one term overlaps *le système financier* 'financial system'.

Such observations lead to the conclusion that causative verbs in English (12 verbs), French (17 verbs) and in Lithuanian (4 verbs) do not attach the same terms. In parallel texts professionals use different linguistic means in order to express the same meaning in the target language. The examples provided below illustrate the differences in the equivalents used in the three analysed languages, which can explain the different number and nature of the attached terms. The following examples are focused on the equivalents used in the sentences including SWT *risk* or MWTs *risk*:

*1) constitute a huge reputational risk to the group - constituer un énorme risque pour la réputation du groupe - sukelti didelį **pavojų** 'danger' grupės reputacijai* (in English and French MWT *risk/risque* was used, while in Lithuanian the term *rizika* was translatated by its synonym **pavojus 'danger'**)

EN A default of the obligor/guarantor would *constitute a huge reputational risk to the group*, damage its franchise and could threaten its viability <*Commission Delegated Regulation (EU) 2018/179 of 25 September 2017*>.

FR <...> un défaut de l'emprunteur/du garant *constituerait un énorme risque pour la réputation du groupe*, nuirait à sa franchise et pourrait mettre en péril sa viabilité <*Décision d'exécution (UE) 2017/2013 du Conseil du 7 novembre 2017*>.

LT <...> skolininko (garanto) įsipareigojimų nevykdymas *sukeltų didelį pavojų grupės reputacijai*, pažeistų jos franšizę ir keltų pavojų jos gyvybingumui <*Tarybos Įgyvendinimo sprendimas (ES) 2017/2013 2017m. lapkričio 7d. >*

*2) prevent the VAT fraud -présenter **un risque de fraude** -užkirsti kelią sukčiavimui* (MWT *risque* occurred in French, while in English and Lithuanian it was omitted)

EN The aim of the requested derogation is to *prevent the VAT fraud* in the sector of telecommunication services<*Commission Delegated Regulation (EU) 2018/179 of 25 September 2017*>.

FR Bien que les livraisons de services de télécommunication, qui *présentent un risque de fraude*, fassent l'objet d'une surveillance étroite <...>. <*Décision d'exécution (UE) 2017/2013 du Conseil du 7 novembre 2017*>.

LT <...> prašomos nukrypti leidžiančios nuostatos tikslas – *užkirsti kelią sukčiavimui* PVM telekomunikacijų paslaugų sektoriuje. <*Tarybos Įgyvendinimo sprendimas (ES) 2017/2013 2017m. lapkričio 7d.* >.

3) pose excessive risks to the soundness of an institution - **compromettre** *de manière excessive la solidité d'un établissement*- **kelti pernelyg didelę riziką** *įstaigos patikimumui* (in English and Lithuanian the term *risk/rizika* was used, while in French it was omitted)

EN <...> to restrict or limit the business, operations or network of institutions or to request the divestment of activities that *pose excessive risks to the soundness of an institution* <Directive 2013/36 /EU of the European Pariament and of the Council of 26 June 2013>.

FR <...> restreindre ou limiter l'activité, les opérations ou le réseau des établissements, ou de demander la cession d'activités qui *compromettent de manière excessive la solidité d'un établissement* <Directive 2013/35/UE du Parlement Européen et du Conseil du 26 juin 2013>

LT <...> uždrausti arba apriboti veiklą, sandorius arba įstaigų tinklus arba reikalauti sumažinti investicijas į veiklą, kuri *kelia pernelyg didelę riziką įstaigos patikimumui* <*Europos Parlamento ir Tarybos Direktyva 2013/36/ES 2013m. birželio 26d.*>

4) leave the Union economy **vulnerable** to risks – **faire courir** des risques à l'économie de l'Union – **kilti** *rizikai Sąjungos ekonomikoje* (in French and Lithuanian there are verbs *faire courir/ kilti* 'arise' which were attributed to the frame CAUSE_RISK, while in English the causation was expressed by a phrase composed of a verb and an adjective 'leave vulnerable to risks')

EN<...> whether the structured deposit, the financial activity or the financial practice *would leave the Union economy vulnerable to risks* <...> <Commission Delegated Regulation (EU)2017/567 of 18 May 2016>.

FR <...> le fait ou non que le dépôt structuré ou l'activité ou la pratique financière *ferait courir des risques à l'économie de l'Union* <...> <Règlement Délégué (UE) 2017/567 de la Commission du 18 mai 2016>.

LT <...> ar dėl struktūrizuoto indėlio, finansinės veiklos arba finansinės praktikos *Sąjungos ekonomikai kiltų rizika* <Komisijos Deleguotasis Reglamentas (ES) 2017/568 2016 m. gegužės 18d.>.

The equivalence of parallel texts will be discussed in more detail in Part 4 of the thesis.

Moreover, the individual verbs of the same language express particular preferences in attraction of certain types of lexical items. The investigation reveals that the verbs belonging to different synonymic groups attach different words and, thus, sheds the light on the nuances of the semantic meaning of the verbs.

In the English material the synonyms *pose, create, generate, give rise to, lead to* attach different lexical items expressing the Cause which initiates the harmful effect or the Experiencer which experiences this harmful effect, e.g.:

- In the English sentences with the verb *pose,* the Cause is expressed by nouns designating physical or institutional actors (*obligor, clients; institution*), the Experiencer is

expressed by nouns designating financial body (*financial system*), while the Effect is expressed by nouns emphasising the degree of intensity of risk (*excessive risk*).

- In the English sentences with the verbs *give rise to, lead to,* the Cause is expressed by the nouns denoting negative process (*the failure of institution*), the Experiencer is expressed by the nouns designating organisation (*The Union*), while the Effect is expressed by nouns with general meaning (*general wrong-way risk*).

The semantic role of Effect going together with the above-mentioned verbs is expressed by terms usually denoting the *Intensity* or *Extension* of risk and an *Asset*, e.g., *excessive risks, significantly higher risk; credit risk, liquidity risk*.

In the French material the verbs *entraîner* 'entail', *impliquer* 'involve', *engendrer* 'generate', *créer* 'create' *poser* 'pose' are considered as close synonyms, however, they attach different nouns for the semantic role of Cause:

- the verb *entraîner* 'entail' and *engendrer* 'generate' attach for the role of Cause nouns denoting negative actions/processes (*le dysfonctionnement or la défaillance d'un établissement* 'the failure or malfunction of an institution', *la modification des conditions de marché* 'changes in market conditions', *l'exlusion des certains acteurs du méchanisme* 'the exclusion of certain operators from the mechanism');
- the verb *impliquer* 'involve' usually attaches for the role of Cause nouns denoting the amount of asset or institutions which are under the risk (*les positions courtes* 'short positions', *les expositions des établissements* 'exposures of institutions');
- the verb *poser* 'pose' attaches for the role of Cause nouns denoting the participants of financial system (*l'*établissement 'institution', *les prestataires de services et fournisseurs de service de réseau* 'critical utilities providers and critical service providers');
- the verb *créer* 'create' attaches more often for the role of Cause nouns denoting the financial tool (*le dépôt structuré* ' structured deposit ', *l'instrument financier* 'financial tool').

The semantic role of Effect going together with mentioned above verbs is expressed by the terms denoting the *Intensity* or *Extension* of risk and a *Protagonist* of risk, e.g., *le risque significatif* 'significant risk', *le risque systématique* 'systemic risk', *le risque de contrepartie* 'counterparty risk'.

Such differences were not observed in the Lithuanian material. Therefore, the Lithuanian verbs *atsirasti, kilti* might be considered as strict synonyms.

All in all, the predicative frame CAUSE_RISK enabled the revelation of a great variety of argument structures and their semantico-syntactic models. In this frame SWT/MWTs *risk/risque/rizika* take different syntactic positions: subject, object, and complement. The SWT/MWTs most often express risk related to a *Harmful_event* or risk of a certain *Intensity/Extension*. However, the MWTs *risk/risque/rizika* in this frame are not numerous (32 for English, 27 for French and 20 for Lithuanian). Moreover, they do not attach all 70 MWTs *risk/risque/rizika* extracted for the analysis, but a restricted number of the MWTs *risk/risque/rizika*. The choice of the MWTs *risk/risque/rizika* depends less on the semantics of the verbs activating the MWTs *risk/risque/rizika*, but more on the context, where the MWTs *risk/risque/rizika* occur. Moreover, the term *risk/risque/rizika* can be also used in the sentences without any modifier. On the other hand, the translation of financial texts has

impact on the number and nature of the MWTs *risk/risque/rizika*. The argument structures activated by the verbs belonging to this frame revealed the typical semantic categories denoting the concepts of the Cause, Effect and Experiencer.

3.2.3.2. EXPERIENCE_RISK frame for English, French and Lithuanian

The frame puts emphasis on the fact that an **Experiencer** undergoes a harmful **Effect** (RISK). The frame Experience_bodily_harm from FrameNet does not provide the element designating the result of the injury; therefore, this frame was adapted to the financial field on the basis of the description of the situation when somebody or something experiences a physical injury or a negative outcome, which is similar to the situation that can happen to participants in the financial field, when a physical or institutional actor undergoes the risk. The situation is viewed from the perspective of the entity which bears the risk.

Definition:

A **Experiencer** experiences an **Effect**(RISK)**.**

(based on the definition of the frame Experience_bodily_harm from FrameNet:

An Experiencer is involved in a bodily injury to a Body_part. Often an Injuring_entity on which the Experiencer injures themselves is mentioned. The Experiencer injures him/herself on an Injuring_entity.)

Examples:

EN **Alki LP** licenses the valuable intellectual property and **bears the entrepreneurial risk.** <*Commission Decision (EU) 2017/502 of 21 October 2015*>

FR < …> le système de mesure du risque opérationnel de l'établissement utilise des données externes pertinentes, surtout s'il y a lieu de penser que **l'établissement** *encourt* **le risque de pertes** potentiellement sévères, quoiqu'exceptionnelles. <*RÉGLEMENT(UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

LT **„Alki LP"** suteikia licencijas, susijusias su vertinga intelektine nuosavybe, ir **prisiima verslo riziką**.<*KOMISSIJOS SPRENDIMAS (ES) 2017/502 2015 m. spalio 21d.*>

The EXPERIENCE_RISK frame encompasses all verbs extracted from the financial corpus with the semantic meaning '*to accept or endue something unpleasant*'. The frame involves three participants performing the semantic roles of Experiencer, Effect, and Cause, however, it directs focus towards the Experiencer experiencing harmful Effect (RISK). Thus, the Experiencer always performs the syntactic role of subject.

Syntactic expression of the frame

The EXPERIENCE_RISK frame is represented by one type of argument structure that has one semantico-syntactic model:

Type I '*Experiencer bears Effect (RISK)*':

Experiencer (Sbj.)+V+Effect (RISK)(Obj.) +[Cause(Compl.)]

The realisation of this model in English and Lithuanian overlaps, i.e. both variations with the complement *Cause* and without it, were captured with examples, while the French material does not provide examples with the complement *Cause*. The provided examples show, that the *Cause* in the position of a complement can be considered optional, because when it is removed from the sentence it does not affect the meaning of the sentence, e.g., < This should include **the risks** [Effect] **that the CSD** [Experiencer] ***bears*** **[from any other entities** [Cause]] < …>> <*Commission Delegated Regulation (EU) 2017/392 of 11 November 2016*>; Tai turėtų apimti **riziką**[Effect]**, kuri CVPD** [Experiencer] ***tenka*** [**dėl kitų subjektų**[Cause]], ir jo keliamą riziką trečiosioms šalims, įskaitant naudotojus ir, kiek įmanoma, jų klientus <...>. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016 m. lapkričio 11d.* >

This argument structure is evoked by the following verbs:

EN *bear, face, incur, assume, take on, undertake, have*

FR *encourir, courir, prendre, assumer, supporter, détenir*

LT *patirti, prisiimti, susidurti, tekti*

The extended list of the examples can be found in the appendix 4.
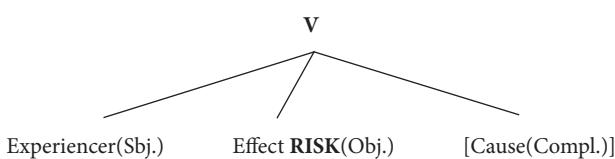
EN

1) < … > **Alki LP**[Experiencer] licenses the valuable intellectual property and ***bears*** **the entrepreneurial risk** [Effect]. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

2) < … > Guidelines clarify that control should be understood, in this context, as **the capacity (of a company)** [Experiencer] to make decisions ***to take on*** **the risk** [Effect] and to manage it. <*Commission Decision (EU) 2017/502 of 21 October 2015)*>

3) < … > similarly, **custody risk** [Effect] ***faced*** **by a CSD** [Experiencer] on own assets held by a custodian bank or other CSDs should not be double-counted. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

4) This should include **the risks** [Effect] **that the CSD** [Experiencer] ***bears*** **from any other entities** [Cause] and the risks that it poses to third parties, including its users and to the extent practicable their clients, as well as linked CSDs, central counterparties, trading venues, payment systems, settlement banks, liquidity providers and investors. <*Commission Delegated Regulation (EU) 2017/392 of 11 November 2016*>

5) Given the nature of the activities of CSDs, **a CSD** [Experiencer] ***assumes*** **business risk** [Effect] **due to potential changes in general business conditions** [Cause] that are likely to impair its financial position. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

FR

1)<…>le système de mesure du risque opérationnel de l'établissement utilise des données externes pertinentes, surtout s'il y a lieu de penser que **l'établissement** [Experiencer] *encourt* **le risque de pertes**[Effect] potentiellement sévères, quoiqu'exceptionnelles. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

2) <...> la Commission exprime des doutes quant à la capacité d'Alki LP à supporter et à contrôler les risques d'entreprise. Lorsqu'**une entreprise**[Experiencer] *prend un risque* [Effect], elle doit d'une part pouvoir contrôler les risques (166) et, d'autre part, pouvoir *assumer* **financièrement un tel risque** [Effect] . <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21octobre 2015* >

3) <...> SMBV n'exécute que des tâches d'exécution journalières dans le domaine de la torréfaction du café, de la mise sous emballage du café et de l'offre de services logiques et administratifs, alors qu'**Alki LP** [Experiencer] prend la précieuse propriété intellectuelle sous licence et *supporte* **le risque commercial** [Effect] de sorte que SMBV est l'entité la moins complexe. <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21octobre 2015* >

LT

1) Duomenys pateikiami atskirai apie kiekvieną turto rinką Sąjungoje, kurioje atitinkama **įstaiga** [Experiencer] *patiria* **riziką**[Effect]. <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr. 575/2013 2013m. birželio 26d.*>

2) <...> rizika grindžiamas nuosavų lėšų reikalavimas yra ypač svarbus, siekiant užtikrinti, kad nuosavų lėšų dydžio reikalavimas būtų pakankamas nenumatytiems nuostoliams padengti. Tačiau krizė parodė, kad vien to reikalavimo nepakanka, kad **įstaigoms**[Experiencer] būtų užkirstas kelias *prisiimti* **pernelyg didelę ir netvarią sverto riziką**[Effect]. <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr. 575/2013 2013m. birželio 26d.*>

3) <...> siekdamas sukurti patikimą rizikos valdymo sistemą, CVPD turėtų integruotai ir visapusiškai apžvelgti visą svarbią riziką. Tai turėtų apimti **riziką**[Effect]**, kuri CVPD** [Experiencer] *tenka* **dėl kitų subjektų**[Cause], ir jo keliamą riziką trečiosioms šalims, įskaitant naudotojus ir, kiek įmanoma, jų klientus <...>. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016 m. lapkričio 11d.* >

4) <...> jokio papildomo reguliuojamojo kapitalo poreikio koeficiento ir ją reikėtų priskirti su operacine rizika susijusiam reguliuojamajam kapitalui. Panašiai **saugojimo rizika**[Effect]**, su kuria** *susiduria* **CVPD** [Experiencer] **dėl nuosavo turto**[Cause], kuris yra jį saugančiame banke ar kituose CVPD, neturėtų būti priskaičiuojama du kartus, ir reikalauti kokio nors papildomo reguliuojamojo kapitalo nereikėtų<...>. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016 m. lapkričio 11d.* >

The findings presented in the table reveal the following tendency: the SWT/MWTs *risk/ risque/rizika* perform the semantic role of Effect and always occupy the syntactic position of object in the three languages. The Experiencer takes position of the subject, while the Cause takes the place of the complement. The Cause appears only with the English verbs *bear, assume* and the Lithuanian verbs *tekti* 'fall on'/*susidurti* 'face'.

Lexical expression of the frame

The predicative frame EXPERIENCE_ RISK reveals new information about the terms with the nominal base *risk/risque/rizika*. EXPERIENCE_RISK frame most often uncovers the relationship between two semantic roles (Experiencer and Effect), rarely among three (Experiencer, Effect and Cause). The Experiencer is affected by the Effect (RISK) which is caused by the Cause (rarely indicated). In the sentences with the verbs *bear, face, have – encourir, courir, supporter, détenir – parirti, susidurti, tekti* the Experiencer is passive. It undergoes the risk which perhaps was not predicted, while with verbs *assume, take on – assumer, prendre – prisiimti* the Experiencer is active. The Experiencer understands that the situation or enterprise is risky, thus, it consciously undertakes risk.

The lexical analysis of the participants of the frame reveals the following tendencies:

- the Experiencer is denoted by nouns classified in the two semantic categories: a) physical and institutional actors or their ability to take on risk; b) financial tools;
- the Effect is denoted by SWT/MWTs *risk/risque/rizika*. MWTs denote various type of risk, classified according to the elements of the frame RISK_scenario: a) *Asset*; b) *Protagonist*; c) *Harmful_event*; d) *Intensity/Extension* of risk.
- the Cause is illustrated by few terms related to financial entities or processes (see Figures 16-18).

Figure 16. EXPERIENCE_ RISK frame for English

Experiencer is expressed by the terms denoting:
a) physical and institutional actors or their ability to take on risk: *Alki LP, SMBV, Alki's capacity, company, (credit) institution, capacity of the company, CSD, investment firms; operator, client, party, manufacturer, issuer, entity*
b) a financial tool: *financial instrument, debt instruments.*

verbs denoting risk experience:
EN
bear/face/incur/assume/ take on(undertake), have

Cause is expressed by the terms: *any other entities, potential changes in general business conditions.*

Effect is expressed by the terms denoting:
a)**risk related to an** *Asset*: *risk of credit loss, ultimate stock risk, investment(s) risk, credit risk, foreign exchange risk, inventory risk, financial risk;*
b) **risk related to a** *Protagonist*: *company risk, economic risk, entrepreneurial risk, business risk;*
c) **risk arising from certain** *Harmful_event*: *migration risk, custody risk;*
d)**risk of certain** *Intensity/Extension*: *significant risk, low credit risk, low market risk, low credit and market risk.*

Figure 17. EXPERIENCE_ RISK frame for French

Experiencer is expressed by the terms denoting: physical and institutional actors: *Alki LP, SMBV, Starburck, le DTC, l'établissement (les établissements), l'établissement prêteur, l'entreprise; le client, la partie, l'acteur, les producteurs, le pays.*

verbs denoting risk experience:
FR
encourir/courir/assumer/supporter/détenir/prendre

Effect is expressed by the terms denoting:
a)risk related to an *Asset*: *le risque d'investissement, le risque de pertes, le risque de liquidité, le risque des matières premières, le risque de crédit, le risque financier;*
b) risk related to a *Protagonist*: *le risque/les risques d'entreprise, le risque économique, le risque commercial;*
c) risk arising from certain *Harmful_event*: -
d) risk of certain *Intensity/Extension*: *le risque d'entreprise significatif, le risque excessif, le faible risque, le risque final.*

Figure 18. EXPERIENCE_ RISK frame for Lithuanian

Experiencer is expressed by the terms denoting: physical and institutional actors *įstaiga(-os), SMBV, „Starburs US", bankų sektorius, Alki LP, CVPD, kredito įstaiga, bendrovė, investicinė įmonė, bankas „Vestjysk"; trečios šalys, teikėjas, savininkas, šalis, klientas.*

verbs denoting risk experience:
LT
patirti, prisiimti, susidurti, tekti

Cause is expressed by the terms: *kiti subjektai, ne prekybos veikla, nuosavas turtas.*

Effect is expressed by the terms denoting:
a)risk related to an *Asset*: *investicijų rizika, kredito rizika, likvidumo rizika;*
b) risk related to a *Protagonist*: *sandorio šalies rizika, ekonominė SMBV rizika, verslo rizika;*
c) risk arising from certain *Harmful_event*: *operacinė rizika;*
d) risk of certain *Intensity/Extension*: *reikšminga rizika, ribota rizika, pernelyg didelė ir netvari sverto rizika, pernelyg didelė rizika, pernelyg didelė ir nepagrįsta rizika, visa bendrovės rizika.*

The predicative frame EXPERIENCE_RISK uncovers the fact that risk affects institutions, individuals and financial tools. Each semantic category of the concepts is represented by terms; however, the lexical contents of the categories coincide only partially in the investigated languages, e.g.:

- the category 'physical or institutional actors' of the concept Experiencer is denoted by the English nouns *operator, manufacturer, issuer, entity* which are not present in Lithuanian;
- the category 'financial tool' of the concept Experiencer is expressed lexically only in the English material (*financial instrument, debt instruments*);
- in the category 'risk of certain *Intensity/Extension*' of the concept Effect, only one MWT overlaps in English and Lithuanian languages (*significant risk – reikšminga rizika*), while the other MWTs are different in the three languages;
- the category 'risk related to an *Asset*' of the concept Effect is denoted by more English and French MWTs than the Lithuanian ones (respectively 7-8-3), it is the most largely instantiated category;
- the category 'risk arising from certain *Harmful_event*' is not present in the French material, while in the English and Lithuanian languages this category, is illustrated by singular terms *migration risk, custody risk – operacinė rizika* 'operational risk';
- the category 'risk related to a *Protagonist*' of the concept Effect is denoted by the same MWTs in the three languages (*business/entrepreneurial risk – risque commercial/risque d'entreprise – verslo rizika*);
- the nouns/noun phrases denoting the concept Cause do not overlap in the English and Lithuanian languages, except one (*other entities – kiti subjektai*).

Such observations lead to the conclusion that experience verbs in English (7 verbs), French (6 verbs) and in Lithuanian (4 verbs) do not attach the same terms. Moreover, the verbs, belonging to the different synonym groups in the same language, also have different lexical preferences. The following differences are observed among the synonymic verbs and their arguments:

- the synonymic English verbs *have, take on* and *undertake*
  In the sentences with the verb *have,* the role of the Experiencer is expressed by nouns/noun phrases denoting an organisation (*credit institution*) or a financial instrument (*debt instrument*), the Effect is denoted by the MWTs which mean the intensity of risk (*low market risk*). In the sentences with the verbs *take on* and *undertake*, the Experiencer is expressed by the nouns/noun phrases denoting an organisation (*CSD*), the Effect is designated by the MWTs meaning *Intensity* of risk or risk related to a certain *Asset* (*significant risk, risk of loss*).
- the synonymic French verbs *encourir/courir, supporter*
  The slight difference lies in the type of MWTs used for the role of Experiencer: the verbs *encourir/courir* 'bear' prefer to attach terms denoting institutions (*l'établissement* 'institution') than individuals, while the verb *supporter* 'bear' attaches more often the terms denoting individuals (*l'acteur* 'participant', *le client* 'client').
- the synonymic Lithuanian verbs susidurti 'face', patirti 'bear' The slight difference lies in the type of MWTs used for the role of Effect: the verb *patirti* attaches the

MWTs desinating the *Intensity* of risk (*perelyg didelė rizika* 'excessive risk'), while the verb *susidurti* tends to attach the MWTs designating risk related to a certain *Asset* (*investicinė rizika* 'investment risk').

All in all, the predicative frame EXPERIENCE_RISK enabled the discovery that the MWTs *risk/risque/rizika* always take the position of the object. The MWTs most often express the risk related to an *Asset* and risk of a certain *Intensity/Extension*. However, the MWTs *risk/risque/rizika* are not numerous (17 for English, 14 for French and 13 for Lithuanian) as the term *risk/risque/rizika* is usually used without any modifier. The argument structures of the frame EXPERIENCE_RISK revealed the typical semantic categories of arguments activated by the verbs which denote the experience of harm, the argument that denotes the concept Experiencer is expressed by the lexical units related to physical or institutional actors and rarely to financial tools, whereas the argument that denotes the concept of Effect is more often expressed by terms which denote an *Asset* or risk of a certain *Intensity/Extension*.

3.2.4. The analysis of the frames of the second stage of the cognitive perception of RISK

3.2.4.1. PERCEIVE and ASSESS_RISK frame for English, French and Lithuanian

---

Definition:

An **Agent** perceives and assesses an **Effect (RISK)**.

↑

Definition:

An **Agent** causes an **Effect** (RISK) to be perceived by a **Experiencer**.

(based on the definition of the frames Cause_to_perceive from FrameNet:

An Agent, Actor, Entity, or Medium causes a Phenomenon to be perceived by a Perceiver)

Examples:

EN <…> documentation showing that **the ICAAP** clearly *identifies* **the concentration risk** arising from the large exposures to the regional or central body and that this is actively manage <…>. < *Guideline (EU) 2017/697 of the European Central Bank of 4 April 2017*>

FR <…> les documents indiquant que **l'ICAAP** *identifie* clairement **le risque de concentration** découlant des grands risques encourus sur l'organe régional ou central <…>. <*ORIENTATION (UE) 2017/697 DE LA BANQUE CENTRALE EUROPÉEN du 4 avril 2017*>

LT <…> dokumentus, įrodančius, kad **ICAAP** aiškiai ***nustato* koncentracijos riziką**, kylančią dėl regioninio arba centrinio organo didelių pozicijų, ir kad ji yra aktyviai valdoma <…>. <*EUROPOS CENTRINIO BANKO GAIRĖS (ES) 2017/687 2017m. balandžio 4d.*>

> **Definition:**
>
> An **Agent** assesses an **Effect** (RISK) to figure out **Amount** for it.
>
> **(based on the definition of the frame Assessing from FrameNet:**
>
> An Assessor examines a Phenomenon to figure out its Value according to some Feature of the Phenomenon. This Value is a factor in determining the acceptability of the Phenomenon. In some cases, a Method (implicitly involving an Assessor) is used to determine the Phenomenon's Value.)
>
> Examples:
>
> **EN** **An institution *shall also assess* the model risk.** <*Regulation(EU) Nr575/2013 of the European Parliament and of the Council of 26 of June 2013*>
>
> **FR** <... > l'approche fondée sur les notations internes (NI), du règlement (UE) no 575/2013, étant donné que ce règlement prévoit **des règles prudentielles pour *mesurer* le risque de crédit** résultant des expositions de crédit à vingt-quatre heures ou de plus longue durée. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>.
>
> **LT** **Įstaiga taip pat *vertina* modelio riziką.** <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

The frames Cause_to_perceive and Assessing frames from FrameNet were joined together and adapted for the financial field under the title PERCEIVE and ASSESS_RISK on the base of the logical relation between the processes of identification and evaluation of risk, i.e., if the risk is detected, it is necessary to evaluate immediately the importance of risk in order to choose and apply appropriate financial tools of risk mitigation. The actions of perception and assessment are connected more to the mental activity of humans than to practical action.

The terminology used to name the frame elements in Cause_to_perceive and Assessing frames was unified and applied to the financial field, i.e., the frame elements *Perceiver* and *Assessor* were replaced by the frame element *Agent*, both of which detect and assess the *Effect*; the frame element *Phenomenon*, which designates an entity or an idea that is perceived by the *Agent* was replaced by the *Effect*, and the *Value* was replaced by *Amount*, as the *Value* in Assessing frame designates 'a factor in determining the acceptability of the Phenomenon/Effect', while in the financial field it is more reasonable to speak about a specific sum of money needed to protect an institution or an individual from the risk, thus the *Amount* designates monetary realisation to cover the risk.

The PERCEIVE and ASSESS_RISK frame encompasses all verbs extracted from the financial corpus with semantic meaning *'to show that risk exists'* and '*to judge or decide the importance of risk'* attaching the terms with the nominal base *risk/risque/rizika*. The frame generally involves two participants performing the semantic roles of Agent, and Effect. However, in some cases the role of Means is added, it denotes the tool by which the risk is identified or assessed. The frame element Means is considered optional, as it provides supplementary information for the sentence, thus, it can be omitted. The verbs related to the evaluation of risk often activate the semantic role of Amount, which appears in the three languages. Amount refers to funds necessary for risk covering or to the value that is under risk.

Syntactic expression of the frame

The PERCEIVE and ASSESS_RISK frame is represented by two types of argument structure that has several subtypes (semantico-syntactic models):

Type I 'Agent identifies/assesses Effect (RISK)' has three semantico-syntactic models:

a) Agent (Sbj.) +[Means(Obj.)]+V+Effect (RISK)(Obj./Compl.)

b) Effect (RISK)(Sbj.)+V+Agent (Compl.);

c) Effect (RISK)(Sbj.)+V+Agent (implicit);

Type II 'Agent calculates Amount for Effect (RISK)' has two semantico-syntactic models:

a) Agent (Sbj.) +V+Amount (Obj.)+Effect (RISK)(Obj./Compl.);

b) Agent(implicit)+V+Effect (RISK)(Compl.).

The realisation of models in English, French and Lithuanian mostly overlaps, for English and French all models were presented in the corpus except for Type IIb. This type was detected as an extra one only for Lithuanian (the Lithuanian material was supplemented by this type). Below, the tables demonstrate all argument structures and their models illustrated by the annotated examples. The extent list of the annotated examples can be found in the appendix 5.

Type I *Agent identifies/assesses Effect (RISK)*

This argument structure is evoked by the following verbs. The verbs in brackets occurred less than five times in the corpus.

EN identify, capture, report (less frequent: detect, disclose, ascertain, point out); measure, assess, evaluate (less frequent: understand, underestimate, overestimate).

FR déterminer, détecter, comprendre, identifier, déceler, indiquer, (less frequent: relever, repérer, appréhender); évaluer, mesurer, apprécier, (less frequent: procéder à une évaluation, quantifier)

LT nustatyti, identifikuoti, nurodyti, pristatyti, pranešti; (į)vertinti, suprasti.
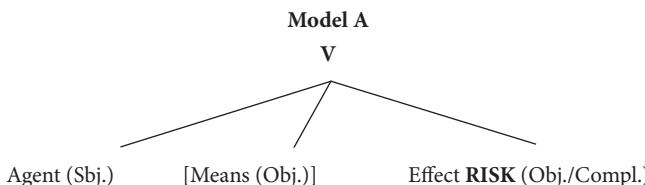
Model A

V

Agent (Sbj.)   [Means (Obj.)]   Effect **RISK** (Obj./Compl.)

EN

1) <…> documentation showing that **the ICAAP** [Agent] clearly ***identifies* the concentration risk** [Effect] arising from the large exposures to the regional or central body and that this is actively manage <…>. < *Guideline (EU) 2017/697 of the European Central Bank of 4 April 2017*>

2) T**he risk-measurement model** [Agent] ***shall capture*** nonlinearities for options and other products as well as **correlation risk** [Effect] **and basis risk** [Effect]. < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

---

3) To carry out a comprehensive risk evaluation of a CSD, **the competent authority** [Agent] will need to request statistical data on the scope of the CSD's business activities in order *to evaluate the risks* [Effect] related to CSDs operation and to the smooth operation of securities markets. <*Commission Delegated Regulation (EU) 2017/392 of 11 November 2016*>

4)Competent authorities shall ensure that **institutions** [Agent] implement **systems**[Means] *to identify, evaluate* and manage **the risk** [Effect] arising from potential changes in interest rates that affect an institution's non-trading activities. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

5) **Investment firms** [Agent] shall establish, implement and maintain **adequate policies and procedures** [Means] designed *to detect* any risk of failure by the firm [Effect] to comply with its obligations under Directive 2014/65/EU, as well as **the associated risks**[Effect], and put in place adequate measures and procedures designed to minimise such risk and to enable the competent authorities to exercise their powers effectively under that Directive. <*Commission Delegated Regulation (EU) 2017/565 of 25 April 2016*>

6) <...> **a CSD-banking service provider** [Agent] shall design and implement **policies and procedures**[Means] that **measure intraday and overnight liquidity risk**[Effect], in accordance with sub-section 1. <*Commission Delegated Regulation (EU)2017/390 of 11 November 2016*>

FR

1) Les entreprises d'investissement déterminent si **leur client**[Agent] possède le niveau d'expérience et de connaissance requis pour *appréhender* **les risques inhérents au produit ou au service d'investissement**[Effect] proposé ou demandé lorsqu'elles évaluent le caractère approprié pour un client d'un service d'investissement conformément à l'article 25, paragraphe 3, de la directive 2014/65/UE. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016*>

2) **Facteurs** [Agent] *indiquant* **un risque de contagion** [Effect] potentiellement élevé de la succursale par les activités du DCT description dès que possible. <*RÈGLEMENT D'EXÉCUTION (UE) 2017/394 DE LA COMISSION du 11 novembre 2016*>

3) <...> ce règlement prévoit **des règles prudentielles**[Agent] pour *mesurer* **le risque de crédit** [Effect] résultant des expositions de crédit à vingt-quatre heures ou de plus longue durée. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

4)**Le DCT** [Agent] met en place, dans le cadre de son dispositif de gouvernance, **des politiques, des procédures et des systèmes documentés**[Means] pour **détecter, mesurer,** contrôler, gérer et déclarer les risques[Effect] auxquels il est susceptible d'être exposé et qu'il est susceptible de faire courir à toute autre entité, y compris ses participants et ses clients, ainsi qu'aux DCT <...>. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

5) Les autorités compétentes veillent à ce que **les établissements** [Agent] mettent en œuvre **des systèmes** [Means] qui permettent *de détecter, d'évaluer* et de gérer **le risque**[Effect] découlant d'éventuelles variations des taux d'intérêt affectant leurs activités autres que de négociation. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

6) **Un établissement** [Agent] **ne peut utiliser de nouveau une approche moins sophistiquée** [Means] **pour *évaluer* le risque opérationnel** [Effect] que si les conditions suivantes sont remplies <...>. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

1) **Komisija** [Agent] tiksliau *nustatė* **tris rizikas: pajėgumų sulaikymo riziką, pajėgumų garantijų sulaikymo riziką ir kainų skirtumo mažinimo riziką** [Effect]. <*KOMISIJOS SPRENDIMAS(ES) 2017/503 2016m. lapkričio 8d.*>

2) Valdymo organas ir aukščiausioji vadovybė užtikrina, kad CVPD politika, procedūros ir kontrolės priemonės atitiktų CVPD priimtiną riziką ir pajėgumą prisiimti riziką, ir kad ta politika, procedūromis ir kontrolės priemonėmis būtų nustatoma, kaip **CVPD**[Agent] *identifikuoja* **riziką** [Effect], apie ją praneša, ją stebi ir valdo. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS(ES)2017/392 2016m. lapkričio 11d.* >

3) <...> turi būti įrodyta, kad šio skyriaus tikslais taikomas **vidaus modelis**[Agent] **tiksliai įvertina riziką**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

4)Kompetentingos valdžios institucijos užtikrina, kad **įstaigos**[Agent] įdiegtų **sistemas**[Means], skirtas **rizikai**[Effect], atsirandančiai dėl galimų palūkanų normų svyravimų, turinčių įtakos įstaigos ne prekybos veiklai, *nustatyti, vertinti* ir valdyti. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA 2013/36/ES 2013m. birželio 26d.*>

5)**Investicinės įmonės**[Agent] parengia, įgyvendina ir taiko **tinkamą politiką ir procedūras**[Means], kurių tikslas – *nustatyti* **bet kokią riziką**[Effect], kad įmonė neįvykdys pareigų pagal Direktyvą 2014/65/ES, taip pat susijusią riziką, ir taiko tinkamas priemones bei procedūras, skirtas tokiai rizikai kuo labiau sumažinti ir suteikti galimybę kompetentingoms institucijoms veiksmingai vykdyti savo įgaliojimus pagal tą direktyvą. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016m. balandžio 25d.*>

6) <...> **CVPD bankinio tipo paslaugų teikėjas**[Agent] sukuria ir įgyvendina **politiką ir procedūras** [Means]**,** siekdamas *vertinti* **dienos ir vienos nakties likvidumo riziką**[Effect] pagal 1 poskirsnį. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.*>

Model B

V

Effect **RISK** (Sbj.)   Agent (Compl.)

1)**The following risks** [Effect] *shall be adequately captured* **by the model**[Agent] referred to in paragraph 1. < *Regulation (EU) Nr 575/2013 of the European Parliament and of the Council of 26 June 2013*>

2)Institutions calculating their capital requirements < ...> shall disclose the following information< ...> for each sub-portfolio covered< ...> where applicable, for the internal models for incremental default and migration risk and for correlation trading, the methodologies used and **the risks**[Effect] *measured* **through the use of an internal model** [Agent] < ...>. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

Some sentences provide examples of the argument structures with imply the Agent. How to reveal the implicit Agent in the sentence? It goes without saying that in order to understand the meaning of the sentence the reader has to determine 'who did what to whom', it means to understand what kind of event each sentence describes, who the necessary participants are and what role each participant performs in the sentence. The understanding of the sentence is dwelled on the sentence's lexical and linguistic forms and not on the general conceptual world-knowledge, in other words, this meaning is encoded in the lexical expression of verbs (Mauner & Koeing, 2000, p.111-112). Such researchers as Carlson and Tanenhaus (1988), Mauner (1995), Roeper (1986, 1987) state that 'unexpressed event participants (e.g., implicit agents) are derived from lexical and linguistic sources, in particular, argument or

conceptual structures or thematic roles lexically encoded in the semantic representations of verbs.' (Mauner & Koeing, 2000, p.112) In order to detect the full number of participants and reveal the unexpressed semantic role in the form of implicit arguments the method of semantic schemata was applied. This method allows the researcher to decode syntactically active participants encoded in the conceptual structure related to a given verb, e.g.:

Example A

EN *The following risks will be captured by the methods.*

Step 1. [S [NP The following risks][VP will be captured[PP by [NP the model]]]]

Step 2. CAPTURE < X, Y>, where X=PATIENT, Y=AGENT, the following risks-X, the methods-Y

Step 3. {X, Y}

FR <...>*les risques correspondants devraient être mesurés à l'aide des* méthodes<...>

Step 1. [S [NP les risques correspondants][VP devraient être mesurés [PP à l'aide [NP des méthodes]]]]

Step 2. MESURER < X, Y>, where X=PATIENT, Y=AGENT, les risques correspondants -X, des méthodes-Y

Step 3.{X, Y}

LT <...> *pagal institucinę užtikrinimo sistemą nustatoma pačios sistemos rizika*<...>

Step 1. [PP pagal [NP institucinę užtikrinimo sistemą] [VP nustatoma] [S [NP pačios sistemos rizika]]]

Step 2. NUSTATYTI < X, Y>, where X=PATIENT, Y=AGENT, pačios sistemos rizika-X, institucinė užtikrinimo sistema -Y

Step 3.{X, Y}

In the example A, the semantic schemata reveals the presence of the Agent in the sentences, while the example B illustrates the absence of the Agent in the sentences:

Example B

EN <...>*all material risks are identified*<...>

Step 1. [S [NP All material risks][VP are identified]

Step 2. IDENTIFY < X, Y>, where X=PATIENT, Y=AGENT, all material risks-X, Y is absent

Step 3.{X, Y}

FR <...>*comment devraient être évalués les risques analogues* <...>

Step 1. [VP devraient être évalués] [S [NP les risques analogues]

Step 2. ÉVALUER < X, Y>, where X=PATIENT, Y=AGENT, les risques analogues -X, Y is absent

Step 3.{X, Y}

LT <...> valstybės rizika *vertinama* <...>

Step 1. [S [NP *valstybės rizika*] [VP *vertinama*]

Step 2. VERTINTI < X, Y>, where X=PATIENT, Y=AGENT, X-valstybės rizika, Y is absent

Step 3. {X, Y}

Such empirical approach focuses on the decoding of implicit arguments and reveals unexpressed Agents in the three languages.

Model C

V

Effect **RISK**(Sbj.)   Agent (implicit)

EN

1) Member States shall ensure that the risk management function ensures that **all material risks** [Effect] **are *identified, measured*** and properly reported. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

2) The additional own funds requirements referred to in paragraph 1 (a) shall be imposed by the competent authorities at least where, (e) **the risks** [Effect] are **likely *to be underestimated*** despite compliance with the applicable requirements of this Directive and of Regulation (EU) No 575/2013. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

3) For all countries classified through the Country Risk Classification Methodology according to Article 25 (d), **the risk of the sovereign**[Effect] ***shall be assessed*** in order to identify, on an exceptional basis, those sovereigns. <*Commission Delegated Regulation (EU) 2018/179 of 25 September 2017*>

FR

1) Selon les autorités, un indicateur de sécurité d'approvisionnement a bien été défini et **un risque de défaillance** [Effect] ***a été identifié*** dans les dernières études de RTE: dans le dernier Bilan prévisionnel de RTE établi avant l'entrée en vigueur du mécanisme.<*DÉCISION (UE) 2017/503 DE LA COMMISSION du 8 novembre 2016*>

2) L'ABE suit les pratiques de surveillance et émet des orientations précisant comment ***devraient être évalués*** **les risques analogues**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2013/36 DE LA COMISSION du 26 juin 2013*>

3) Pour tous les pays classés selon la méthodologie de classification des risques pays conformément à l'article 25 d), **le risque du souverain**[Effect] ***est évalué*** afin d'identifier, à titre exceptionnel, les souverains. <*RÈGLEMENT DÉLÉGUÉ (UE) 2018/179 DE LA COMISSION du 25 septembre 2017*>

1)Visų šalių, kurios pagal 25 straipsnio d dalį klasifikuojamos pagal šalių rizikos klasifikavimo metodiką, **valstybės rizika**[Effect] ***vertinama*** norint išskirtinėmis aplinkybėmis nustatyti valstybių Vyriausybes arba kitas valdžios institucijas. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2018/179 2017m. rugsėjo 25d.*>

2) <...> jis bent kartą per metus pateikia kokybinį pranešimą, kuriame aprašoma, kokių veiksmų imtasi ***vertinant***, stebinant ir valdant **kredito riziką**[Effect], įskaitant **dienos kredito riziką**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS(ES)2017/390 2016m. lapkričio 11d.* >

3) <...> siekiant tinkamai įvertinti **riziką**[Effect], kurį kyla iš pakeitimo vertybiniais popieriais pozicijų ir prekybos <...> . <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

Type II *Agent calculates Amount for Effect (RISK)*
This argument structure is evoked by verbs:
EN calculate;
FR calculer, déterminer, mesurer
LT (ap)skaičiuoti

Model A
V

Agent(Sbj.)   Amount (Obj.)   Effect **RISK** (Compl.)

1) <…> **the institution**[Agent] ***shall calculate*** **an own funds requirement** [Amount] **for foreign exchange risk**[Effect]. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

2) <…> **the institution**[Agent] shall use the method set out in Article 384 ***to calculate*** **the own funds requirement** [Amount] for **CVA risk**[Effect]. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

3)**Any internal model** [Agent] used **to calculate capital requirements** [Amount] for **position risk, foreign exchange risk, commodities risk**[Effect] and any internal model for correlation trading shall meet all of the following requirements. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

FR

1) À cette fin, **les établissements** [Agent] *calculent* **la valeur exposée**[Amount] **au risque des éléments** [Effect] visés à l'article 166, paragraphes 8 à 10, en appliquant un facteur de conversion ou un pourcentage de 100 % au lieu des facteurs de conversion ou des pourcentages prévus par ces paragraphes. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

2) **Les établissements** [Agent] *déterminent* **la valeur exposée**[Amount] **au risque des contrats**[Effect] visés à l'annexe II et des dérivés de crédit, y compris ceux hors bilan, conformément à l'article 429 bis. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016*>

3) Lorsqu'**un établissement** [Agent] est autorisé à utiliser la méthode du modèle interne pour *calculer* **la valeur exposée** [Amount] **au risque** [Effect] de plusieurs ou de l'ensemble des opérations visées audit paragraphe, **il** [Agent] *mesure* **la valeur exposée**[Amount] **au risque** [Effect] de ces opérations au niveau de l'ensemble de compensation. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

LT

1) Bet kurią iš toliau išvardytų sąlygų atitinkantis **CVPD** [Agent] *apskaičiuoja* **su operacine, teisine ir saugojimo rizika** [Effect] **susijusius kapitalo reikalavimus**[Amount] laikydamasis bazinio indikatoriaus metodo, nurodyto Reglamento (ES) Nr. 575/2013 315–316 straipsniuose, nuostatus < ...>. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.* >

2) < ...> **įstaigos** [Agent] turi turėti aiškiai suformuluotus kriterijus garantų, pripažįstamų *skaičiuojant* **pagal riziką**[Effect] **įvertintas pozicijų sumas**[Amount], rūšims nustatyti. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA (ES) NR.575/2013 2013m. birželio 26d.*>

3) Įstaigos[Agent], *apskaičiuojančios* **pagal riziką**[Effect] **įvertintų pozicijų sumas**[Amount] pagal trečios dalies II antraštinės dalies 2 skyrių, atskleidžia tokią informaciją pagal kiekvieną pozicijų klasę, nurodytą 112 straipsnyje. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA (ES) NR.575/2013 2013m. birželio 26d.*>

Model B

V

Agent (implicit)   Effect **RISK** (Obj.)

EN –

FR –

The findings presented in the tables reveal the following tendencies: the SWT/MWTs *risk/risque/rizika* always perform the semantic role of Effect. However, their syntactic positions in the sentences are different and depend on the verbs forming the argument structures:

- In English, SWT/MWTs *risk* takes the following positions:
  - the position of the object in the argument structures formed by the verbs *identify, capture, detect, assess, evaluate, measure, determine, report*;
  - the position of the subject in the argument structures formed by the verbs in passive form *measure(in passive form), underestimate, report, identify, assess, capture*;
  - the position of the complement in the argument structures formed by the verb *calculate*.
- In French, SWT/MWTs *risque* takes the following positions:
  - the position of the object in the argument structures evoked by the verbs *indiquer, comprendre, quantifier, relever, réperer, appréhendre, apprécier, déterminer,* évaluer, procéder à une pleine évaluation ;
  - the position of the subject in the argument structures evoked by the verbs in passive form *mesurer, identifier, prendre en compte, détecter, déceler;*
  - the position of the complement in the argument structures formed by the verbs *calculer, déterminer, mesurer.*
- In Lithuanian, SWT/MWTs *rizika* takes the following positions:
  - the position of the object in the argument structures evoked by the verbs *nustatyti, identifikuoti, nurodyti, įvertinti, pranešti*;
  - the position of the subject in the argument structures evoked by the verbs *nustatyti,* įvertinti(in passive form);
  - the position of the complement or the object if the Agent is implicit in the argument structures formed by the verb *apskaičiuoti.*

The analysis reveals that in the three languages the SWT/MWTs *risk/risque/rizika* most frequently take the position of the object.

Lexical expression of the frames

The predicative frames PERCEIVE and ASSESS_RISK provide new information about the terms with the nominal base *risk/risque/rizika*. The frames establish relationships mainly between the three semantic roles Agent, Means and Effect. The verbs *calculate-calculer(déterminer, mesurer)-apskaičiuoti* also activate the semantic role of Amount. The The Agent identifies and assesses the Effect (RISK) applying financial tool (the Means). In some cases, the Agent behaves as the Means. If it is necessary, the Agent calculates the funds in order to eliminate the Effect (RISK) or the amount of asset which is under risk. The lexical analysis of the participants of the frame reveals the following tendencies:

- the Agent is denoted by nouns/noun phrases which in English might be classified into the three semantic categories denoting: a) physical and institutional actors; b) methods; c) financial tool.
- The Effect is denoted by the SWT/MWTs *risk/risque/rizka*. MWTs denote various types of risk, classified according to the elements of the frame RISK_scenario: a) *Asset*; b) *Protagonist*; c) *Harmful_event*; d) *Intensity/Extension of risk*; f) *Time*.
- The Means refers to the methods applied in order to identify or assess risk.
- The Amount is expressed by noun phrases denoting money (see Figures 19-21).

Figure 19. PERCEIVE and ASSESS_RISK frame for English

Agent is expressed by the terms denoting:
a) institutional actors: *ICAAP, management framework, CSD-banking service provider, CSD, institution, competent authorities;*
b) financial tool: *countercyclical capital buffer, buffer rate, prices, risk weights, additional surcharge, percentage, derivatives;*
c) methods: *(institution internal) model(s), (institution internal) methodology(-ies)/model, in-and-out flow levels, RTE's studies, management's method, strategies, policies, procedures.*

EN verbs denoting identification: *identify, capture, detect, disclose, ascertain, point out;*
EN verbs denoting assessment: *measure, assess, evaluate, report, understand, underestimate, overestimate, calculate*

Effect is expressed by the terms denoting:
a) **risk related to an *Asset*: credit risk, liquidity risk, foreign exchange risk, commodities risk, all price risks, interest rate risk;**
b) **risk related to a *Protagonist*: credit risk of the customer, legal risk;**
c) **risk arising from certain *Harmful_event*: operational risk, risk of failure, settlement risk, model risk, risk of disruption, custody risk;**
d) **risk of certain *Intensity/Extension*: material risk, specific risk, general and specific risk, potential risk, higher/actual/of specific types risk, real risk;**
e) **risk lasting for certain *Time*: intraday and overnight credit risk, intraday and overnight liquidity risk.**

Amount is expressed by the terms: *own fund requirement(s), capital requirements.*

Means is expressed by the terms denoting methods: *internal methodologies, internal model, risk management function, method.*

Figure 20. PERCEIVE and ASSESS_RISK frame for French

Agent is expressed by the terms denoting:
a) physical and institutional actors: *le participant, le participant demandeur, l'émetteur, la contrepartie centrale, le client, le client professionnel; l'établissement, l'établissement investisseur, le DTC, le DTC-prestataire de services bancaires, le DTC demandeur, l'émetteur, les entreprises d'investissement, la Commission, L'ICAAP;*
b) a financial tool: *les coussins de fonds propres contracycliques, les taux, le surcharge supplémentaire ;*
c) methods: *l'approche standard, les approches internes, la plate-forme de négociation, les politiques, les processus, les procédures, les procédures efficaces de gestion des risques, les stratégies, les informations(financières), les systèmes documentés, les méthodes, les modalités, les règles, la méthode de modèle interne, les nouveaux mécanismes, le modèle interne, les règles prudentielles, les systèmes de contrôle.*

FR verbs denoting identification: *déterminer, détecter, identifier, déceler, indiquer, relever, repérer, appréhender, prendre en compte;*
FR verbs denoting assessment: *mesurer, évaluer, apprécier, procéder à une évaluation, quantifier, calculer, déterminer, mesurer*

Effect is expressed by the terms denoting:
a) risk related to an *Asset*: *le risque des contrats, le risque financier, le risque de crédit, le risque inhérent au produit ou aux services d'investissement, le risque inhérent aux transactions particuliers, le risque de liquidité, le risque de position, le risque sur les matières premières ;*
b) risk related to a *Protagonist*: *le risque de crédit des clients, le risque de l'OPC, le risque de l'entreprise, le risque de défaillance de l'entreprise, le risque de contrepartie, le risque de marché ;*
c) risk arising from certain *Harmful_event*: *le risque de modèle, le risque de rupture de l'équilibre, le risque opérationnel, le risque de concentration, le risque de défaillance, le risque de rétention de garanties de capacité, le risque de la consommation, le risque de surestimation, le risque de contagion, le risque juridique, le risque de garde, le risque de change, le risque de tromperie ;*
d) risk of certain *Intensity/Extension*: *les risques analogues, le risque de croissance excessive du crédit, le risque de types spécifiques, le risque spécifique de corrélation, le risque de levier excessif, le risque systémique, le risque général de corrélation ;*

f) risk lasting for certain *Time*: *le risque de crédit intrajournalier, le risque de crédit intrajournalier et à vingt-quatre heures.*

Means is expressed by the terms denoting methods: *les méthodes internes, les tests de résistance, l'approche moins sophistiquée, les politiques, les processus, des procédures, la procédure adéquate, les stratégies, les systèmes informatiques, le modèle interne, les systèmes solides.*

Amount is expressed by the terms: *la valeur (exposée), les montants d'exposition pondéré, les exigences de capital, les exigences de fonds propres.*

Figure 21. PERCEIVE and ASSESS_RISK frame for Lithuanian

Agent is expressed by the terms denoting:
a) physical and institutional actors: *vyresnioji vadovybė, valdymo funkciją atliekantys asmenys, vertinimą atliekantys asmenys, užtikrinimo funkciją atliekantys asmenys, dalyviai, rinkos komiteto nariai, subjektas, klientas; investicinė įmonė, Komisija, sistema, įstaigos, CVPD, CVPD bankinio tipo paslaugų teikėjas, valdymo organas, kompetetinga institucija, kompetetingos valdžios institucija;*
b) a financial tool: *nuosavų lėšų reikalavimas, rezervas, rezervo norma, įstaigų kapitalo poreikis, faktinis terminas, sverto rodyklis;*
c) methods: *valstybės rizikos valdymo(vertinimo) metodika, vidaus rizikos valdymo metodika, testavimo metodika, gairės, kokybinis modelis, vertinimas, (vertinimo/vidaus) modelis, metodika, metodas, tyrimas, (rizikos valdymo) politika ir procedūros, institucinė užtikrinimo sistema, papildomas įsipareigojimų neįvykdymo ir pasikeitimų rizikos nustatymo vidaus modelis, vidaus kapitalo palankmumo vertinimo procesas.*

LT verbs denoting identification: *nustatyti, identifikuoti, nurodyti, pristatyti;*
LT verbs denoting assessment: *įvertinti, suprasti; apskaičiuoti*

Effect is expressed by the terms denoting:
a) risk related to an *Asset*: *kredito rizika, likvidumo rizika, investicinė rizika, užsienio valiutos kurso rizika, biržos prekių kainos rizika, palūkanų normos rizika;*

b) risk related to a *Protagonist*: *valstybės rizika, rinkos rizika;*

c) risk arising from certain *Harmful_event*: *įsipareigojimų nevykdymas, pasikeitimų rizika, nepakankamumo rizika, koncentracijos rizika, perkėlimo rizika, modelio rizika įvykių rizika, operacinė rizika, politinė rizika, saugojimo rizika;*

d) risk of certain *Intensity/Extension*: *specifinė klaidingų sprendimų rizika, reikšminga rizika, sistemos rizika, didesnė rizika;*

e) risk lasting for certain *Time*: *dienos ir vienos nakties kredito rizika, dienos ir vienos nakties likvidumo rizika.*

Amount is expressed by the terms: *nuosavų lėšų reikalavimas (-ai), kapitalo reikalavimai/poreikis, trumpoji pozicija, pozicijos(-ų) suma (-os).*

Means is expressed by the terms: *rinkos valdymo politika ir procedūros, institucinė užtikrinimo sistema, vidaus modelis, valstybės rizikos vertinimo metodika.*

The predicative frame PERCEIVE and ASSESS_RISK shows that risk can be identified and assessed by competent organisations, individuals, financial tools and methods designated for these purposes.

Each argument of the predicative structure is represented by terms; however, the lexical expression of the arguments coincides only partially in the investigated languages, e.g.:

- in French and Lithuanian, the concept Agent is expressed by numerous lexical items belonging to the semantic category 'physical and institutional actors'denoting institution; meanwhile, such lexical units are not present in the English material;

- in the semantic category 'institutional actors', referring to the concept Agent, only one noun phrase overlaps in the three languages: *CSD-banking service provider – DTC-prestataire de services bancaires – CVPD bankinio tipo teikėjas*;

- the concept Effect, is expressed by the largest group of terms in the French material 37 MWTs *risque,* while in English there are 24 MWTs *risk*, in Lithuanian - 23 MWTs *rizika*;

- the terms belonging to the semantic category '*Asset*', which express the concept Effect, overlap in the English and Lithuanian material except for one (in the English material there is the term *all price risk* which was not detected in Lithuanian, while in Lithuanian there is the term *investicinė rizika* 'investment risk' which is not present in the English material); only two terms overlap in all three languages *credit risk – risque de crédit – kredito rizika, liquidity risk – risque de liquidité – likvidumo rizika*;

- the lexical units belonging to the category '*Protagonist*', which express the concept Effect, include one or two MWTs *risk/rizika* in English and Lithuanian, but these terms are different: *credit risk of the customer* and *valstybės rizika* 'sovereign risk'or *rinkos rizika* 'market risk', while in the French material one can find five different terms from English and Lithuanian MWTs *risque/rizika* ;

- comparing the MWTs *risk/risque/rizika* belonging to the semantic category '*Harmful_event*', expressing the concept Effect, only three of them coincide in English and Lithuanian material *operational risk – operacinė rizika, model risk – modelio rizika, custody risk – saugojimo rizika*; and only five of them overlap in English and French languages *operational risk – risque opérationel, model risk – risque de modèle, custody risk – risque de garde, risk of failure – risque de défaillance, risk of disruption – risque de rupture de l'équilibre*;

- in the English and Lithuanian material, only two MWTs *risk/rizika* of the semantic category 'risk of certain *Intensity/Extension*', expressing the concept Effect, overlap

- (*material risk – reikšminga rizika, higher risk – didesnė rizika*); comparing French and English data, only one term coincides with English *risk of specific types – risque de types spécifiques,* comparing French and Lithuanian languages the terms *risque spécifique de corrélation – specifinė klaidingų sprendimų rizika*;

- in the English and Lithuanian languages, the lexical units of the category 'risk lasting for certain *Time*', expressing the concept Effect, is instantiated by the same MWTs *risk/rizika*: *intraday and overnight credit risk – dienos ir vienos nakties kredito rizika, intraday and overnight liquidity risk – dienos ir vienos nakties likvidumo rizika;*

- the concept Means is denoted by different noun phrases in the investigated languages,

only one of them coincides in the three languages: *internal model – modèle interne – vidaus modelis*;

- the concept Amount is denoted by different noun phrases in the investigated languages, only two of them coincides: *own fund requirements – exigences de fonds propres – nuosavų lėšų reikalavimai, capital requirements – exigences de capital – kapitalo reikalavimai.*

Such observations lead to the conclusion that perception and assessment verbs in English (15 verbs), in French (16verbs) and in Lithuanian (7 verbs) do not attach the same terms. Moreover, the verbs, belonging to synonym groups in the same language, also have different lexical preferences. The following differences are observed among the synonymic verbs and their arguments:

- the synonymic English verb *evaluate* attaches the nouns/noun phrases denoting an organisation (*CSD*) or a method (*institution's internal methodology*). Meanwhile, the verb *calculate* attaches nouns/noun phrases denoting an organisation (*institution*).
- the synonymic French verb *évaluer* 'evaluate' attaches the nouns/noun phrases denoting an organisation (*l'*établissement 'institution'*)* or individuals (*le participant* 'participant'). Meanwhile, the verb *mesurer* 'mesure' attaches nouns/noun phrases denoting the methods used for the risk evaluation (*les procédures* 'procedures').
- the synonymic Lithuanian verb *nustatyti* 'identify' attaches the nouns/noun phrases denoting an organisation (įstaiga 'company'), individuals (*valdymo funkciją atliekantys asmenys* 'people performing the management function') or a method (*vertinimo modelis* 'evaluation model'). Meanwhile, the verb *identifikuoti* 'identify' only attaches the nouns/noun phrases denoting an organisation (*CSD).*

To sum up, the PERCEIVE and ASSESS_RISK frame illustrates the first steps for dealing with risk. It is considered to be the second stage of the perception of the concept RISK as negative impact (Effect) on an *Asset*. The MWTs *risk/risque/rizika* most often take the position of the object in the sentences in the three investigated languages. The MWTs denote the risk related to an *Asset, Harmful_event*, risk of certain *Intensity/Extension* or risk lasting for certain time. The argument structures activated by the verbs belonging to this frame reveal the typical semantic categories that denote concepts of the Agent, Effect and Means. Competent institutions and individuals related to the financial system or financial tools and methods identify and assess the risk which is mainly related to an *Asset, Harmful_event* or its *Intensity/Extension*.

3.2.4.2. CHANGE and CONTROL _RISK frame
for English, French and Lithuanian

The CHANGE and CONTROL_RISK frame denotes specific actions that must be carried out in order to prevent or mitigate risk. This frame is considered as the second stage of the perception of the concept RISK. The frame is composed on the basis of two separate frames Cause_change and Control from FrameNet, which were fused and applied for the financial field. In order to unify the terminology used in the thesis and not to introduce supplementary frame elements, some frame elements were replaced by those already used

in the thesis, e.g, the frame element Controlling_entity suggested for the Control frame designating 'a thing or person whose behavior controls a Dependent_entity, Dependent_ situation, or Dependent_variable', was replaced by the Agent, thus the notion of this frame element was broadened; in the frame CHANGE and CONTROL_RISK, the Agent changes and controls the Effect. Moreover, in the frame Cause_change the Agent is also present. A Dependent_entity, Dependent_situation, Dependent_variable, or Entity from frame Control were replaced by the frame element Effect. These frames are merged on the basis of the logical relationship between the actions of management of the risk, i.e. when the risk is identified and its importance is evaluated, professionals have to reduce risk and constantly perform the revision of the degree of risk.

Definition:

An **Agent** changes and controls an **Effect** (RISK).

↑

Definition:

An **Agent** causes an **Effect** (RISK) to change/ An **Agent** changes an **Effect** (RISK).

(based on the definition of the frame Cause_change from FrameNet:

An Agent or Cause causes an Entity to change, either in its category membership or in terms of the value of an Attribute.)

Examples:

EN <…> a lessor shall disclose its risks management strategy for the rights it retains in underlying assets, including any means by which **the lessor *reduces* that risk.** <*Commission Regulation (EU) 2017/1986 of 31 October 2017*>

FR Si le nombre de cas de création ou suppression indue de titres visés au paragraphe 2 est supérieur à cinq par mois, le DCT transmet à l'autorité compétente et aux Autorités concernées, dans un délai d'un mois, **un projet de plan de mesures** visant à *atténuer* **le risque d'apparition de cas semblables.** <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

LT Visų pirma nuomotojas turi atskleisti savo rizikos valdymo strategiją, taikomą išlaikytoms teisėms į nuomojamą turtą, įskaitant bet kokias priemones, kuriomis **nuomotojas tą riziką mažina.** <*EUROPOS KOMISIJOS REGLAMENTAS (ES) 2017/1986 2017 spalio 31d.*>

Definition:

An **Agent** controls **an Effect** (RISK)

(based on the definition of the frame Control from FrameNet:

A Controlling_entity, Controlling_situation, or Controlling_variable control a Dependent_ entity, Dependent_situation, or Dependent_variable. The latter, dependent, element or some aspect of it is not just influenced, but determined by the controlling element.)

Examples:

EN <…> **the operational risk-management function of a CSD shall manage the CSD's operational risk**. <*Commission Delegated Regulation (EU) 2017/392 of 11 November 2016*>

FR **Alki LP** n'est donc pas en mesure de *maîtriser* **le risque d'entreprise** avec la même efficacité que des salariés ou cadres directs de SMBV, de sorte que le transfert contractuel de ces risques à Alki LP ne pourrait, au plus, limiter ce risque que partiellement. <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015* >

LT **CVPD operacinės rizikos valdymo funkcija** kaip dalis rizikos valdymo funkcijos **valdo CVPD operacinę riziką**. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS(ES) 2017/392 2016m. lapkričio 11d.* >

The CHANGE and CONTROL_RISK frame embraces all verbs extracted from the financial corpus with the semantic meaning '*to modify the importance of negative impact, limit it or eliminate*'. The frame mostly involves two participants performing the semantic roles of Agent and Effect. The Agent influences the Effect in such way that it becomes less important and constantly undergoes the control from the Agent. The MWTs *risk/risque/ rizika* denote the Effect and can take two syntactic positions in the sentences – either the subject or the object.

Syntactic expression of the frame

The CHANGE and CONTROL_RISK frame is represented by one type of the argument structure that has two subtypes (semantico-syntactic models):

Type I 'Agent reduces/controls Effect (RISK)':
a) Agent (Sbj.) +[Means (Obj./Compl.)]+V+Effect (RISK)(Obj./Compl.);
b) Effect (RISK)(Sbj.)+V+ [Means(Compl.)]+Agent(implicit);

In the model *a* the verbs are used in the active form, which emphasises the Agent that performs actions of change or control of the risk, while the model *b* provides examples of sentences in the passive voice, where the emphasis is put on the actions which the Effect performs and the Agent in this case might be omitted. In English and French, where the word order is strict, the switching between the active and passive voices often results from the practical need to ensure the sequence of items according to the information structure.

In both models the element Means can be considered optional, as it provides supplementary information, i.e. it specifies the ways by which the risk was changed or controlled, e.g. : <...> **a CSD-banking service provider** [Agent] accepts **highly liquid collateral with minimal credit and market risk** [Means] *to manage* its corresponding credit risk [Effect]. <*Commission Delegated Regulation (EU) 2017/390 of 11 November2016*>. It is possible to say: <...> **a CSD-banking service provider** [Agent] […] *manages* its corresponding credit risk [Effect]. **L'établissement** [Agent] *suit* le risque général de corrélation [Effect] **par produit, par région, par secteur d'activité ou selon d'autres critères adaptés à son activité**[Means]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >. It is possible to say: **L'établissement**[Agent] *suit* **le risque général de**

corrélation [Effect] […]. Komisija mano, kad **visais šiais taisomaisiais veiksmais**[Means] **pajėgumų sulaikymo rizika**[Effect] bent jau *sumažinama iki minimumo,* nors jos visiškai *atmesti negalima.* <*KOMISIJOS SPRENDIMAS (ES) 2017/503 2016m. lapkričio 8d.*>. It is possible to say: Komisija mano, kad […] **pajėgumų sulaikymo rizika**[Effect] *sumažinama iki minimumo,* nors jos visiškai *atmesti negalima.*

The realisation of the argument structures in English, French and Lithuanian differs. In the English and French material both semantico-syntactic models are detected, while in the Lithuanian material, the semantico-syntactic models Agent(Sbj.)+Means(Obj./Compl.)+Effect RISK(Obj./Compl.) is not present. The tables below demonstrate all models illustrated by the annotated examples. The extended list of the examples can be found in the appendix 6.

Type I *Agent reduces/controls Effect(RISK)*

This argument structure is evoked by the following verbs:

EN mitigate, reduce (provide a reduction, require the reduction), minimize, eliminate, absorb, cover, prevent, manage, monitor, address, control, hedge, (less used *constrain, limit*);

Note: The verbs *cover,* and *prevent* are ascribed to this group as they are placed on the polar axis of the meaning *change*: *cover* means 'protect from the loss' (Cambridge Dictionary), in other words it means 'not to cause change'; *prevent* designates 'stop something from happening' (Cambridge Dictionary). The meaning also can to be considered as not to cause change.

*FR atténuer, diminuer, limiter, supprimer, prévenir (*less used *maîtriser, modifier, traiter, éliminer*); gérer, suivre (effectuer un suivi), contrôler, faire face à, couvrir;*

LT (su)mažinti, pašalinti, panaikinti, užkirsti kelią, padengti, valdyti, stebėti, kontroliuoti, (ap)riboti, apdrausti. The last two verbs mean not to cause change; they are included in this group as they have the meaning of zero degree of change.

Note: Each Lithuanian verb has prefix (su-/pa-/už-) that indicates the completed action (perfective aspect).

Model A

V

Agent(Sbj.)   [Means (Obj./Compl.)]   Effect **RISK**(Obj./Compl.)

EN

1) **The ABCP programme**[Agent] *shall mitigate* **risk** [Effect] relating to the performance of the seller and the servicer through various methods. <*Regulation (EU) № 575/2013 of the European Parliament and of the Council of 26 June 2013*>
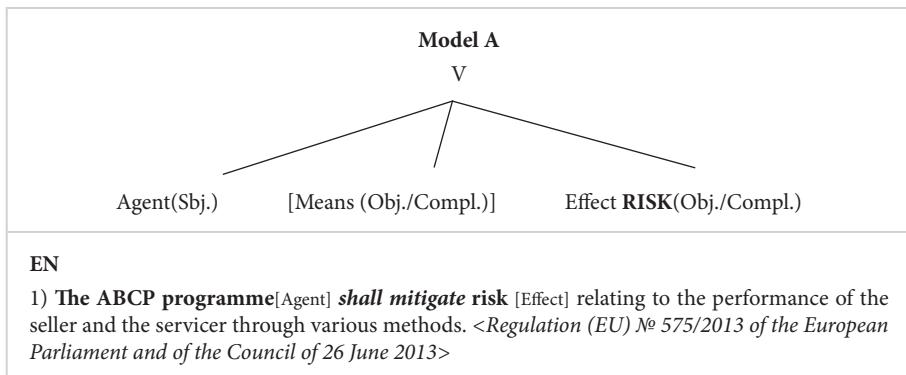
2) <…> **other variables** [Agent] that the designated authority considers relevant for ***addressing cyclical systemic risk*** [Effect] <…>. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

3) <…> **the operational risk-management function of a CSD** [Agent] ***shall manage*** **the CSD's operational risk** [Effect]. <*Commission Delegated Regulation (EU) 2017/392 of 11November2016*>

4)<…> a lessor shall disclose its risks management strategy for the rights it retains in underlying assets, including **any means** [Means] by which **the lessor** [Agent] ***reduces*** **that risk** [Effect]. < *Commission Regulation (EU) 2017/1986 of 31 October 2017*>

5) **Investment firms** [Agent] shall establish, implement and maintain adequate policies and procedures designed to detect any risk of failure by the firm to comply with its obligations under Directive 2014/65/EU, as well as the associated risks, and put in place **adequate measures and procedures** [Means] designed ***to minimise such risk*** [Effect]. <*Commission Delegated Regulation (EU) 2017/656 of 25 April 2016*>

6) <…> **a CSD-banking service provider** [Agent] accepts **highly liquid collateral with minimal credit and market risk** [Means] ***to manage*** **its corresponding credit risk** [Effect]. <*Commission Delegated Regulation (EU) 2017/390 of 11 November2016*>

FR

1) Certaines précisent que **la solution de rechange** [Agent] aura des répercussions plus rapides sur la concurrence, **atténuera le risque**[Effect] lié à l'exécution et permettra de renforcer plusieurs entités challenger (et non pas une comme dans le cas de la cession de Rainbow). <*DÉCISION (UE) 2018/119 DE LA COMMISSION du 18 septembre 2017*>

2) **Le capital interne** [Agent] doit être adéquat pour ***couvrir*** les risques de marché significatifs [Effect] non soumis à des exigences de fonds propres. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

3) < ... > **il (le DCT-prestataire de services bancaires)** [Agent] ***effectue un suivi*** **du risque de liquidité** [Effect] engendré par le crédit à vingt-quatre heures par rapport à l'exposition de liquidité la plus élevée jamais enregistrée engendrée par le crédit à vingt-quatre heures. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

4) **L'établissement**[Agent] ***suit*** **le risque général de corrélation** [Effect] **par produit, par région, par secteur d'activité ou selon d'autres critères adaptés à son activité**[Means]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

5) **Les DCT** [Agent] ne devraient conclure **des contrats dérivés** [Means] que s'ils sont obligés de ***couvrir*** **un risque**[Effect] qu'ils ne peuvent pas ***réduire*** d'une autre manière. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

6) **Les Participants** [Agent] doivent percevoir, en plus **des taux d'intérêt**, **des primes** [Means] destinées à ***couvrir*** **le risque de non-remboursement des crédits** [Effect] à l'exportation. Les taux de primes perçus par les Participants doivent être calculés en fonction du risque, converger et ne pas être insuffisants pour couvrir les frais d'exploitation et les pertes à long terme.

<*RÈGLEMENT DÉLÉGUÉ (UE) 2018/179 DE LA COMISSION du 25 septembre 2017*>

LT

1) <...> **Garantas grynaisiais pinigais** [Agent] labai *sumažina* **draustų kredito grąžinimo sumų nemokėjimo riziką**[Effect].<*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2018/179 2017m. rugsėjo 25d.*>

2) <...> **modelis** [Agent] *turi tiksliai padengti* **visą reikšmingą kainos riziką** [Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

3) <...> **nuomotojas**[Agent] patikimai *valdo* **riziką**[Effect], susijusią su nuomojamo turto panaudojimu, jo vieta, amžiumi ir planuojama naudojimo trukme, įskaitant deramą užtikrinimo priemonės vertės stebėseną <...>. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

Model B

V

Effect **RISK**(Sbj.)   [Means(Compl.)]   Agent(implicit)

EN
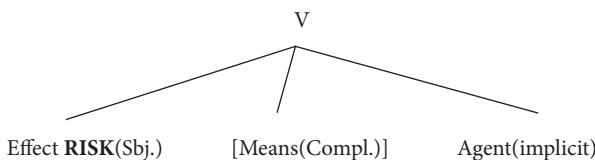
1) **Operational risks** [Agent] *should be managed* in accordance to a well-documented and robust framework with clearly assigned roles and responsibilities. <*Commission Delegated Regulation (EU) 2017/392 of 11November2016*>

2) Inflows and outflows are usually matched and **liquidity risk** [Agent] **is** therefore *limited*. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

3)<...> the CSD's analysis of the risks arising from that participation, including any analysis approved by an internal or external auditor, demonstrating that **all risks**[Agent] resulting from the participation *are* adequately *managed*. <*Commission Delegated Regulation (EU) 2017/392 of 11November2016*>

4)Therefore, Alki LP cannot ensure the management of SMBV's business risks as effectively as direct employees or managers of SMBV could, and therefore **that risk**[Effect] *could,* at best, *be* partially *mitigated* **through its contractual transfer**[Means] to Alki LP. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

5) Fifth, while the Commission accepts the claim of the Netherlands and Starbucks that **certain sales risks of SMBV**[Effect] *are mitigated* **through the arrangements**[Means] with the Shops, this fact has no bearing on SMBV's relationship with Alki LP. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

6) Third, and most important, the Commission considers that if the Netherlands' claim were accepted, **the business risk of any group company**[Effect] *could be eliminated* **through intra-group reallocation of risks by simple means of contract**[Means]. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

FR

1) Les entrées correspondent généralement aux sorties et **le risque de liquidité**[Effect] *est* dès lors *limité.* <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

2)< ...> l'analyse par le DCT des risques liés à cette participation, incluant toute analyse approuvée par un auditeur interne ou externe, et démontrant que tous **les risques liés à la participation**[Effect] *sont gérés* de manière adéquate. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

3) Cinquièmement, la Commission accepte l'argument des autorités néerlandaises et de Starbucks selon lequel **les risques de vente de SMBV**[Effect] *sont limités* par les accords conclus [Means] avec les magasins, mais ce fait n'a pas d'incidence sur la relation entre SMBV et Alki LP. <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015* >

4) Afin d'évaluer si **un risque de concentration résiduel**[Effect] *peut être traité* par d'autres **moyens d'une efficacité équivalente, tels que les dispositifs, processus et mécanismes** [Means] visés à l'article 81 de la directive 2013/36/UE du Parlement européen et du Conseil < ...>. <*ORIENTATION (UE) 2017/697 DE LA BANQUE CENTRALE EUROPÉENNE du 4 avril 2017*>

5)Troisièmement, et c'est là le point le plus important, la Commission est d'avis que si l'argument avancé par les autorités néerlandaises était accepté, **le risque d'entreprise de n'importe quelle entreprise du groupe**[Agent] *pourrait être supprimé* sur base d'un simple contrat par **une réaffectation des risques**[Means] au sein du groupe. <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015* >

LT

1) Taigi, „Alki LP" negali užtikrinti SMBV verslo rizikos valdymo taip veiksmingai, kaip tai galėtų atlikti SMBV tiesioginiai darbuotojai arba vadovai, ir todėl **ta rizika (valdymo rizika)** [Effect] **galėtų** geriausiu atveju būti sumažinta <...>. <*KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.*>

2) <...> garantinės įmokos rizikos laikotarpis-laikotarpis nuo paskutinio pasikeitimo priemone, kuria užtikrinami užskaitos grupės sandoriai su įsipareigojimų nevykdančia sandorio šalimi, iki tol, kol sandoriai likviduojami, o atitinkama **rinkos rizika** [Effect] *apdraudžiama iš naujo*; <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

3) Informacija apie trečiosios valstybės CVPD sąsajas ir sąsajas su kitais rinkos infrastruktūros subjektais, taip pat apie tai, kaip *stebima ir valdoma* **susijusi rizika**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.*> 4)Komisija mano, kad **visais šiais taisomaisiais veiksmais**[Means] **pajėgumų sulaikymo rizika**[Effect] bent jau *sumažinama iki minimumo,* nors jos visiškai *atmesti negalima.* <*KOMISIJOS SPRENDIMAS (ES) 2017/503 2016m. lapkričio 8d.*>

5) <...> šiame reglamente ir direktyvoje 2013/36/ES numatyta **įvairių priemonių**[Means], kuriomis būtų užkirstas kelias makrolygio rizikos ribojimo rizikai bei sisteminei rizikai ir **tokia rizika**[Effect] *būtų sumažinta.* <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

6) Trečia ir visų svarbiausia, Komisija mano, kad, jeigu Nyderlandų reikalavimas būtų patvirtintas, bet kurios grupės bendrovės **verslo rizika**[Effect] *būtų pašalinta*, perkeliant riziką grupės viduje **paprastomis sutarties priemonėmis**[Means]. <*KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.*>

The findings presented in the tables reveal the following tendencies: the SWT/MWTs *risk/risque/rizika* always performs the semantic role of the Effect. However, its syntactic positions in the sentences are different and depend on the verbs forming the argument structure:

- In English, SWT/MWTs *risk* takes the following positions:
  - the position of the object, in the semantico-syntactic model formed by the verbs: *mitigate, cover, address, hedge, monitor, reduce, limit, prevent*;
  - the position of the subject, in the semantico-syntactic model formed by the verbs: *limit, hedge, manage, mitigate, eliminate, address, control.* All of them are in the passive form.
- In French, SWT/MWTs *risque* takes the following positions:
  - the position of the object, in the semantico-syntactic model formed by the verbs: *atténuer, courir, suivre, réduire, maîtriser, prévenir, rémedier, modifier, éliminer, gérer, supprimer, minimizer, faire face à*;
  - the position of the subject, in the semantico-syntactic model formed by the verbs: *limiter, supprimer, traiter, controller, atténuer.* All of them are in the passive form.
- In Lithuanian, SWT/MWTs *rizika* takes the following positions:
  - the position of the object, in the semantico-syntactic model formed by the verbs *panaikinti, pašalinti, apriboti*,
  - the position of the subject, in the semantico-syntactic model formed by the verbs *(su)mažinti, valdyti, stebėti(passive form)*;
  - the position of the complement, in the semantico-syntactic model formed by the verbs *užkirsti kelią, padengti*.

The analysis reveals that in the three languages the SWT/MWTs *risk/risque/rizika* most frequently take the position of the object.

Lexical expression of the frame

The predicative frame CHANGE and CONTROL_RISK reveals new information about the terms with the nominal base *risk/risque/rizika*. CHANGE and CONTROL_RISK uncovers relationships between two semantic roles Agent and Effect. The Agent makes the Effect to change; it also performs the control on the Effect. The lexical analysis of the participants of the frame reveals the following tendencies:

- The Agent is denoted by nouns/noun phrases, which might be classified into five semantic categories denoting a) physical or institutional actors; b) methods; c) a financial tool;
- The Effect is denoted by the SWT/MWTs *risk/risque/rizika*. MWTs denote various type of risk, classified according to the elements of the frame RISK_scenario: a) *Asset*; b) *Protagonist*; c) *Harmful_event*; d) *Intensity/Extension* of risk; e) *Time* (see Figures 22-24).

Figure 22. CHANGE and CONTROL_RISK frame for English
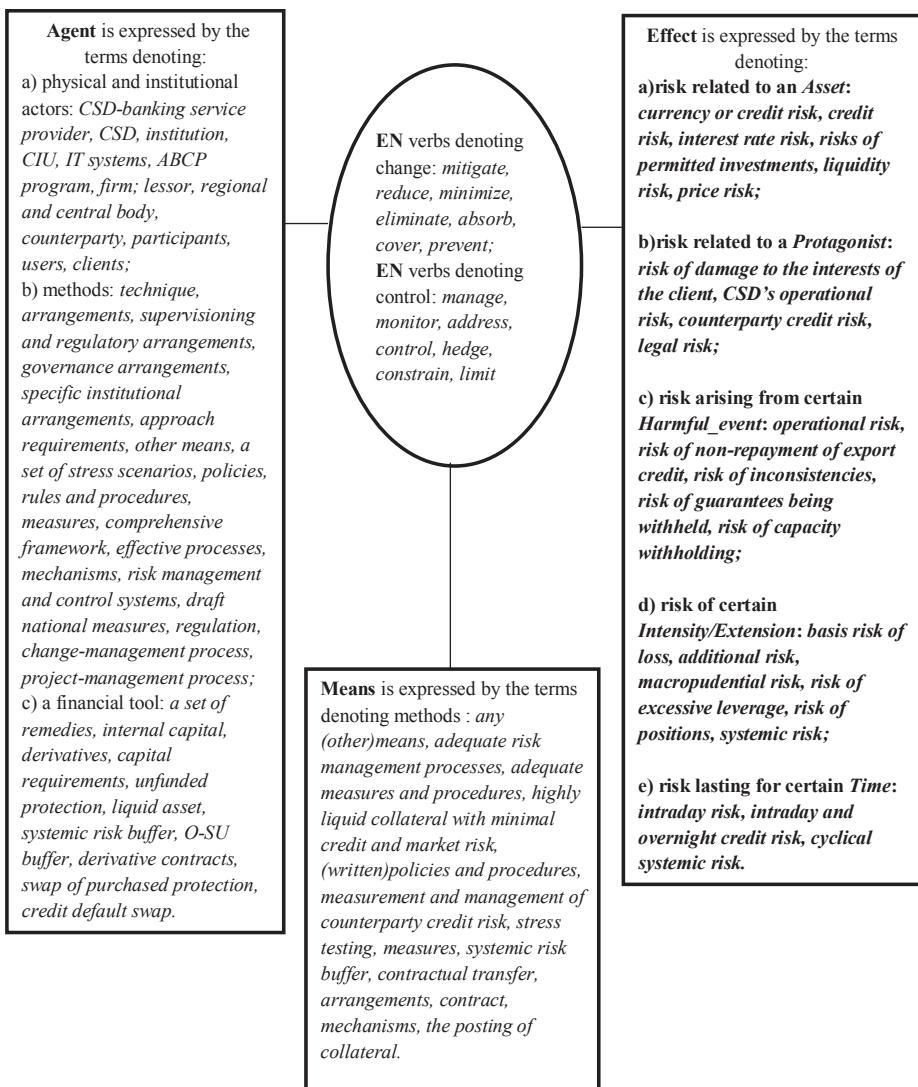
Agent is expressed by the terms denoting:
a) physical and institutional actors: *CSD-banking service provider, CSD, institution, CIU, IT systems, ABCP program, firm; lessor, regional and central body, counterparty, participants, users, clients;*
b) methods: *technique, arrangements, supervisioning and regulatory arrangements, governance arrangements, specific institutional arrangements, approach requirements, other means, a set of stress scenarios, policies, rules and procedures, measures, comprehensive framework, effective processes, mechanisms, risk management and control systems, draft national measures, regulation, change-management process, project-management process;*
c) a financial tool: *a set of remedies, internal capital, derivatives, capital requirements, unfunded protection, liquid asset, systemic risk buffer, O-SU buffer, derivative contracts, swap of purchased protection, credit default swap.*

EN verbs denoting change: *mitigate, reduce, minimize, eliminate, absorb, cover, prevent;*
EN verbs denoting control: *manage, monitor, address, control, hedge, constrain, limit*

Means is expressed by the terms denoting methods : *any (other)means, adequate risk management processes, adequate measures and procedures, highly liquid collateral with minimal credit and market risk, (written)policies and procedures, measurement and management of counterparty credit risk, stress testing, measures, systemic risk buffer, contractual transfer, arrangements, contract, mechanisms, the posting of collateral.*

Effect is expressed by the terms denoting:
a)risk related to an *Asset*: currency or credit risk, credit risk, interest rate risk, risks of permitted investments, liquidity risk, price risk;

b)risk related to a *Protagonist*: risk of damage to the interests of the client, CSD's operational risk, counterparty credit risk, legal risk;

c) risk arising from certain *Harmful_event*: operational risk, risk of non-repayment of export credit, risk of inconsistencies, risk of guarantees being withheld, risk of capacity withholding;

d) risk of certain *Intensity/Extension*: basis risk of loss, additional risk, macropudential risk, risk of excessive leverage, risk of positions, systemic risk;

e) risk lasting for certain *Time*: intraday risk, intraday and overnight credit risk, cyclical systemic risk.

Figure 23. CHANGE and CONTROL_RISK frame for French

Agent is expressed by the terms denoting:
a) physical and institutional actors: *les États membres, les participant, les autorités françaises, le professionnel; l'/les établissement(s), l'établissement (de lien/ de crédit), le DTC demandeur, l'OPC, le DTC, le DTC-prestataire de services bancaires, l'entreprise (d'investissement), Alki LP, l'organe de direction, la direction générale;*
b) a financial tool: *le coussin, les couvertures, les exigences(de fonds propres/de sécurité/prévues/du capital), le capital interne, le montant (notionnel total/de la provision générale et spécifique), les produits dérivés, la contre-garantie, la garantie, l'accord, les accords institutionnels spécifiques, le contrat, le financement, le remède, l' instrument financier, la partie des actifs liquides;*
c) methods: *le projet de plan des mesures, la solution de rechange, les processus de gestion du changement et des projets, l'utilisation de couvertures et de protection non financées, le cadre juridique, les mesures, la technique, les méthodes, les moyens, les règles, le modèle interne d'évaluation des risques,les procédures, la fonction de gestion du risque.*

FR verbs denoting change: *atténuer, réduire, limiter, couvrir, diminuer, supprimer, prévenir, modifier, traiter, éliminer;*
FR verbs denoting control: *gérer, maîtriser, suivre, contrôler, faire face à*

Means is expressed by the terms denoting methods: *l'assurance et des autres mécanismes de transfert de risque, le dépôt d'une garantie (collatéral), les mesures, le coussin des mesures adéquates, les ressources liquides, les garanties hautement liquides, les accords, les contrats, les contrats dérivés, le capital, le capital interne adéquat/suffisant, les primes, les produits dérivés, les politiques et les procédures écrites, des processus, les procédures(adéquates de gestion), le/les moyen(s), le dispositif, les commissions, l'approche standard, les stratégies, les dispositions, les ressources nécessaires, le fonctionnement et les arrangements juridiques du mécanisme de DVB.*

Effect is expressed by the terms denoting:
a)risk related to an *Asset*: *le risque de crédit, le risque de l'investissement, le risque de liquidité, le risque de taux d'intérêt, le risque de taux d'intérêt des instruments dérivés, le risque de l'exposition, le risque des expositions de titrisation et de retitrisation conservés, le risque de prix, le risque de pertes;*
b)**risk related to a** *Protagonist*: *le risque de crédit de contrepartie, le risque de défaillance du client, le risque de l'entreprise, le risque de défaillance de l'entreprise, le risque de contrepartie;*
c) risk arising from certain *Harmful_event*: *le risque opérationnel, le risque de non-remboursement des crédits, le risque de concentration, le risque de corrélation, le risque d'une rétention économique des garanties de capacité, le risque de change, le risque de CVA, le risque de vente de SMBV, le risque de fraude, le risque de défaut, le risque de non-transfert;*
d)**risk of certain** *Intensity/Extension*: *le risque de levier excessif, le risque basique de pertes, les risques de marché significatifs, les grands risques;*
e)risk lasting for certain *Time*: *le risque intrajournalier, le risque de liquidité intrajournalier et à vingt- quatre heures le risque systémique ou macroprudentiel non cyclique à long terme.*

Figure 24. CHANGE and CONTROL_RISK frame

Agent is expressed by the terms denoting:
a) physical and institutional actors: *darbuotojai, vadovai, sandorio šalis, bendrovė, nuomotojas, vartotojai, klientai, dalyviai; įstaiga(-os), investicinės įmonės, regioninis ar centrinis organas, kredito įstaiga; atitikties užtikrinimo funkciją atliekantys asmenys, vadovybė, CVPD, teisinė sistema CVPD bankinio tipo paslaugų teikėjas,*
b) methods: *metodas, taisyklės, procedūros, (nacionalinės/vidaus/kontrolė s) priemonės, kriterijai, griežtas reguliavimas, veiksmai, reikalavimai, taisomasis veiksmas, mechanizmas, vidaus rizikos valdymo metodika, išvestinė priemonė, vertinimai;*
c) a financial tool: *draudimo sutartis, garantas, garantija, apsidraudimai, užkaitos sutartis, specifinio pobūdžio sisteminės rizikos rezervas, išvestinė priemonė, įkaitas ir kiti lygiaverčiai finansiniai ištekliai, vidaus kapitalas, nuosavas kapitalas, suma, nuosavų pozicijų sumos.*

LT verbs denoting change:
Sumažinti, pašalinti, panaikinti, užkirsti kelią, padengti;
LT verbs denoting control:
valdyti, stebėti, kontroliuoti, (ap)riboti, apdrausti

Means is expressed by the terms denoting methods :
(finansinių priemonių)sutartis, draudimas ir kiti rizikos perleidimo mechanizmai, kredito rizikos vertinimas ir valdymas, rizikos valdymo procesas, likvidieji įkaitai, (rašytinė) politika ir procedūros, vidaus kapitalas, (nustatytos/nacionalinės) priemonės, sisteminės rizikos rezervas, draudimo sutartis, taisomieji veiksmai, sutarties priemonė, sverto koeficientas, nuosavų lėšų reikalavimas, susitarimai, veiksmingi būdai, procesai, mechanizmai, reikalavimai.

Effect is expressed by the terms denoting:
a) risk related to an *Asset*: *kredito rizika, su vertybinių popierių saugojimu susijusi rizika, prekybos knygos rizika;*

b) risk related to a *Protagonist*: *teisinė rizika, verslo rizika, rinkos rizika;*

c) risk arising from a *Harmful_event*: *piktnaudžiavimo rizika, sukčiavimo rizika, pajėgumų nepakankamumo rizika, draustų kredito grąžinimo sumų nemokėjimo rizika, operacinė rizika, neigiamos informacijos perdavimo rizika, nuostatų nesilaikymo rizika, koncentracijos rizika, neatsakingo elgesio rizika, pajėgumų sulaikymo rizika, lėšų pervedimo rizika*

d) risk of certain *Intensity and Extension* of risk: *makrolygio rizika, pozicijos rizika, bendroji įstaigos pozicijos rizika, makrolygio rizikos ribojimo rizika, sisteminė rizika, pernelyg didelio sverto rizika, papildoma rizika;*

f) risk lasting certain *Time*: *ilgalaikė necilkinė sisteminė ar makrolygio rizika, dienos kredito rizika, dienos ir vienos nakties kredito rizika.*

The predicative frame CHANGE and CONTROL_RISK uncovers the fact that risk can be reduced and controlled by relevant institutions, individuals, methods, financial instruments or covered by certain amount of money.

Each semantic category of the concepts Agent, Effect or Means is represented by terms; however, the lexical contents of the categories coincide only partially in the investigated languages, e.g.:

- the terms from the category 'physical or institutional actors' of the concept Agent mostly overlap in the three languages: *CSD-banking service provider – DTC-prestataire de services bancaires – CVPD bankinio tipo paslaugų teikėjas, institution – établissement – įstaiga, participants – participants – dalyviai,* etc.; however, some terms differ, e.g., in Lithuanian material the terms as *atitikties užtikrinimo finkciją atliekantys asmenys* 'the compliance function carrying out by the necessary authority' or *darbuotojai* 'employees' are captured, while in English and French they are not present.

- the nouns/noun phrases denoting the semantic categories 'method' and 'financial tool' do not overlap in the investigated languages;

- the category '*Protagonist*' of the concept Effect is illustrated with few examples in the three languages, in English four terms have been found: *risk of damage to the interests of the client, CSD's operational risk, counterparty credit risk*; in French five terms were captured: *le risque de crédit de contrepartie* 'counterparty credit risk', *le risque de défaillance du client* 'the risk of default by customers', *le risque de l'entreprise* 'business risk' *le risque de défaillance de l'entreprise* 'risk of failure by the firm', *le risque de contrepartie* 'counterparty risk', in Lithuanian solely three were detected *teisinė rizika* 'legal risk', *verslo rizika* 'business risk', rinkos rizika 'market risk';

- in the category 'risk of certain *Intensity/Extension*' only one term overlaps in the three languages *risk of excessive leverage – le risque du levier excessif – pernelyg didelio sverto rizika*;

- the SWT/MWTs *risk/risque/rizika* in the category 'risk arising from a *Harmful_event*' two terms (*operational risk – risque opéationnel – operacinė rizika; risk of capacity withholding –risque de rétension de capacités – pajėgumų sulaukymo rizika*) solely coincide in the investigated languages;

- the number of nouns/noun phrases instantiating the concept Means varies from language to language, respectively EN:14, FR:24, LT:18. Naturally, the lexical realisation of this category also differs though the languages. Thus, only three nouns/noun phrases coincide in the investigaited languages: *means – moyens –priemonės, written policies and procedures – des politiques et procédures écrites – rašytinė politika ir procedūros, des contrats – des accords – sutarties priemonė*.

As can be observed above the verbs denoting change or control in English (16 verbs), in French (15 verbs) and in Lithuanian (10 verbs) do not attach the same terms. Thus, the same ideas are often expressed by different linguistic means in the investigated languages. Moreover, the verbs belonging to the same synonym groups of the same language have different lexical preferences, usually the lexical expression of the first argument (the Agent) can vary across the investigated languages, e.g.:

- the synonymic English verbs *reduce, minimise, absorb*
  In the sentences with the verb *reduce,* the Agent is expressed by the nouns denoting an organisation (*institution*) or a method (*specific institutional arrangement*), while in the sentences with the verbs *minimise* and *absorb*, only nouns/noun phrases denoting a method (*systems and communication arrangements*) are used to express the Agent.
- the synonymic English verbs *limit, control, manage, address*
  In the sentences with the verb *limit,* the Agent is expressed by the nouns/noun phrases denoting an organisation (*institution*), while the verbs *control, address* and *manage* attach nouns/noun phrases denoting an institution or individuals (*firm, participants*) or a method/means (*comprehensive framework*) to express the Agent.
- the synonymic French verbs *atténuer, réduire, diminuer, limiter*
  In the sentences with the verbs *atténuer* 'mitigate', *réduire* 'reduce' the Agent is expressed by the nouns/noun phrases denoting institutions or individuals (*le DCT-prestataire de services bancaires* 'a CSD-banking service provider', *les autorités françaises* 'French authorities'), while the verbs *diminuer* 'reduce', and *limiter* 'limit' attach nouns/noun phrases denoting financial instrument, which is used in order to reduce risk (*les couvertures et les protections non financées* 'the use of hedging and unfunded protection', *la forme de sûreté* 'form of encumbrance of assets').
- the synonymic French verbs *gérer, contrôler*
  With synonymic verbs *gérer* 'manage', and *contrôler* 'control' the Agent is always expressed by nouns/noun phrases denoting only an organisation (*l'entreprise d'investissement* 'the investment firm', *l'organe de direction* 'management body')
- the synonymic Lithuanian verbs *sumažinti, apriboti*
  The verb *sumažinti* 'minimise' attaches in the position of the Agent nouns/noun phrases denoting a financial instrument (*draudimo sutartis* 'insurance contract'), an organisation or individuals (*vadovybė, įstaiga* 'authorities, institution') or means (*griežtas reguliavimas* 'strict adjustment'), while *apriboti* 'limit'attaches only nouns/noun phrases denoting means (*vertinimas, reikalavimai* 'evaluation, requirements').
- the synonymic Lithuanian verbs *valdyti, stebėti, kontroliuoti*
  With the verbs *valdyti* 'manage', *stebėti* 'monitor', *kontroliuoti* 'control' the Agent is always expressed by nouns/noun phrases denoting an organisation (*CVPD bankinio tipo paslaugų teikėjas* 'a CSD-banking service provider', įstaiga 'institution')

To sum up, the predicative frame CHANGE and CONTROL_RISK is the last frame that completes the picture of the perception of the concept RISK based on the analysed material extracted from the ad hoc corpora. The argument structures activated by the verbs that belong to this frame reveal the typical semantic categories that denote the concepts of the Agent, Effect and Means. The concept of the Agent is expressed by the terms denoting physical and institutional actors, financial tools and methods. The same categories are relevant for the concept Means except for physical and institutional actors. The concept Effect is lexically realised in form of SWT/MWTs *risk/risque/rizika.* The MWTs denoting risk related to an *Asset, Harmful_event* and *Intension/Extension* of risk are most extensively instantiated in the three languages. It means that professionals have a duty to reduce and

control the risk related to *an Asset* and a *Harmful_event*. They also have to monitor constantly the *Intensity* or *Extension* of risk. However, the MWTs *risk/risque/rizika* are not numerous for this frame (24 for English, 33 for French and 27 for Lithuanian) as the term *risk/risque/rizika* usually occurs without any modifiers. This tendency can be explained by the fact that in the EU legislative documents it is important to manage and monitor risk as soon as the financial transactions start. The type of risk is of secondary importance.

The analysis of the macro-context of the term *risk/risque/rizika* proves the importance of application of predicative frames in the investigation of concept RISK and SWT/MWTs *risk/risque/rizika* denoting it as such and its types. Predicative lexical units not only communicate knowledge, but also organise knowledge and determine the positions of the concepts in the overall conceptual framework of the domain. Thus, they can be viewed as nodes of knowledge representation. The applied methodology enabled the researcher to reveal the deepest layer of the financial language, which cannot be disclosed by applying concept frame analysis alone.

4. PECULIARITIES OF THE USAGE OF LINGUISTIC MEANS IN THE PARALLEL CORPUS

As the research material is a parallel corpus of three languages, i.e. original texts (English or French) and their translations into Lithuanian, translation issues were inevitably encountered. These issues are related to the nature of the legislative language of the EU as well as the structure of the languages and their historic relationship.

Legislative acts of all areas have common linguistic features, which they share with the administrative language and the legal language, such as formal and impersonal style, complex sentences, ready-made sentences, declarative mood, nominal style, lexically poor language, consistent use of terminology, etc. (Biel, 2014, p. 26-27). The tradition of long and complex sentences in English and French is inherited from Antiquity and Middle Ages when every part of a legal document used to consist of a single sentence, thus, law drafters had to include all necessary information, use repetition, long noun phrases with plenty of modifications, peculiar word order, prepositional phrases, as well as coordinate and subordinate clauses (Veretina-Chiriac, 2012, p. 106). It is not suprising that to this day sentences remain long, which makes it difficult for non-professionals to fully understand and interpret legal texts. Though the history of the Lithuanian legislative language is not so long, its syntactic structures are also complex due to the general European tradition of language of legislative documents (Žilinskienė, 2009, p. 19; Maksimaitis, 2002). Despite the structural complexity, fundamental characteristics of the EU legislative language are its accuracy and precision as linguistic clarity is a crucial norm of legislation, the main goal of which is the protection of citizens and assurance of legal certainty.

In the EU space, English occupies the place of *lingua franca* as almost all documents are written in English, thus, it influences very much the terminology of national languages. English term formation patterns become a matrix for the creation of terms in other languages (Mockienė, 2016). However, nowadays English is the predominant language of international business, and has a significant role as a legislative language within the European Union, it is important to emphasise that for a very long period legal English was influenced by Latin and French. Since 1066, Anglo-Norman French became the official language of England. For a period of nearly 300 years, it was the language of legal proceedings. As a result many words used in the modern legal English are derived from Anglo-Norman, for example: *property, estate, chattel, lease, executor,* and *tenant.* Its influence may be illustrated by some of the complex linguistic structures employed in legal writing. From 1066 Latin was the language of formal records and statutes, but it was not the language of legal pleading or debate. The Statute of Pleading, which was enacted in French in 1356, stated that all legal proceedings should be in English, but recorded in Latin. Nonetheless, the use of French in legal pleadings continued into the seventeenth century in some areas of the law (cf. Tiersma, 1999). Thus, this historical context explains the similarities of English and French modern legislative lexicon and syntax.

The above-discussed factors influence the usage of linguistic means in the investigated parallel texts; they are discussed below in two sections: peculiarities of the usage of the linguistic means observed in the microcontext and macro-context analyses.

4.1. Peculiarities of the usage of linguistic means
in the micro-context of the term *risk/risque/rizika*

The main lexical feature of legislative texts is their specific vocabulary. Collocations, which are the main element of text construction, acquire specific features in legislative documents. According to Biel collocations of a specialised field are restricted and stable, they include few variations, i.e. the range of collocates with which the bases are usually connected, is very limited. It is due to the processes of standardisation within the EU legislation (Biel, 2014, p. 28).

The investigation of the micro-context of the term *risk/risque/rizika* revealed the fact that nominal term-forming collocations (which are to be regarded as multi-word terms) were not numerous, though the corpus was of sufficient size (more than million words) and quality: while the term *risk* was used 4350 times, only 70 term-forming collocations with the nominal base *risk* were detected in the English corpus (respectively, the French term *risque* was used 4360, the Lithuanian term *rizika* 5021 (involving all possible grammatical forms)). Hence, the variety of nominal collocational patterns can be viewed as restricted in the financial domain.

Although English can serve as an example for term formation for other languages, Lithuanian terminologists state that the term structures of other languages should be disregarded during the process of translation (Keinys, 2005, as cited in Zaikauskas, 2014, p. 73). The mission of terminologists is to provide a national equivalent in form and in concept for the term in translation (Keinys, 2005, Zaikauskas, 2014 Houbert, 2001). However, according to Zaikauskas (2014), Rackevičienė, Janulevičienė (2011) and Houbert (2001) terms of specialised domains are usually translated literally or via applying the through-translation technique. There are many reasons, which explain the literal or through-translation of terms, the most important being the lack of time to translate, analyse the concept designated by the term and consult experts (Zaikauskas, 2014, p. 74).

The micro-context analysis revealed similar tendencies: the risk-related concepts are expressed using identical or very similar linguistic means in all three languages. Most risk-related concepts are denoted by multi-word nominal phrases in all three languages. Moreover, their lexical structure (the number of modifiers and their meanings) also coincides in most cases, e.g., *credit risk – risque de crédit – kredito rizika; systemic risk – risque systémique – sisteminė rizika.* Only in 5 Lithuanian terms a bigger number of modifiers than in English and French are used to denoted the same concept, e.g.:

transfer risk – risque de non-transfert – lėšų pervedimo rizika ;
currency risk – risque de change – valiutos kurso rizika ;
undue risk – risque excessif – pernelyg didelė rizika ;
risk of the obligor – risque au débiteur – įsipareigojončio asmens rizika ;
default risk – risque de défaut – įsipareigojimų neįvykdymo rizika.

4.2 Peculiarities of the usage of linguistic means
in the macro-context of the term *risk/risque/rizika*

The analysis of the macro-context of the term *risk/risque/rizika* uncovered the peculiarities of the usage of linguistic means used, while dealing with the same semantic frame. The empirical research reveals that in the parallel Eglish and French texts syntactic strcutures are in most cases identical, this can be explained by the tight historical relationship between the languages and their typological similarities. Meanwhile, the syntactic strcutures in the Lithuanian texts are often different. Below, the most prominent differences between the languages are discussed.

a) *Nominal constructions ⟷ Verbal constructions*
Nominalisation is an important feature of the legislative language. The abundant use of nouns instead of verbs makes the legislative language more complex, e.g., *give rise to* is used instead of *raise, run a risk* instead of *risk*, *provide a reduction* instead of *reduce*, *give an indication* instead of *indicate*, etc. According to Mattila, this occurs because a noun gives a more objective impression than a verb (Mattila, 2013, p.122). Using this linguistic tool, the drafters of legislative documents place more emphasis on the result of the action than on the action itself (Jasinskienė, 2016). Moreover, a wide range of nouns become bases of multi-word terms formed as noun-phrases or compound words (Mattila, 2013, p. 122). In translation theory, this method is named *transposition* or a shift of word class, e.g., verb for noun, noun for preposition, etc. (Malina & Albir, 2002, p. 449; Newmark, 1988, p. 85).

The investigated material revealed the differences in the usage of nominal patterns vs. verbal patterns in the English, French and Lithuanian and vice versa.

In many cases nominal patterns are used in all three languages, e.g.:

EN <…> documentation showing that **the ICAAP** clearly **identifies the concentration risk** arising from the large exposures to the regional or central body and that this is actively manage <…>. < *Guideline (EU) 2017/697 of the European Central Bank of 4 April 2017*>

FR <…> les documents indiquant que **l'ICAAP identifie** clairement **le risque de concentration** découlant des grands risques encourus sur l'organe régional ou central et que ce risque est géré activement <…>. < ORIENTATION (UE) 2017/697 DE LA BANQUE CENTRALE EUROPÉENNE du 4 avril 2017>

LT <…> dokumentus, įrodančius, kad **ICAAP** aiškiai **nustato koncentracijos riziką**, kylančią dėl regioninio arba centrinio organo didelių pozicijų, ir kad ji yra aktyviai valdoma <…>. < EUROPOS CENTRINIO BANKO GAIRĖS (ES) 2017/697 2017 m. balandžio 4d.>

However, in some cases the English and French nominal patterns are replaced by the verbal constructions or subordinate clauses in the Lithuanian texts:

EN/FR (NP) → **LT** (V/Clause)

1) valuation and estimation of price risks / l'évaluation et l'estimation des risques de prix → vertinti ir apskaičiuoti kainų riziką

EN *The institution shall also have due regard to the amount of model risk inherent in **the***

valuation and estimation of price risks associated with such products. *<Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 of June 2013>*

FR *Les établissements tiennent aussi dûment compte de l'importance du risque de modèle inhérent à **l'évaluation et à l'estimation des risques de prix de tels produits**. <RÉGLE-MENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013 >*

LT *Įstaigos taip pat turi deramai atsižvelgti į modelio rizikos, būdingos **vertinant ir apskaičiuojant kainų riziką**, susijusią su tokiais produktais, sumą. <EUROPOS PARLA-MENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.>*

2) risk of failure by the firm /le risque de défaillance de l'entreprise → rizika, kad įmonė neįvykdys pareigų

EN *Investment firms shall establish, implement and maintain adequate policies and procedures designed to detect **any risk of failure by the firm** to comply with its obligations under Directive 2014/65/EU <…>. <Commission Delegated Regulation (EU) 2017/565 of 25 April 2016>*

FR *Les entreprises d'investissement établissent, mettent en œuvre et gardent opérationnelles des politiques et des procédures conçues pour détecter **tout risque de défaillance de l'entreprise** afin de se conformer à ses obligations au titre de la directive 2014/65/UE <…>. <RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016>*

LT *Investicinės įmonės parengia, įgyvendina ir taiko tinkamą politiką ir procedūras, kurių tikslas – nustatyti bet **kokią riziką, kad įmonė neįvykdys pareigų** pagal Direktyvą 2014/65/ES <…>. <KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016 m. balandžio 25d.>*

In other cases, the English and French verbal structures are replaced in Lithuanian by the nominal ones:

EN/FR (V) → **LT** (NP)

1) to mitigate the risk/ atténuer le risque → rizikos mažinimas;

EN *<…> the justification for why the O-SII buffer is considered likely to be effective and proportionate **to mitigate the risk** <…>. <Directive 2013/36/EU of The European Parliament and of Council of 26 June 2013>*

FR *<…> les raisons pour lesquelles le coussin pour les autres EIS est susceptible d'être efficace et proportionné en vue **d'atténuer le risque** <…>. <DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013>*

LT *<…> pagrindimas, kodėl manoma, kad O-SII rizikos rezervas gali būti efektyvus ir proporcingas **rizikos sumažinimui**. <EUROPOS PARLAMENTO IR TARYBOS DIREKTY-VA 2013/36/ES 2013m. birželio 26d.>*

2) to manage business risks/ gérer les risques économiques → verslo rizikos valdymas

EN *A description of the risk management and control systems as well as the IT tools put in place by the CSD **to manage business risks** <…>. <Commission Delegated Regulation (EU) 2017/392 of 11 November 2016>*

FR *Une description des systèmes de gestion des risques et de contrôle ainsi que des outils informatiques mis en place par le DCT demandeur pour **gérer les risques économiques**. <RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016>*

LT *Paraišką teikiančio CVPD nustatytų **verslo rizikos valdymo** ir kontrolės sistemų, taip*

pat IT priemonių aprašymas <…>. <KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.>

b) Passive constructions vs. Active constructions

Drafters of legislation tend to use linguistic means that reduce the role of agent identity and emphasise the action. The use of passive voice and pronouns are frequent and typical for the impersonal style of writing. Drafters of legislation commonly use the passive voice especially in cases when obligation and condition are imposed in order to create the impression that such rules are right as they occur without the intervention of the human agent (Veretina-Chiriac, 2012, p. 106). In translation, this technique is named *modulation* – a change of viewpoint, perspective or category of thought. If transposition is a shift in grammatical categories, modulation is related to the shift in cognitive categories. It can be lexical or structural (Malina & Albir, 2002, p. 449; Newmark, 1988, p. 88). In the current study, only the structural modulations were identified.

EN/FR (Passive) → LT (Active)

EN Operational risks that *may be posed* **by critical utilities and critical service providers** < … > . *<Commission Delegated Regulation (EU) 2017/392 of 11 November 2016>*

FR Risque opérationnel susceptible *d'être posé* **par des prestataires de services et fournisseurs de services de réseau essentiels** < … >. *<RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016>*

LT Operacinė rizika, *kurią gali kelti* **ypatingos svarbos komunalinių paslaugų ir ypatingos svarbos paslaugų teikėjai** < … >. *<KOMISIJOS DELEGUOTASIS REGLAMEN-TAS (ES) 2017/390 2016m. lapkričio 11d.>*

EN < … > similarly, **custody risk** *faced* **by a CSD** on own assets held by a custodian bank or other CSDs should not be double-counted. *<Commission Delegated Regulation (EU) 2017/390 of 11 November 2016>*

FR De même, **le risque de garde** *encouru* **par un DCT** sur ses actifs détenus par une banque dépositaire ou un autre DCT ne devrait pas être comptabilisé deux fois et aucun capital réglementaire supplémentaire ne devrait être exigé. *<RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016>*

LT Panašiai **saugojimo rizika, su kuria** *susiduria* **CVPD** dėl nuosavo turto, kuris yra jį saugančiame banke ar kituose CVPD, neturėtų būti priskaičiuojama du kartus, ir reikalauti kokio nors papildomo reguliuojamojo kapitalo nereikėtų. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016 m. lapkričio 11d.* >

It might be assumed that in English and French, which have fixed word order in a sentence, the shift from the active to passive voice often resuts from the practical need to ensure the sequence of items according to the information structure: it allows to direct the focus towards the *Patient* by positioning it before the *Agent*. Meanwhile, in Lithuanian, where word order is free, there is no need for such transformations.

c) Transformation of argument structure

Another example of modulation, observed in the Lithuanian translation, is transformation of the entire argument structure of the source language by using a verb activating a

different frame in the target language. For example, the argument structure (belonging to the CAUSE_ RISK frame) *Cause causes Effect (RISK) to Experiencer* is translated by the argument structure (belonging to EXPERIENCE_RISK frame) *Experiencer bears Effect (RISK)*. In the sentences below, the English syntactic structure *Sbj. exposes Obj. to RISK* is translated into Lithuanian by the syntactic structure *Sbj. experiences RISK because of Compl.* Such transformation changes the perspective from which the participants of the action are seen. It seems that modulation is an important technique in translation of the EU legislation documents. The French syntactic structure is identical to the English one:

EN *<…> macro-financial assistance shall be carried out in euro using the same value date and shall not involve the Union in the transformation of maturities, or **expose it (the Union) to any exchange or interest rate risk, or to any other commercial risk.** <Decision (EU) 2016/1112 of the European Parliament and of the Council of 6 July 2016>*

FR *Les opérations d'emprunt et de prêt relatives à l'assistance macrofinancière de l'Union sont effectuées en euros, en appliquant la même date de valeur, et n'impliquent pas pour l'Union de transformation d'échéance, **ni ne l'exposent à un quelconque risque de change ou de taux d'intérêt, ou à un quelconque autre risque commercial.**<DÉCISION(UE) 2016/1112 DU PARLEMENT EUROPÉEN ET DU CONSRIL du 6 juillet 2016>*

LT *Su Sąjungos makrofinansine pagalba susijusios skolinimosi ir skolinimo operacijos atliekamos eurais, naudojant lėšų įskaitymo dieną taikomus valiutų kursus, ir dėl tų operacijų Sąjunga nesprendžia su terminų pasikeitimu susijusių klausimų ir **ji nepatiria jokios valiutų keitimo kurso rizikos ar jokios kitos komercinės rizikos.**<EUROPOS PARLAMENTO IR TARYBOS SPRENDIMAS (ES) 2016/1112 2016m. liepos 6d.>*

d) Usage of verbal synonyms

The empirical research revealed that the verbal synonym strings are different in the investigated languages: the English and French legislative languages possess a wider verbal synonymy than the Lithuanian legislative language, which leads to a greater variety of English and French argument structures. For example, the argument structure of the type *Cause causes Effect(RISK) to Experiencer* is instantiated with:

- 9 English verbs *pose, cause, create, entail, constitute, generate, involve, determine*;
- 13 French verbs *entraîner, (re)présenter, créer, poser, (faire)apparaître, constituer, engendrer, comporter, impliquer, survenir, faire peser, faire courir, donner lieu à*;
- 2 Lithuanian verbs *(su)kelti* 'cause', *kilti* 'arise'.

In the English and the French subcorpora, 9 synonymic verbs activating the frame CAUSE_ RISK were detected, while in the Lithuanian subcorpus only 2 verbs were observed:

cause *systemic risk –* **créer** *un risque systémique –* **sukelti** *sisteminę riziką;*

pose *systemic risk –* **poser** *un risque systémique –* **kelti** *sisteminę riziką;*

constitute *a single risk –* **constituer** *un risque –* **kelti** *vieną riziką ;*

entail *credit or liquidity risk –* **entraîner** *un risque de crédit ou de liquidité –* **kilti** *kredito ar likvidumo rizikai;*

create *systemic risk –* **créer** *un risque systémique –* **kilti** *sisteminei rizikai.*

e) Omission of verbal constructions

The analysis of the Lithuanian translations revealed one more translation technique – omission of verbal constructions. In order to illustrate the phenomenon of omission, the examples from the frame CAUSE_RISK are provided: the English verb *generate* is omitted in Lithuanian, but preserved in French:

EN <…> **the market risk that is generated** *by the internal hedge shall be dynamically managed in the trading book within the authorised limits* <…>.*<Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013>*

FR <…> **le risque de marché qu'elle génère** *fait l'objet d'une gestion dynamique à l'intérieur du portefeuille de négociation, dans les limites autorisées* <…>. *<RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013 >*

LT <…> *vidaus apsidraudimo pozicijų* **rinkos rizikos dalis** *dinamiškai valdoma kaip prekybos knygos rizika, neviršijant leistinų ribų*<…>.*<EUROPOS PARLAMENTO IR TA-RYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.>*

The translator omitted the verb *(vidaus apsidraudimo pozicijų <**sukelta**> rinkos rizikos dalis)* as it is evident from the context and makes the sentence unnecessarily more complex.

Another example includes the verb *EN arise, FR survenir*. In the Lithuanian sentences the verb *arise/survenir* is omitted due to the structure of the sentence which does not require a verb to be put together with the term *risk (rizika)*:

EN *"Specific Wrong-Way risk" arises when* future exposure to a specific counterparty is positively correlated with the counterparty's PD due to the nature of the transactions with the counterparty. <Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013>

FR *"Risque spécifique de corrélation": le risque survenant lorsque l'exposition future envers une contrepartie donnée est positivement corrélée à la PD de cette contrepartie, en raison de la nature des transactions conclues avec elle. <RÉGLEMENT (UE) Nr. 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013 >*

LT „**Specifinė klaidingų sprendimų rizika**"*– rizika, kai* būsimos pozicijos su konkrečia sandorio šalimi ir PD, atsirandančios dėl sandorių su sandorio šalimi pobūdžio, tarpusavio koreliacija yra teigiama. <EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr 575/2013 2013m. birželio 26d.>

To sum up, the empirical research confirms that the legislative language is specific and complex. Its mission is to communicate legislative messages with absolute clarity and without ambiguity in any languages of member states of the EU. Translations have to ensure a smooth flow of these messages in the multi-cultural EU society.

The provided examples show that the choice of linguistic means in the parallel legislative documents often depends on the structure of the languages, historical relationship between the languages, tradition of legislative language in the particular country. Translators have to look for creative ways to convey precisely and accurately the ideas by using linguistic means typical and usual in the target language. Thus, in some cases, they transform the sentences of the source language syntactically, nominalise verbs, while in other cases, they omit lexical units or replace them by others without modifying the meaning of the sentences.

5. A COGNITIVE MAP OF THE CONCEPT RISK

The multidimensional analysis of the terms with the nominal base *risk/risque/rizika* allows the researcher to create a cognitive map of the concept RISK in the financial field. The findings of the research disclose two important stages of cognition of the concept RISK: first, risk arises and starts affecting an entity; second, once risk is detected, it must be evaluated and managed. The scheme below illustrates the relations between the macro-frames (expressed by the macro-context of the term *risk/risque/rizika*) and the micro-frame (expressed by the micro-context of the term *risk/risque//rizika*).

In the centre of the table there is the concept RISK, on the left of it there are participants of the risk-related situations/events *Cause* and *Experiencer* which cause or experience RISK, while on the right there is the participant of the risk-related situations/events *Agent* which identifies, evaluates and controls RISK.

The quadrangles show the categories of the lexical units that denote the participants on the lexical level. They overlap in the three languages: individuals and organisations taking part in the financial system, financial tools or valuable papers, actions and processes. The arrows indicate the relations between the concepts: the entities, presented in the quadrangles, cause risk, the same entities may bear risk and the same entities participate in risk management. This creates the picture of mirror reflection of the frames. The visual representation of the cognitive map of the concept RISK provides the understanding of deep and close relations between participants in the financial field. In addition, this map provides the model of the perception of the world related to the concept RISK.

The macro-frames include the general concept RISK realised by semantic categories related to the different elements of the micro-frame RISK_scenario: either *Asset, Protagonist, Harmful_event, Intensity* or *Extension* of risk, and *Time*. The list of examples of terms with the nominal base *risk/risque/rizika* is conveyed in the table below. The twofold analysis enabled the researcher to uncover how people perceive the concept RISK and what they do with this danger in the financial field. Although the processes passing in our brains, while perceiving the world, are very complicated, they are linguistically realised in a very simple, logical and coherent system.

Table 15. *A cognitive map of the concept **RISK** in the financial field*

MACRO-FRAMES /Macro-context

Predicative frames

Cause

1) physical and institutional actors;

2) a financial tool;

3) actions or processes;

Cause_RISK →

RISK

Agent

1) physical and institutional actors;

2) a financial tool;

Perceive and Assess_RISK ←

Change and Control_RISK ←

Experiencer **Experience_RISK**

1) physical and institutional actors;

2) a financial tool;

MICRO-FRAME/micro-context

Asset: *investment risk – risque d'investissement – investicijų/investicinė rizika, interest rate risk – risque de taux d'intérêt – palūkanų normos rizika, ultimate stock risk – risque final lié aux stocks – pagrindinių išteklių rizika, liquidity risk – risque de liquidité – likvidumo rizika, financial risk – risque financier – finansinė rizika, credit risk – risque de crédit – kredito rizika, commodities risk – risque sur matières premières – biržos prekių kainos rizika, price risk – risque de prix – kainos rizika, foreign exchange risk – risque de change – valiutos kurso rizika, currency risk – risque de change – valiutos kurso rizika, inventory risk – risque sur stocks – atsargų rizika,* etc.;

Protagonist: *country (credit) risk – risque (de crédit) de pays – šalies (kredito) rizika, counterparty (credit) risk – risque (de crédit) de contrepartie – sandorio šalies (kredito) rizika, risk of the borrower – risque de l'emprunteur – skolininko rizika, risk of the obligor – risque au débiteur – įsipareigojančiojo asmens rizika, risk of a CSD-banking service provider – risque d'un DCT-prestataire de services bancaires – CVPD bankinio tipo paslaugų teikėjo rizika, counterparty(credit)risk – risque (de crédit) de contrepartie – sandorio šalies(kredito)rizika, sovereign risk – risque souverain – valstybės rizika, market risk – risque de marché – rinkos rizika, business risk (entrepreneurial risk) – risque économique – verslo rizika, commercial risk – risque commercial – komercinė rizika, risque to third parties – risque à des tiers –trečiųjų šalių rizika, legal risk – risque juridique – teisinė rizika, political risk – risque politique – politinė rizika, economic risk – risque économique (risque d'entreprise) – ekonominė rizika* etc.;

Harmful_event: *default risk – risque de défaut – įsipareigojimų neįvykdymo rizika, operational risk – risque opérationnel – operacinė rizika, risk of a price squeeze – risque de ciseau tarifaire – kainų skirtumo mažinimo rizika, migration risk – risque de migration – pasikeitimų rizika, model risk – risque de modèle – modelio rizika, risk of disruption – risque de perturbation – finansų sistemos sutrikimo rizika, cva risk (credit valuation adjustment risk) – risque d'adjustement de l'évaluation de crédit – kredito vertinimo koregavimo rizika, concentration risk – risque de concentration – koncentracijos rizika, risk of capacity withholding – risque de rétension de capacités – pajėgumų sulaikymo rizika, custody risk – risque de garde – saugojimo rizika, settlement risk – risque de règlement – atsiskaitymo (-ų) rizika,* etc.;

Intensity or extension of risk: *high risk – risque* élévé *– didelė rizika, low(credit) risk – risque (de crédit) faible/modéré* – maža (kredito) rizika, *position risk – risque de position – pozicijų rizika, significant wrong-way risk – risque significatif de corrélation – didelė klaidingų sprendimų rizika, material risk – risque significatif – reikšminga rizika, minimal credit and market risk – risque de crédit et de marché minimal – minimali kredito ir rinkos rizika, systemic risk (macroprudential risk) – risque systémique (macroprudentiel) – sisteminė (makroprudencinė rizika), specific risk – risque spécifique – specifinė rizika, general risk – risque général – bendroji rizika, specific wrong-way risk – risque spécifique de corrélation – specifinė klaidingų sprendimų rizika, general wrong-way risk – risque général de corrélation – bendroji klaidingų sprendimų rizika* etc.;

Time: *intraday credit risk – risque de crédit intrajournalier – dienos kredito rizika, intraday and overnight credit risk – risque de crédit intrajournalier et à vingt-quatre heures – dienos ir vienos nakties kredito rizika, intraday and overnight liquidity risk – risque de liquidité – intrajournalier et à vingt-quatre heures –dienos ir vienos nakties likvidumo rizika.*

Relations between words are a vital part of any natural language system. The argument structure provides a helpful tool to reveal how the meaning of an individual word depends on various relations connecting it to other words in the sentence. Knowledge carried by collocations is important for natural language processing because collocations establish the restrictions on how words can be used together.

CONCLUSIONS

The results of the frame-based analysis of the English term *risk*, its French and Lithuanian equivalents and their micro- and macro-contexts in the ad hoc corpora of the EU legislative documents of the financial domain proves that a term does not exist in a vacuum: it is accompanied by other words, which allow to specify its meaning and disclose its relations with other terms in the domain. The findings lead to the following conclusions:

1. The research proves that the methodological principles of Frame Semantics, further developed by the FrameNet project, can be applied to the semantico-syntactic analysis of the financial terms with the nominal base *risk/risque/rizika* which provides important information both on the conceptual and linguistic dimensions of these terms.
   Although the FrameNet project has been developed for the data of the general language, the frames provided by it can be adapted for application in the terminological research of the financial domain which enables the revelation of conceptual interrelations among the financial terms and their semantic and syntactic characteristics.

2. The analysis of the micro-context of the term *risk/risque/rizika* substantiates the following conclusions:
   2.1. The collocational method is an effective means for the analysis of the lexical and grammatical environment of the selected keyword, as well as multilingual extraction of multi-word terms from corpora. The method is based on the assumption that complex terms are made of existing simple terms.
   2.2. The frame-based analysis of multi-word terms with the selected nominal base allows the classification of the terms into semantic categories according to the meanings of the modifiers of the base. The frame **RISK_scenario**, distinguished by FrameNet researchers, proved to be a suitable conceptual-cognitive model for the semantic classification of the terms of the financial domain. The frame **RISK_scenario**, adapted to the financial field, provides a background of experiences that are necessary to interpret the concept RISK and its relations to other concepts, such as *Assets, Protagonist, Harmful_event, Intensity/Extension of risk, Time*. Thus, the frame **RISK_scenario** is a coherent structure of related concepts; the knowledge of all of them is indispensable to get complete knowledge of the term *risk/risque/rizika* and classify the multi-word terms that include this base into semantic categories.
   2.3. Most of the extracted multi-word terms denote *Harmful_event, Protagonist, Extension* of risk, and loss of *Assets*. The findings confirm that in the financial domain the focus is directed towards the *Asset* and the *Harmful_event* which causes the risk on the *Asset* as well as to the *Extension* of the risk affecting the *Asset* or the *Protagonist* who performs the exchange. It is crucial to know which *Harmful_event* can affect the *Asset* if the risk occurs and how many entities undergo the negative outcome; the *Intensity* and *Time* during which the risk lasts are of secondary importance.
   2.4. The contrastive analysis of the linguistic expression of the established semantic

categories of the multi-word terms discloses the diversity of the linguistic means used to form terminology in English, French and Lithuanian. The following term formation tendencies in the investigated languages have been observed:

- the prevailing term type according to the number of constituents in the investigated languages is two-word terms: they constitute the biggest number of the extracted terms in English, French and Lithuanian; that shows that the EU term-developers respect the main requirement of language economy (brevity of terms);
- only a few English and French terms have more than 2-3 words, while in Lithuanian terms with 4 and more words constitute a significant part of the selected data (15 of 70);
- the pre-nominal modification of the term base is characteristic of both the English and Lithuanian: most English and all Lithuanian investigated multi-word terms are formed by using this formation pattern, on the contrary, in French only the post-nominal modification of the term base is used;
- Nominal modifiers are attached to the base in different ways in the investigated languages: in English and Lithuanian they are mostly attached directly (*credit risk, kredito rizika*), while in French they are always attached with the help of the preposition *de* (*risque de crédit*).

3. The analysis of the macro-context of the term *risk/risque/rizika* leads to the following conclusions:

    3.1. The annotated verbs of the given research proved to be a useful perspective to approach the meanings of the terms, as they link concepts in financial texts and reflect how financial entities interact. The verbs of the term-embedding collocations V+RISK, RISK+V evoke predicative frames which configure the general meaning of the verbs and create specific semantic spaces for the arguments of the verbs. The analysis of predicative frames enables to reveal the processes and actions related to the concept RISK.

    3.2. Four frames were generated by the annotated verbs: CAUSE_RISK, EXPERIENCE_RISK, PERCIEVE and ASSESS_RISK, CHANGE and CONTROL_RISK. All of them are based on the frames developed by the FrameNet project and adapted to the financial field. The frames capture the stages of existence of risk: risk is caused by something or somebody, something or somebody experiences it, consequently, risk is identified, assessed and proceeds to some changes and control.

    3.3. The contrastive analysis revealed seven universal semantico-syntactic models used to express the investigated frames in the English, French and Lithuanian languages:

a) Cause/Agent (Sbj.)+V+Effect **RISK** (Obj.);

b) Cause (Sbj.)+V+Effect **RISK** (Obj.)+Experiencer (Compl.);

c) Effect **RISK** (Sbj.) +V+ Cause (Obj./Compl.)

d) Agent (Sbj.) + V+Amount (Obj.)+ Effect **RISK**(Obj./Compl.);

e) Experiencer(Sbj.) +V+ Effect **RISK** (Obj.);

f) Effect **RISK** (Sbj.)+V+[Means (Compl.)]+Agent(implicit) ;

g) Agent (Sbj.)+V+[Means (Obj./Compl.)]+ Effect **RISK**(Obj./Compl.).

Some models specific only to one or two languages have also been observed, but they are rarely used in the corpora:

> EN/FR
> Cause (Sbj.) + V + Effect **RISK**(Compl.);
> Cause (Sbj.) + V+ Experiencer (Obj.) + Effect **RISK**(Compl.);
> Experiencer (Sbj.) + V + Effect **RISK**(Compl.);
> Effect **RISK** + V+ Experiencer (Compl.)
> EN/LT
> Experiencer (Sbj.) + V + Effect **RISK**(Obj.) + Cause (Compl.)
> FR/LT
> Effect **RISK**(Sbj.) + V + Experiencer (Compl.) + Cause (Compl.)
> LT
> Effect **RISK**(Sbj.) + V + Experiencer (Compl.)
> Agent (implicit) + V+ Effect **RISK** (Obj.)

Thus, the findings prove that the majority of the semantico-syntactic structures overlap in the investigated languages. This might be explained by the fact that the investigated corpora are parallel texts and the translators sought to ensure the highest degree of equivalence of the source and target texts both on the semantic and syntactic levels.

3.4. The analysis of the lexical expression of the predicative frames in the investigated languages revealed that the elements Cause, Agent and Experiencer are represented by the same semantic categories: individuals, institutions, financial tools, (unsuccessful) actions and processes. That reveals the interdependency of the participants of the risk-related situations: they depend on each other and the role, which they acquire, is determined by a situation, i.e. in some situations they cause risk, in other situations they experience risk or become risk assessors/controllers.

4. The analysis of the peculiarities of the usage of the linguistic means in the parallel texts discloses the following tendencies: on the micro-context level, the semantic equivalence is achieved by identical or very similar linguistic means in all three languages: most risk-related concepts are denoted by term-forming multi-word phrases; moreover, the multi-word terms are identical in their lexical structure (the number of modifiers and their meanings), only in several cases the number of the modifiers is higher in one of the languages (Lithuanian). On the macro-context level, the linguistic means used to achieve the semantic equivalence in Lithuanian differ from the ones in English and French: in the Lithuanian subcorpus the same risk-related situations are often expressed by verbal constructions which correspond to the nominal constructions in English and French, by active form which corresponds to passive in English and French or vice versa, by verb omission or different argument structures, etc. This might be explained by different typological structures of the investigated languages.

5. The Frame Semantics methodology applied for the micro- and macro-analysis and classification of the chosen group of the financial terms enabled the development of a conceptual-cognitive map of the investigated financial domain representing the knowledge of the field and cognitive perception of the concept RISK. The analysis showed that verbs are culturally shared knowledge registered in the lexicon; they are conceptual

constants configuring the major conceptual parameters of the cognitive map of the specific field, while the nouns occupy the slots, activated by the verbs, and form conceptual micro-environments.

6. The findings of the contrastive analysis of the multi-word terms and semantico-syntactic models of predicative argument structures provide terminological information which might be useful for various target groups: formal structure of multi-word terms reveals term formation patterns in the investigated languages, which might be important to translators and terminology managers and used for the development of automatic linguistic methods of term extraction. Meanwhile, semantico-syntactic models of the annotated argument structures might be used in human and machine translation. Moreover, the parallel corpus compiled for the purposes of the research, is available to the public in CLARIN repository and might be used for various research purposes.

REFERENCES

1. Andor, J. (2010). Discussing frame semantics: The state of the art. An interview with Charles J.Fillmore. John Benjamins Publish Compagny, p.157-177. Retrieved from https://www.icsi.berkeley.edu/pubs/ai/discussingframe10.pdf (accessed 25 November 2018)

2. Anič, A., Lončar, M., Pavič, M. (2019). Extracting Lexical Units for Identifying Specialized Semantic Frames. *Terminologija 26*, p.73-87. Retrieved from https://www.researchgate.net/publication/338429054_Extracting_Lexical_Units_for_Identifying_Specialized_Semantic_Frames (accessed 12 February 2020)

3. Aston, G., & Burnard, L. (1998). *The BNC Handbook. Exploring the British National Corpus with SARA*. Edinburgh: Edinburgh University Press. (accessed 19 October 2019).

4. Attila, R. (1989). Historical and Comparative Linguistics. 2nd rev. ed. Amsterdam: John Benjamins Publishing Company. (accessed 10 May 2019)

5. Atkins, S., Rundell, M., & Sato, H. (2003) The contribution of FrameNet to practical lexicography. *International Journal of Lexicography 16(3)*, p.333-357. (accessed 5 March 2019)

6. Baker, P. (2010). Corpus Methods in Linguistics. In I.Litosselity, *Reserch Methods in Linguistics* (p.93-113). New York: Continuum International Publishing Group. (accessed 28 October 2019)

7. Bernotaitytė, G., Nemuraitė, L., Butkienė, R., & Paradauskas, B. (2013). Developing SBVR Vocabularies and Business Rules from OWL2 Ontologies. In T.Skersys, R.Butleris & R.Butkienė. *Information and Software Technologies*. (p.134-145). Berlin. Springer. (accessed 10 May 2019)

8. Biber, D. (1993). Representativeness in corpus design. *Literary and Linguistic Computing* Vol.8, No4. p. 343-57. Oxford University Press. (accessed 7 December 2019)

9. Biel, L. (2014). Lost in the Eurofog: The Textual Fit of Translated Law. Chapter 1, p. 19-48. Frankfurt: Peter Lang. (accessed 20 January 2019)

10. Bielinskienė A., Boizou L, Grigonytė G., Kovalevskaitė J., Rimkutė E., Utka A. 2015: Lietuvių kalbos terminų automatinis atpažinimas ir apibrėžimas. Monografija. Vytauto Didžiojo universitetas. Kaunas. Retrieved from https://eltalpykla.vdu.lt/bitstream/handle/123456789/92/ISBN9786094671487.pdf?sequence=3&isAllowed=y (accessed 15 April 2017)

11. Boas, H. (2005). Bilingual FrameNet for Machine translation. University of Texas at Austin, USA, p.1-8. (accessed 3 December 2019)

12. Bolshakov, I.A., Gelbukh, A.F (1998). *Lexical functions in Spanish*. Paper presented in Simposium Internacional de Computación, November 11 - 13, Mexico D.F., p. 383 - 395: Retrieved from https://www.gelbukh.com/CV/Publications/1998/CIC-98-Lexical-Functions.htm (accessed 14 March 2017)

13. Broekhuis, Hans. (2020). 1.3.3.Relational adjectives. Taalportaal. Retrieved from http://www.taalportaal.org/taalportaal/topic/link/syntax____Dutch__ap__a1__a1_General.1.3.3.xml. (accessed 16 May 2020)

14. Bugarski, R. (1991), Contrastive analysis of terminology and the terminology of contrastive analysis. In: V.Ivir, & D.Kalogjera. *Languages in Contact and Contrast. Essays in Contact Linguistics* (p. 73-82). Series: Trends in Linguistics. Studies and Monographs 54, Vol. 54. Berlin: De Gruyter Mouton. (accessed 2 August 2019).

15. Busse, D. (2012). *Frame-Semantik: Ein Kompendium*. Berlin and Boston: De Gruyter. (accessed 17 May 2017)

16. Butler, C.S. (2004). Corpus studies and functional linguistic theories. *Functions of Language* 11(2), p. 147–186. (accessed 4 June 2017)

17. Butler, C.S., Gonzáles, M., & Doval-Suárez, M. (2005). *The Dynamics of Language Use: Functional and contrastive perspectives*. Amsterdam: John Benjamins Publishing Company. (accessed 6 June 2019)

18. Cabré Castellví, M. T. (2003). Theories of terminology: their description, perception and explanation. *Terminology 9(2),* p.163-199. (accessed 16 November 2017)

19. Cabré Castellví, M. T., Montané, M. A., & Nazar, R. (2012). Corpus-based Terminology Processing. Paper predented at Terminology and Knowledge Engineering Conference in Madrid. Retrieved from http://terminus.iula.upf.edu/tke2012/ (accessed 28 November 2017)

20. Castells, S. T., Gallen, E. B. (2017). *Collocations and other lexical combinations in Spanish: Theoretical, Lexicographical and Applied Perspectives*. Routledge: London and New York. Retrieved from https://books.google.lt/books?id=vzIlDwAAQBAJ&pg=PA207 &lpg=PA207&dq=phrases+having+terminological+value&source=bl&ots=RJ7bleq1r T&sig=ACfU3U0PYXaadlqlQIdn13NJoik1jbuJQA&hl=ru&sa=X&ved=2ahUKEwiW qem19abpAhUOXpoKHXeqBpEQ6AEwAXoECAsQAQ#v=onepage&q=phrases%20 having%20terminological%20value&f=false (accessed 16 June 2019)

21. Chromá, M. (2016). Synonymy and Polysemy in Legal Terminology and Their Applications to Bilingual and Bijural Translation. *Research in Language*., vol. 9,1, po.31-50. (accessed 13 October 2017)

22. Chromá, M. (2016). Traps of English as a Taget Language in Legal Translation. *Comparative Linguistics. International Journalfor legal Communication*. Volume 26, p.71-98. (accessed 13 October 2017)

23. Colas, M.-M. (2006) Les classes de verbes: syntaxe et sémantique. Le traitement du lexique. Catégorisation et Actualisation. Sousse. Tunisie. (accessed 20 May 2020)

24. Croft, W., & Crus, D.A. (2004). *Cognitive Linguistics*. Cambridge University Press. (accessed 18 October 2019)

25. De Groot, G.-R. & van Laer, Conrad, J.P. (2007). The Dubious Quality of Legal Dictionaries. *International Journal of Legal Information*, p.64-86. (accessed 23 October 2017)

26. De Groot, G.-R. & van Laer, Conrad, J.P. (2011). Bilingual and multilingual legal dictionaries in the European Union: An Updated Bibliography. *Legal Reference Services Quarterly, 30(3)*, p.149-209. (accessed 23 October 2017)

27. Evans, V. (2007). *A Glossary of Cognitive Linguistics*. Salt Lake City: University of Utah Press. (accessed 23 October 2017)

28. Evans, V., & Green, M. (2006). *Cognitive linguistics. An Introduction.* Edinburg University Press. (accessed 18 January 2019)

29. European Commission. (2017). About multilingualism policy. Retrieved from https://ec.europa.eu/education/policies/multilingualism/about-multilingualism-policy_en (accessed 18 February 2019)

30. EU Monitor.(2020). Implementing regulation. Retrieved from https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/vkh7cggewpvt (accessed 18 February 2019)

31. Europen Union. (2020). Regulations, Directives and other acts. Retrieved from https://europa.eu/european-union/eu-law/legal-acts_en (accessed 18 February 2019)

32. Faber, P.B., Mairal, & Usón, R. (1999). *Constructing a Lexicon of English Verbs.* Berlin: Mouton de Gruyter. (accessed 8 February 2017)

33. Faber, P. B. (2010) The Cognitive Shift in Terminology and specialized translation, p.107-134. Alicante, Spain. Retrieved from https://pdfs.semanticscholar.org/109c/098f27278892d08542b0ae2f4897f0f1b15c.pdf Retrieved from https://www.redalyc.org/pdf/2651/265119728010.pdf (accessed 10 February 2017)

34. Faber, P.B., Pilar, L., & Prietoc J.A. (2009) Semantic Relations, Dynamicity, andTerminological Knowledge Bases. *Current Issues in Language Studies.* Spain. Retrieved from http://academicpress.us/journals/511X/download/v1n1-1.pdf (accessed 10 March 2017)

35. Faber, P.B., Sánchez, M., López Rodríguez, C., Arauz, P., Reimerik, A., Velasco, J., Linares, C., Questada, M., Góme-Moreno, J., & Martinez, S.. (2010). *A Cognitive Linguistics View of Terminology and Specialized Language.* Berlin: de Gruyter Mouton. (accessed 8 February 2020)

36. Faber, P.B. (2014). Frames as a framework for terminology. *Handbook of Terminology. Volume 1*, p.14-33. Amsterdam: John Benjamins. Retrieved from https://www.researchgate.net/publication/266392844_Frames_as_a_Framework_for_Terminology (accessed 3 March 2017)

37. Faber, P., Araúz, L., Velasco, P., Reimerink, A. (2007). Linking images and words: The description of specialized concepts. *International Journal of Lexicography 20*, p. 39-65. (accessed 12 March 2017)

38. Faber, P.B., Cabezas-García, M. (2019). Specialized Knowledge Representation: From Terms to Frames. *Research in Language 17(2)*, p.197-211. Retrieved from https://www.academia.edu/39683262/SPECIALIZED_KNOWLEDGE_REPRESENTATION_FROM_TERMS_TO_FRAMES (accessed 14 June 2019)

39. Faber, P., Reimerink, A. (2019). Framing terminology in legal translation. *Legal Discours, 4(1)*, p.15-46. (accessed 16 June 2019)

40. Fillmore, Ch. (1992). Frame Semantics. *Linguistics in the morning calm*, p. 111-137. Hanshin Publishing Compagny, Seoul, Korea. Retrieved from http://brenocon.com/Fillmore%201982_2up.pdf (accessed 14 November 2018)

41. Fillmore, Ch. and Atkins, S. (1992). Toward a Frame-Based Lexicon: The Semantics of Risk and its Neighbours, p.75-102. International Computer Science Institute. Berkley, California. Retrieved from http://www.icsi.berkeley.edu/pubs/ai/towarda92.pdf (accessed 14 November 2018)

42. Fillmore, Ch. and Baker, C. (2009). A frames approach to semantic analysis. Chapter 13, p.313-339. Retrieved from http://lingo.stanford.edu/sag/papers/Fillmore-Baker-2011.pdf (accessed 14 November 2018)

43. Fillmore, Ch. and Baker, C. (2001). Frame Semantics for Text Understanding, p.1-6. International Computer Science Institute. Berkley, California. Retrieved from http://www.sfs.uni-tuebingen.de/~keberle/Lit/framenet.pdf (accessed 24 November 2018)

44. Fillmore, Ch. (1985). Frame and the Semantics of understanding. *Quadrini de semantica,* vol.6(2), p.222-254. (accessed 25 November 2018)

45. FrameNet project available at: https://framenet.icsi.berkeley.edu/fndrupal/

46. Gelbukh, A., Kolesnikova, O. (2013). *Semantic Analysis of Verbal Collocations with Lexical Functions.* Springer. (accessed 12 Frbruary 2017)

47. Gómez-González, M.A. & Doval-Suárez, S.M. (2005). On contrastive linguistics: Trends, chalenges and problems. In C.S.Butler, M.A. Gómez-González & S.M.Doval-Suárez(Eds.). *The dynamics of languages use: functional and contrastive perpectives*, p.19-44. Amsterdam, Philadelphia: John Benjamins. (accessed 20 January 2018)

48. Geeraerts, D., & Cuycken, H. (2007). *The Oxford Handbook of Cognitive Linguistics.* Oxford University Press. (accessed 2 March 2019)

49. Hamm, F. (2009). *Frame Semantics.* In The Cambridge Encyclopedia of the Language Sciences. Cambridge University Press. (accessed 11 October 2017)

50. Harvey, M. (2002). What's so special about Legal Translation? *Meta 47(2)*, p.177-185. (accessed 17 December 2017)

51. Hoey, M. (2005). *Lexical Priming: A New Theory of Words and Language.* London: Routledge. (accessed 5 November 2017)

52. Houbert, F. (2001). Problématique de la traduction économique et financière. *Translation Journal*, Volume 5, No. 2. (accessed 20 November 2019)

53. Hunston, S.(2002) . *Corpora in Applied Linguistics.* Cambridge: Cambridge University Press. (accessed 25 May 2020)

54. Ibarretxe - Antuñano, I. (2004). What is Cognitive Linguistics? A new framework for the study of Basque, p.3-29. Association for French Lagnguage Studies. (accessed 22 April 2018)

55. James, C., (1980). *Contrastive Analysis.* London: Longman. (accessed 25 November 2019)

56. Janulevičienė, V. & Rackevičienė, S., (2011) Clarity versus accuracy and objectivity in written legal English. In *Santalka = Coactivity: Filologija. Edukologija 19, 2,* p. 141-149. (accessed 10 May 2018)

57. Janulevičienė, V. & Rackevičienė, S. (2016). Public sector fraud: comparative analysis of terminology and concepts. In *Public Policy and Administration 15, 4*, p. 673-686 Retrieved from https://www3.mruni.eu/ojs/public-policy-and-administration/article/viewFile/4365/4210 (accessed 10 May 2018)

58. Janulevičienė, V. & Rackevičienė, S., 2014, Formation of criminal law terms in English, Lithuanian and Norwegian. In *LSP journal - Language for special purposes: professional communication, knowledge management and cognition 15, 1*, p. 4-20. (accessed 10 May 2018)

59. Jasinskienė, D.(2016, april). *Ką reikia žinoti verčiant teisinius tekstus.* Paper presented at the conference of Legal Translation. MRU, Vilnius. (accessed 18 September 2016)

60. Kennedy, G.(1998). *An Introduction to Corpus Linguistics.* London: Longman. (accessed 20 February 2019)

61. Klein, Jared S.; Joseph, Brian D.; Fritz, Matthias; Wenthe, M. (2017) Series: *Handbook of Comparative and Historical Indo-European Linguistics,* Volume 1. Berlin: De Gruyter Mouton. (accessed 10 March 2016)

62. Khurshid, A., Rogers, M. (1992). Terminology management: a corpus-based approach. *Translating and the Computer 14*, p.33-44. London: Aslib. Retrieved from https://www.researchgate.net/publication/255612660_TERMINOLOGY_MANAGEMENT_A_CORPUS-BASED_APPROACH1(accessed 7 November 2018)

63. Kecskes, I. (2014). *Intercultural Pragmatics.* John Benjamins Publishing compagny. (accessed 10 May 2018)

64. Kocbek, A. (2006). Language and Culture in International Legal Communication. *Managing Global Transitions*, 4(3). Retrieved from http://www.fmkp.si/zalozba/ISSN/1581-6311/4_231- 247.pdf. (accessed 21 May 2017)

65. Kuczok, M. (2017). Contrastive and comparative linguistics. In: Körtvélyessy L. (ed.) *Language Typology. Preliminaries and Principles* (p. 169-175). Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego,. Retrieved from https://www.academia.edu/36621316/Contrastive_and_comparative_linguistics?email_work_card=view-paper (accessed 18 August 2019)

66. Kwiatek, E. (2013). Contrastive Analysis of English and Polish Surveying Terminlogy. p.1-14. Cambridge scholars publishing. (accessed 15 October 2018)

67. Laukaitis, A, Vasilecas, O., Plikynas, D. (2008). Formal concept analysis for business information. Information technology and control / Kaunas University of Technology. Kaunas: *Technologija.* Vol. 37, no. 1, p. 33-37. (accessed 21 January 2018)

68. Lehecka T. (2015). Collocation and colligation. In J.-O. Östman, & J. Verschueren (Eds.). *Handbook of Pragmatics Online*. Amsterdam: John Benjamins. (accessed 9 October 2017)

69. L'Homme, M.-C. (2003) *Combinaisons lexicales spécialisées. Regroupement des mots clés par classes conceptuelles.* In De Werelt, Editors: F. Grossman, A.Tutin, *Les collocations: analyse et traitement* p.89-103. Retrieved from https://www.researchgate.net/publication/266140480_Combinaisons_lexicales_specialisees_CLS_description_lexicographique_et_integration_aux_banques_de_terminologie (accessed 10 February 2018)

70. L'Homme, M.-C. (2004). La Terminologie: principes et techniques. *Terminology. International Journal of Theoretical and Applied Issues in Specialized Communication*, Volume 13, Issue 2, p. 291 – 297. (accessed 10 February 2018)

71. L'Homme, M.-C. (2012). Le verbe terminologique: un portrait des travaux récents. 3e Congrès Mondial de Linguistique Française, *Cahier de lexicologie 62,* p.93-97. L'Université de Montréal. (accessed 10 February 2018)

72. L'Homme, M.-C., & Zhicho, J. (2015). Classement des combinaisons lexicales spécialisées à base nominale dans un dictionnaire d'informatique, p.1-28. L'Université

de Montréal Retrieved from https://www.researchgate.net/publication/275065697_Classement_des_combinaisons_lexicales_specialisees_a_base_nominale_dans_un_dictionnaire_d'informatique68. (accessed 10 February 2018)

73. L'Homme, M.-C., Subirats, C., & Robichaud, B. (2016). A Proposal for combining general and specialized frames. Conference: Cogalex (December, 2016.). Cognitive Aspects of the Lexicon. Retrieved from https://www.researchgate.net/publication/311732962_A_Proposal_for_combining_general_and_specialized_frames (accessed 13 February 2018)

74. Ivanovska, B., Daskovska, N., Celik, M. (2012). A Contrastive Analysis in the Meaning of the Linguistic Units in the Contemporary German and Macedonian Languages. *Social and Behavioral Sciences 46,* p.1196-1202. (accessed 27 November 2019)

75. Jackon, H. & Zé Amvala, E. (2007). *Meaning and Vocabulary: An Introduction to Modern English Lexicology*. Bloomsbury Publishing. (accessed 26 November 2019)

76. López, A. & Valenzuela, J. (1998). Frame Semantics and Lexical Translation The Risk Frame ans Its Translation. In Babel, Volume 44, Issue 2, p.128-138. (accessed 28 January 2019)

77. Malina, A., & Albir, A. (2002). Translation Techniques Revisited: A Dynamic and Functionalist Approach. *Meta XLVII, 4*, p.498-512. (accessed 10 February 2020)

78. Maksimaitis, M., Pakalniškis V., Pečkaitis J., & Šenavičius A. (2002) *Lietuvos teisės istorija*. Vilnius: Justitia. (accessed 8 August 2017)

79. Marcinkevičienė, R. (2010). *Lietuvių kalbos kolokacijos*. Monografija.VDU. Kaunas. (accessed 23 January 2018)

80. Marcinkevičienė, R., Grigonytė, G. (2005). Lexicogrammatical Patterns of Lithuanian Phrases. The Second Baltic Conference on Human Language Technologies proceedings. Tallinn, 2005, p.299–305. Retrieved from http://donelaitis.vdu.lt/publikacijos/RG_1.pdf (accessed 29 May 2020)

81. Martin, W. (2006). Frame-based Lexicons and the Making of Dictionaries, p.281-293, University of Amsterdam. Retrieved from https://pdfs.semanticscholar.org/2383/1fd59e4ab0329ec88ceb94af9228047e1415.pdf (accessed 18 March 2018)

82. Mauner, G., Koeing, J.-P. (2000). Linguistic vs. Conceptual Sources of Implicit Agents in Sentence Comprehension. *Journal of Memory and Language 43*, p.110–134 Retrieved from http://www.idealibrary.com (accessed 25 May 2020)

83. Marzo, S., Sutter, G. De., & Heylen, K. (2012). Corpus Studies in Contrastive Linguistics Series: Benjamins Current Topics. Amsterdam : John Benjamins Publishing Company. (accessed 16 April 2018)

84. Mattila, Heikki E. S.(2013). *Comparative Legal Linguistics: Language of Law, Latin and Modern Lingua Francas*. Vol. 2nd ed, Routledge. (accessed 29 November 2017)

85. Mattila, Heikki E. S. & Gémar, J.C. (2012). Jurilinguistique comparé, langue de droit. Montréal, édition Yvon Blais. (accessed 29 November 2017)

86. McEnery, T., McEnery, A ., Xiao, R., Tono, Y. (2006). *Corpus-based Language Studies: An Advanced Resource Book.* by Routledge, New York. Retrieved from https://books.google.lt/books?id=h4jvexlSum8C&pg=PA41&lpg=PA41&dq=stylystical+annotation&source=bl&ots=yMTM0FD8VR&sig=ACfU3U1XAQfJK4clsLFQE71-1sK6SNV

3cw&hl=ru&sa=X&ved=2ahUKEwjjt8WL4aPpAhUOyKYKHc2dBnUQ6AEwAHo
ECAYQAQ#v=onepage&q=stylystical%20annotation&f=false (accessed 29 January 2020)

87. Mécemmène, C. (2019). *Analyse terminologique trilingue du langage des agences de notation financière et analyse de divers aspects de la traduction économique et financière.* Université de Lyon. France. (accessed 27 May 2020)

88. Minsky, M. (1992) . A Framework for Representing Knowledge. Reprinted in *The Psychology of Computer Visio*n, P. Winston (Ed.), McGraw-Hill, 1975. Shorter versions in J. Haugeland, Ed., *Mind Design*, MIT Press, 1981, and in *Cognitive Science*, Collins, Allan and Edward E. Smith (eds.) Morgan-Kaufmann, Retrieved from https://web.media.mit.edu/~minsky/papers/Frames/frames.html (accessed 12 February 2020)

89. Mockienė, L. (2016). *Formation of terminology of constitutional law in English, Lithuanian and Russian.* (doctoral dissertation). Vilnius: Mykolas Romeris University. Retrieved from: https://repository.mruni.eu/bitstream/handle/007/14473/VL16%20--%20Disertacija%20--%20Liudmila%20Mockiene%20-%20for%20WEB.pdf?sequence=1&isAllowed=y (accessed 19 November 2016)

90. Mockiene, L. & Rackeviciene, S. (2014) Contrastive analysis of constitutional one-word terms in Lithuanian, Russian and English. In : *Language in different contexts = Kalba ir kontekstai 6, 1,* p. 130-144. (accessed 9 March 2018)

91. Mockienė, L. & Rackevičienė, S. (2016). Analysis of term formation in Lithuanian, Russian and English terminology works = Terminų kūrimo analizė lietuvių, anglų ir rusų terminologijos darbuose // *Terminologija 23*, p. 52-72. Vilnius: Lietuvių kalbos institutas. p. 52-72. Retrieved from http://lki.lt/wp-content/uploads/2017/06/terrminologija_23_maketas2-ilovepdf-compressed.pdf (accessed 9 March 2018)

92. Mockienė, L. & Rackevičienė, S. (2018). Models of Formation of Multi-Word Terms in Legal Acts of a Constitutional Nature in English and Lithuanian. *Terminologija 25*, p. 55-76. Vilnius: Lietuvių kalbos institutas. Retrieved from http://lki.lt/wp-content/uploads/2018/12/Terrminologija_25_maketas.pdf (accessed 9 March 2018)

93. Mossa., O. (1992). *Terminologie bancaire multilingue (français-arabe-anglais) : méthodologie et applications* (doctoral dissertation). Université de Paris 13, France. (accessed 27 May 2020)

94. Nakagawa, H. (2001). Experimental evaluation of ranking and selection methods in term extraction. In D. Bourigault, Ch. Jacquenim and M.-C. L'Homme (Eds.). *Recent Advances in Computational Terminology*, p. 303-325. Amsterdam/Philadelphia: J. Benjamins. (accessed 11 November 2018)

95. Nerlich, B., & Clarke, D. (2000) Semantic fields and frames: Historical explorations of the interface between language, action, and cognition. *Journal of Pragmatics 32 (2000),* p. 125-150. (accessed 15 January 2020)

96. Newman J., & Rice S. 2006: Transitivity schemas of English EAT and DRINK in the BNC. In S.T. Gries and A. Stefanowitsch (Eds.). *Corpora in Cognitive Linguistics: Corpus-Based Approaches to Syntax and Lexis,* p. 225–260. Berlin/New York: Mouton de Gruyter. (accessed 13 October 2018)

97. Onufrio, M.V. (2007). Harmonization of European contract law and legal translation: a role for comparative lawyers, p.1-14. Barcelona. (accessed 9 March 2016)

98. Petruck, M. (2003). Frame Semantics, 1-8. University of California, Berkley. Rerieved from https://www.princeton.edu/~adele/LIN_106:_UCB_files/Miriam-Petruck-frames.pdf (accessed 17 Frbruary 2020)

99. Piccato., M. (2012). *Création et exploitation d'un corpus trilingue du tourisme (italien/français/anglais) en vue de la réalisation d'une base de données lexicale informatisée.* (doctoral dissertation). Université de Lyon 2. France. (accessed 27 May 2020)

100. Pimentel, J.(2012). *JuriDiCo:User's Guide.* Université de Montréal, Observatoire de linguistique Sens-Texte (OLST). Retrieved from http://olst.ling.umontreal.ca/juridico/Users_Guide_JuriDiCo.pdf (accessed 7 June 2019)

101. Platonova, M. (2011). *Term Formation and Application in the Thematic Field „Environment and Ecology": Contrastive analysis.* (doctoral dissertation). Latvijas Universitate, Riga. Retrieved from: https://pdfs.semanticscholar.org/acc5/248c16a78cc87ef5ac9021f11616f502675d.pdf (accessed 13 March 2018)

102. Pommer, S.E. (2008). Translation as Intercultural Transfer: The Case of Law. *SKASE Journal of Translation and Interpretation, 3(1)*, p.17-21. (accessed 8 October 2017)

103. Rackevičienė, S., & Janulevičienė, V. (2010). Lietuvių, anglų ir norvegų kalbų baudžiamosios teisės terminai // Kalbų studijos = Studies about Languages : taikomoji kalbotyra, sociolingvistika, kompiuterinė lingvistika, svetimųjų kalbų studijos / *Technologija. Nr. 17*, p. 19-28. Kauno technologijos universitetas. Humanitarinių mokslų fakultetas. Kaunas. Retrieved from: http://www.kalbos.lt/zurnalai/17_numeris/03.pdf. (accessed 19 October 2017)

104. Rackevičienė, S., & Janulevičienė, V. (2011). Translation strategies of English legal terms in the bilingual Lithuanian and Norwegian law dictionaries. *Socialinių mokslų studijos : mokslo darbai = Social sciences studies : research papers Nr. 3(3)*, p. 1073-1093. Vilnius: Mykolo Romerio universitetas. Retrieved from: http://www.mruni.eu/lt/mokslo_darbai/sms/archyvas/?l=114417 (accessed 19 October 2017)

105. Rackeviciene, S. & Mockiene, L. (2014). Formation of constitutional one-word terms in Lithuanian and English. In : *People and the world = Žmogus ir žodis . 16, 1*, p. 87-99. (accessed 19 October 2017)

106. Rackevičienė, S.,Valūnaitė Oleškevičienė, G., & Galkutė, G. (2016). Equivalence of lease and tenancy terminology in English and Lithuanian . *Linguaculture vol. 7, no. 2*, p. 73-93. Iasi: Alexandru Ioan Cuza University of Iasi. Retrieved from: http://journal.linguaculture.ro/images/22016/Linguaculture_2_2016_RACKEVICIENE_OLESKEVICIENE_GALKUTE.pdf (accessed 19 October 2017)

107. Rackevičienė, S., & Šliogerienė, J. (2014). Dealing with non-equivalence of legal terminology –a comparative case study of Lithuanian and English legal terms. *English for specific purposes world: online journal for teachers . International Association of Technical English Trainers, iss. 42, vol. 15*, p. 1-16. Saint Petersbug : TransEarl. Retrieved from http://www.esp-world.info/Articles_42/Documents/Rackeviciene.pdf (accessed 20 October 2017)

108. Rackevičienė, S., Janulevičienė, V., & Mockienė, L. Circumnavigating non-equivalence in legal languages: a trilingual case study of generic-specific concepts and terms. *Journal of teaching English for specific and academic purposes vol. 7, no. 1*, p. 1-16. University of Niš. vol. 7, no. 1, p. 1-16. Retrieved from http://espeap.junis.ni.ac.rs/index.php/espeap/article/view/860/419 (accessed 20 October 2017)

109. Ruppenhofer, J., Ellsworth, M., Petruck, M., Christopher, R., Collin F. B., & Scheffczyk, J. (2016) *FrameNet II: Extended Theory and Practice*. Retrieved from https://framenet.icsi.berkeley.edu/fndrupal/the_book (accessed 19 December 2017)

110. Sandrini, P.(1996). Comparative Analysis of legal terms: Equivalent revisited. In C.Galinski and K.Schmits (Eds.), p. 342-351. *Terminology and Knowledge Engineering.* (accessed 12 November 2016)

111. Sinclair, J. (1998). The lexical item. In E. Weigand (Ed.) *Contrastive Lexical Semantics*, p. 1–24. Amsterdam: John Benjamins. (accessed 19 October 2017)

112. Taylor, J., Cuycken, H., & Driven, R. (2003). New directions in cognitive lexical semantic research, p. 1-28. (accessed 29 November 2019)

113. Temmerman, K. (1997). Questioning the univocity ideal. The difference between sociocognitive Terminology and traditional Terminology. *Hermes. Journal of Linguistics 18*, p. 51-91. (accessed 26 October 2018)

114. Temmerman, K. (2000). *Towards New Ways of Terminology Description*. Amsterdam. Philadelphia: John Benjamins. (accessed 26 October 2018)

115. Temmerman, K., Kerremans, K., Vandervoort, V. (2005). *La termontographie en contexe(s).* In Actes des Septièmes Journées scientifiques du Réseau Lexicologie, terminologie, traduction. Brussels, Belgium. (accessed 29 October 2018)

116. Tiersma, P. (1999). Legal Language . University of Chicago Press. Retrieved from http://www.languageandlaw.org./LEGALLANG.HTM (accessed 26 May 2020)

117. Tognini Bonelli, E. (2010). Theoretical over view of the evolution of Corpus Linguistics. In A.O'Keeffe & M.McCarthy. *The Routledge Handbook of corpus Linguistics,* p.14-27. Routledge. London and New York. (accessed 26 January 2020)

118. Trohin, E. (2009). Computational Lexicography: an overview of Wordnet and FrameNet dictionaries. *Linguistics and Literature, Nr10(30)*, p.68-70. Moldova. Retrieved from http://studiamsu.eu/wp-content/uploads/12.P.68-70.pdf (accessed 15 May 2019)

119. Veretina-Chiriac, I., (2012). *Caracteristics and features of legal English vocabulary*. *Linguistics and Literature, Nr4(54)*, p.103-107. Retrieved from http://studiamsu.eu/wp-content/uploads/20.-p.103-107.pdf (accessed 17 April 2019)

120. Wanner, L. (1996). *Lexical Functions in Lexicography and Natural Language Processing*. Amsterdam: John Benjamins Publishing Company. (accessed 7 October 2018)

121. Zaikauskas, E. (2014). Terminų vertimo būdai Europos Sąjungos teisės aktų vertimuose į lietuvių kalbą. *Terminologija 21,* p.71-90. Vilnius: Lietuvių kalbos institutas. (accessed 6 March 2020)

122. Zermane, A. (2017). *Etude terminologique et phraséologique multilingue (anglais, français, arabe) des textes de l'Organisation des Nations Unies sur le commerce électronique* (doctoral dissertation). Université de Lyon. France. (accessed 27 May 2020)

123. Žilinskienė, V., Akelaitis, G., & Pečkuvienė, L. (2009). *Specialybės kalba. Administracinės kalbos vadovėlis*. Vilnius: Mykolo Romerio Universitetas (accessed 10 March 2020)

DICTIONARIES:

1. „Aiškinamasis ekonomikos anglų-lietuvių žodynas" compiled by David W. Pearce, 2006
2. Business Dictionary online available at http://www.businessdictionary.com/
3. Cambridge Dictionary online available at https://dictionary.cambridge.org
4. DiCoInfo (Dictionnaire fondamental de l'informatique et de l'Internet/ Fundamental dictionary on computing and the Internet), 2015, available at http://olst.ling.umontreal.ca/cgi-bin/dicoinfo/search.cgi
5. DiCoEnviro (Dictionnaire fondamental de l'environnement/ Fundamental dictionary on the environment and climate change), 2014, available at http://olst.ling.umontreal.ca/cgi-bin/dicoenviro/search-enviro.cgi?ui=en&mode=terme&lang=fr&prec=exact&equi=1&rq=
6. EcoLexicon available at http://ecolexicon.ugr.es/en/index.htm
7. EUR-Lex available at https://eur-lex.europa.eu/homepage.html
8. Investopedia (financial dictionary online since 1999) available at: https://www.investopedia.com/terms/r/risk.asp
9. JuriDico (Fundamental dictionary on the law), 2012, available at http://olst.ling.umontreal.ca/cgi-bin/juridico/search.cgi
10. Kicktionary (2009) available at http://www.kicktionary.de/dictionary.html
11. Lietuvos Respublikos terminų bankas available at http://terminai.vlkk.lt/pls/tb/tb.search
12. 'Lietuvių kalbos žodynas' available at http://www.lkz.lt/
13. Mataf.net (glossaire) available at https://www.mataf.net/fr/edu/glossaire
14. Merriam-Webster, thesaurus available at https://www.merriam-webster.com/thesaurus

COMPUTER SOFTWARE

1. Anthony, L. (2014) AntConc(Version 3.4.4w)[Computer Software].Tokyo, Japan: Waseda University. Available from http://www.antlab.sci.waseda.ac.jp
2. Anthony, L. (2017) AntPConc(Version 1.2.0)[Computer Software].Tokyo, Japan: Waseda University. Available from http://www.antlab.sci.waseda.ac.jp
3. Nova Text Aligner: https://nova-text-aligner.soft112.com/

APPENDICES

Appendix 1.

The list of the collocates of term *risk* in English

Collocate	Total frequency	Freq.(L)	Freq.(R)	MI score
1.dilution	51	37	14	8,34
2.weighted	344	27	317	7,7
3.linear	18	18	0	7,6
4.CVA	30	29	1	7,6
5.minimal	13	13	0	7,5
6.withholding	16	4	12	7,5
7.excessive	27	8	19	7,4
8.buyer	111	86	25	7,3
9.profile	89	1	88	7,2
10.enhancements	15	0	15	7,7
11.classification	88	14	74	7,1
12.weighting	27	4	23	7,1
13.assign	18	14	4	7
14.capture	23	12	11	7
15.macroprudential	21	21	0	6,7
16.technques	24	4	20	6,7
17.calculating	67	56	11	6,4
18.measurement	63	13	50	6,4
19.category	80	7	73	6,2
20.concentration	32	30	2	6,2
21.standardised	48	30	18	6,1
22.overnight	22	16	6	6
23.hedge	30	21	9	6
24.commodities	31	19	12	6
25.intraday	48	46	2	6

Collocate	Total frequency	Freq.(L)	Freq.(R)	MI score
26.approaches	39	23	16	5,9
27.buffer	84	17	67	5,9
28.management	257	43	214	5,9
29.calculate	72	58	14	5,9
30.manage	26	22	4	5,8
31.factors	52	12	40	5,8
32.counterparty	83	61	22	5,7
33.adjustments	57	9	48	5,7
34.strategy	21	5	16	5,6
35.credit	701	610	91	5,6
36.calculation	86	78	8	5,6
37.associated	50	14	36	5,6
38.leverage	28	8	20	5,5
39.overall	29	28	1	5,5
40.model	79	46	33	5,4
41.country	109	96	13	5,4
42.sovereign	29	20	9	5,3
43.requirement	70	52	18	5,3

Appendix 2.

The list of the most frequent terms with the nominal base *risk* in English, French and Lithuanian equivalents

Terms with base *risk* in English	Frequency	French equivalents	Lithuanian equivalents
1.credit risk	506	risque de crédit	kredito rizika
2.systemic risk	115	risque systémique	sisteminė rizika
3.operational risk	102	risque opérationnel	operacinė rizika
4.liquidity risk	98	risque de liquidité	likvidumo rizika
5. specific risk	88	risque spécifique	specifinė rizika
6. market risk	76	risque de marché	rinkos rizika
7. country risk	64	risque pays	šalies rizika
8. interest rate risk	51	risque de taux d'intérêt	palūkanų normos rizika
9. counterparty credit risk	41	risque de crédit de contrepartie	sandorio šalies kredito rizika
10. dilution risk	34	risque de dilution	gautinų sumų sumažėjimo rizika
11. cva risk(credit valuation adjustment risk)	29	risque d'ajustement de l'évaluation de crédit	kredito vertinimo koregavimo rizika
12.business risk	26	risque économique	verslo rizika
13.intraday credit risk		risque de crédit intrajournalier	dienos kredito rizika
14. general risk	25	risque général	bendroji rizika
15. concentration risk	24	risque de concentration	koncentracijos rizika
16. general wrong-way risk	22	risque général de corrélation	bendroji klaidingų sprendimų rizika
17. high risk	21	risque élevé	didelė rizika
18. low risk	21	risque modéré/faible	maža rizika
19. risk of excessive leverage	18	risque de levier excessif	pernelyg didelio sverto rizika
20. counterparty risk	17	risque de contrepartie	sandorio šalies rizika
21. position risk	17	risque de position	pozicijų rizika
22. commodities risk	15	risque sur matières premières	biržos prekių kainos rizika
23. foreign exchange risk	15	risque de change	valiutos kurso rizika

Terms with base *risk* in English	Frequency	French equivalents	Lithuanian equivalents
24. price risks	*15*	*risque de prix*	*kainos rizika*
25. macroprudential risk	*14*	*risque macroprudentiel*	*makrolygio rizika*
26. risk of loss	*12*	*risque de pertes*	*nuostolio rizika*
27. minimal credit and market risk	*12*	*risques de crédit et de marché minimaux*	*minimali kredito ir rinkos rizika*
28. risk of debt instruments	*12*	*risque sur titres de créance*	*skolos finansų priemonių rizika*
29. migration risk	*11*	*risque de migration*	*pasikeitimų rizika*
30. default risk	*11*	*risque de défaut*	*įsipareigojimų neįvykdymo rizika*
31. low credit risk	*11*	*risque de crédit faible*	*nedidelė kredito rizika*
32. medium risk	*11*	*risque moyen*	*vidutinė rizika*
33. shortfall risk	*11*	*risque de défaillance*	*nepakankamumo rizika*
34. significant credit risk	*11*	*risque significatif de crédit*	*reikšminga kredito rizika*
35. potential risks	*11*	*risques potentiels*	*galima rizika*
36. intraday and overnight credit risk	*10*	*risque de crédit intrajournalier et à vingt-quatre heures*	*dienos ir vienos nakties kredito rizika*
37. significant risk	*10*	*risque significatif*	*reikšminga rizika*
38. financial risks	*10*	*risques financiers*	*finansinė rizika*
39. legal risks	*10*	*risque juridique*	*teisinė rizika*
40. model risk	*9*	*risque de modèle*	*modelio rizika*
41. basis risk	*8*	*risque de base*	*bazinė/pagrindinė rizika*
42. delta risk	*8*	*risque delta*	*delta rizika*
43. risk to third parties	*8*	*risque à des tiers*	*trečiųjų šalių rizika*
44. gold price risks	*8*	*risque de variation du cours de l'or*	*aukso kainos rizika*
45. sovereign risk	*7*	*risque souverain*	*valstybės rizika*
46. specific wrong-way risk	*7*	*risque spécifique de corrélation*	*specifinė klaidingų sprendimų rizika*
47. risk of capacity withholding	*7*	*risque de rétention de capacités*	*pajėgumų sulaikymo rizika*
48. custody risk	*6*	*risque de garde*	*saugojimo rizika*
49. entrepreneurial risk	*6*	*risque commercial/ risque d'entreprise*	*verslo rizika*

Terms with base *risk* in English	Frequency	French equivalents	Lithuanian equivalents
50. intraday and overnight liquidity risk	6	risque de liquidité intrajournalier et à vingt-quatre heures	dienos ir vienos nakties likvidumo rizika
51. investment risk	6	risque d'investissement	investicinė rizika
52. settlement risk	6	risque de règlement	atsiskaitymo(-ų) rizika
53. significant wrong-way risk	6	risque significatif de corrélation	didelė klaidingų sprendimų rizika
54. risk of disruption	6	risque de perturbation	finansų sistemos sutrikimo rizika
55. risk of payment interruption	6	risque d'interruption de paiement	mokėjimų sustabdymo rizika
56. commercial risk	5	risque commercial	komercinė rizika
57. country credit risk	5	risque de crédit de pays	šalies kredito rizika
58. currency risk	5	risque de change	valiutos kurso rizika
59. material risk	5	risque significatif	reikšminga rizika
60. risk of a price squeeze	5	risque de ciseau tarifaire	kainų skirtumo mažinimo rizika
61. inventory risk	5	risque sur stocks	atsargų rizika
62. transfer risk	5	risque de non-transfert	lėšų pervedimo rizika
63. risk of the borrower	5	risque de l'emprunteur	skolininko rizika
64. risk of the obligor	5	risque au débiteur	įsipareigojančio asmens rizika
65. economic risk	5	risque économique	ekonominė rizika
66. political risk	5	risque politique	politinė rizika
67. ultimate stock risk	5	risque final lié aux stocks	pagrindinių išteklių rizika
68. undue risk	5	risque excessif	pernelyg didelė rizika
69. residual risk	5	risque résiduel	likutinė rizika
70. risk of a CSD-banking service provider	5	risque d'un DCT-prestataire de services bancaires	CVPD bankinio tipo paslaugų teikėjorizika

Appendix 3.

CAUSE_RISK frame

Argument structures

Type I: Cause causes **Effect** (RISK) **to Experiencer**

Annotated examples:
Model A

EN

1) Member States shall ensure that where a review shows that **an institution**[Cause] **may *pose* systemic risk**[Effect] in accordance with Article 23 of Regulation (EU) No 1093/2010 the competent authorities inform EBA without delay about the results of the review. <*Commission Delegated Regulation (EU) 2017/567 of 18 May 2016)*>

2) < … > "tranche" means a contractually established segment of the credit risk associated with an exposure or a number of exposures, where **a position**[Cause] in the segment ***entails* a risk of credit loss**[Effect] greater than or less than a position of the same amount in each other such segment < … >. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

3) **Access**[Cause] **would *cause* systemic risk**[Effect]. < *Commission Implementing Regulation (EU) 2017/394 of 11 November 2016*>

4) < … > the long and short positions are in the same underlying exposure and **the short positions**[Cause] ***involve* no counterparty risk**[Effect]. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

5) < … > in order to establish a rule that is on the one hand prudent, as it takes into account the fact that **other participants**[Cause] are also capable of ***generating* liquidity risk**[Effect] < ... >. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

6) < … > **two or more natural or legal persons**[Cause] **who**, unless it is shown otherwise, ***constitute* a single risk**[Effect] because one of them, directly or indirectly, has control over the other < … >. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

1) < ...> le cas échéant, l'indication du fait que l'entreprise exécute des ordres en dehors d'une plate-forme de négociation et des conséquences que **cela**[Cause] *entraîne*, par exemple **le risque de contrepartie**[Effect] lié à une exécution en dehors d'une plate-forme de négociation, et, sur demande du client, un complément d'informations sur les conséquences de ce mode d'exécution. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016*>

2) < ....> s'**il (le marché)**[Cause] est susceptible de *créer* **un risque systémique**[Effect] affectant la stabilité financière, par exemple un risque de dénouement d'une position dominante sur le marché, ou si les obligations de règlement n'étaient pas respectées dans un volume significatif. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016*>;

3) < ...> tous **les éléments**[Cause] qui, parmi les expositions titrisées, sont considérés comme *présentant* **un risque particulièrement élevé**[Effect] au sens de l'article 128. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉENET DU CONSEIL du 26 jiun 2013* >.

4) < ....> **ils (les instruments du marché monétaire)**[Cause] *présentent* **un risque de marché peu élevé**[Effect], selon une évaluation interne appropriée effectuée par le DCT-prestataire de services bancaires sur la base d'une méthode précise et objective qui ne repose pas uniquement sur des avis externes. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

5) < ....> le DCT peut démontrer à l'autorité compétente que **les instruments financiers**[Cause] *présentent* **un risque de marché et de crédit faible**[Effect], sur la base d'une évaluation interne effectuée par ses soins. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>.

6) **Les expositions**[Cause] *présentant* **un risque particulièrement élevé**[Effect] incluent les expositions suivantes. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

7) < ....> fonds propres de base de catégorie 1 qui résultent de positions courtes sur les indices sous-jacents, y compris lorsque **ces positions courtes**[Cause] *impliquent* **un risque de contrepartie**[Effect], pour autant que les deux conditions suivantes soient remplies. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

8) < ...> les établissements pour lesquels les résultats des tests de résistance visés à l'article 98, paragraphe 1, points a) et g), et à l'article 100 ou **les résultats du processus de contrôle et d'évaluation prudentiel**[Cause] visé à l'article 97 *font apparaître* **des risques significatifs**[Effect] quant à leur solidité financière ou des infractions aux dispositions nationales transposant la présente directive et au règlement (UE) no 575/2013. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

9) **Services accessoires de type non bancaire**[Cause] fournis par le DCT et *n'entraînant pas de risque de crédit ou de liquidité*[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/394 DE LA COMISSION du 11 novembre 2016*>

10) < ...> **les redevances de services afférentes**[Cause] aux services de pilotage qui ne sont pas exposé à une concurrence effective *pourraient comporter* **un risque plus élévé des tarifs abusifs**[Effect] en cas de situation monopolistiques. <*RÉGLEMENT (UE) Nr 2017/352 PARLEMENT EUROPÉEN ET DU CONSEIL du 15 février 2017* >

11) Les scénarios devraient comprendre, sans s'y limiter, la défaillance de deux des plus importants participants du DCT-prestataire de services bancaires dans cette monnaie, et ce, afin d'établir une règle d'une part prudente, étant donné qu'elle prend en considération le fait que **d'autres participants, outre les plus importants**[Cause], sont également susceptibles de *représenter* **un risque de liquidité**[Effect], et d'autre part proportionnelle à l'objectif visé, en ne tenant pas compte

des autres participants [Cause] moins susceptibles **d'*engendrer* un risque de liquidité**[Effect]. *<RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016>*

12) Dans la décision d'ouverture, la Commission avait considéré que **le risque d'exclusion de certains acteurs du mécanisme**[Cause], comme certaines capacités d'effacement (à cause d'une potentielle discrimination entre eux), des capacités étrangères ou encore de nouvelles capacités de production, pouvait ***engendrer* un risque de surcompensation des acteurs** [Effect] pouvant participer au mécanisme, à cause d'une pression compétitive réduite. *<DÉCISION (UE) 2017/503 DE LA COMMISSION du 8 novembre 2016>*

LT

1) **Operacinė rizika**[Effect]**, kurią *gali kelti* pagrindiniai dalyviai**[Cause] .*<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.>*

2) Įstaiga deramai atsižvelgia į **pozicijas**[Cause], **kurios *kelia* didelę specifinę ir bendrąją klaidingų sprendimų riziką**[Effect]. *<EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr 575/2013 2013m. birželio 26d.>*

3) <...> **finansinė priemonė, finansinė veikla arba finansinė praktika**[Cause] *kelia* **didelę finansų įstaigų,** kurios yra svarbios Sąjungos finansų sistemai, **veiklos sutrikdymo riziką**[Effect] <...>. *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/567 2016 m. gegužės 18d.>*

4) <...> neatsižvelgiama į tuos kitus **dalyvius**[Cause], kurie turi mažiau galimybių *sukelti* **likvidumo riziką**[Effect]. *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.>*

Model B
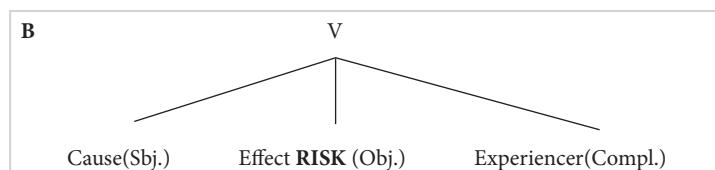
EN

1) < … > whether **the financial instrument, financial activity** or **financial practice**[Cause] ***poses* a high risk of disruption**[Effect] **to financial institutions** [Experiencer] deemed to be important **to the financial system of the Union**[Experiencer]. *<Commission Delegated Regulation (EU) 2017/567 of 18 May 2016)>*

2) **A concentration of assets and overreliance**[Cause] **on** market liquidity *creates* systemic **risk**[Effect] **to the financial sector**[Experiencer] and should be avoided. *<Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013>*

3) **A default of the obligor/guarantor**[Cause] ***would constitute* a huge reputational risk**[Effect] **to the group**[Experiencer], damage its franchise and could threaten its viability. *<Commission Delegated Regulation (EU) 2018/179 of 25 September 2017>*

FR

1) Le DCT identifie **les prestataires de services et fournisseurs de services de réseau essentiels**[Cause] susceptibles de *poser* **des risques**[Effect] **pour ses propres opérations**[Experiencer] en raison de sa dépendance à leur égard. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

2) < ...> **les risques**[Effect] **qu'un établissement**[Cause] *présente* **pour le système financier** [Experiencer] compte tenu de l'identification et de la mesure du risque systémique en vertu de l'article 23 du règlement (UE) no 1093/2010 ou des recommandations du CERS, le cas échéant. <*DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

3)Les scénarios des tests de résistance utilisés pour mettre à l'épreuve les ressources financières liquides tiennent compte de la conception et du fonctionnement du DCT-prestataire de services bancaires, et couvrent toutes **les entités**[Cause] susceptibles de *représenter* pour celui-ci (DCT-prestataire de services bancaires)[Experiencer] **un risque de liquidité significatif**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

4) <...> la conception et les activités du DCT-prestataire de services bancaires, y compris par rapport aux entités visées à l'article 30, paragraphe 2, et aux infrastructures des marchés financiers liées ou à **d'autres entités**[Cause] qui peuvent *poser* **un risque de liquidité significatif**[Effect] **pour le DCT-prestataire de services bancaires**[Experiencer] et, le cas échéant, couvrir une période de plusieurs jours. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

5) <...> le fait ou non que **l'instrument financier ou l'activité ou la pratique financière**[Cause] **fasse** *peser* **des risques particuliers**[Effect] **sur le marché ou l'infrastructure des systèmes de paiement**[Experiencer], y compris **les systèmes de négociation, de compensation et de règlement**[Experiencer] . <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>

6) < ...> le fait ou non que **le dépôt structuré ou l'activité ou la pratique financière**[Cause] *ferait courir* **des risques**[Effect] à l'économie de l'Union[Experiencer]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>

7) < ...> le fait ou non que **l'instrument financier, le dépôt structuré, ou l'activité ou la pratique financière**[Cause] *ferait courir* **des risques**[Effect] à l'économie nationale[Experiencer]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>

LT

1) <...> **panašūs verslo modeliai arba panaši geografinė pozicijų padėtis**[Cause], *turi* arba *gali* įgyti panašios rizikos poziciją arba *sukelti* **panašią riziką**[Effect] **finansų sistemai**[Experiencer]. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA 2013/36/ES 2013m. birželio 26d.*>

2) CVPD bankinio tipo paslaugų teikėjas taip pat atsižvelgia į šiuos elementus: <...> su 30 straipsnio 2 dalyje **nurodytais subjektais ir susijusiomis finansų rinkos infrastruktūromis arba kitais subjektais**[Cause]**,** kurie **CVPD bankinio tipo paslaugų teikėjui**[Experiencer] *gali kelti* **reikšmingą likvidumo riziką**[Effect] <...> . <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.*>

3) <...> Komisijos deleguotojo reglamento (ES) 2017/565 (9) 23 straipsnyje, suderinamu būdu iš anksto nustato, kada laikoma, kad **klientų pateikiamų pavedimų skaičius ar apimtis**[Cause] *kelia* **įmonei**[Experiencer] **pernelyg didelę riziką**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/567 2016 m. gegužės 18d.*>

4) <...> tai, ar strukūtizuotas indėlis, finansinė veikla arba **finansinė praktika**[Cause] *kelia didelę* **finansų įstaigų**, kurios yra svarbios Sąjungos finansų sistemai, **veiklos sutrikdymo riziką**[Effect], visų pirma atsižvelgiant į apsidraudimo strategiją, kuria vadovaujasi finansų įstaigos išleisdamos struktūrizuotą indėlį, įskaitant **klaidingą kapitalo garantijos kainos nustatymą suėjus terminui arba struktūrizuoto indėlio, praktikos ar veiklos**[Cause] *keliamą* **riziką**[Effect] **finansų įstaigų reputacijai**[Experiencer]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/567 2016 m. gegužės 18d.*>

Model C

| C | V |
| Cause (Sbj.) | Effect **RISK**(Compl.) |
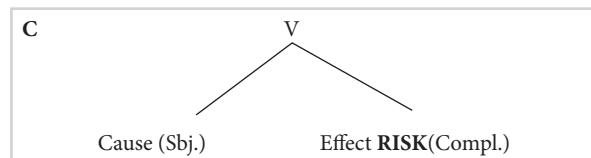
EN

1) < … > **business risk**[Effect] is highly dependent on the individual situation of each CSD and it *can be caused* by **various factors**[Cause] < … >. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

2) < … > systemically important institution means an EU parent institution, an EU parent financial holding company, an EU parent mixed financial holding company or an institution **the failure or malfunction of which**[Cause] could *lead to* **systemic risk**[Effect]. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

3) In the Opening Decision, the Commission took the view that **the risk of excluding certain operators**[Cause] from the mechanism such as certain demand-side response capacities (due to possible discrimination against them), foreign capacities and new generation capacities, *could lead* to a **risk**[Effect]. <*Commission Decision (EU) 2017/503 of 8 November 2016*>

4) An institution shall give due consideration to **exposures**[Cause] that *give rise to* **Specific and General Wrong-Way risk**[Effect]. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

FR

1) L'établissement prend dûment en considération **les expositions**[Cause] *donnant lieu à* **un risque de corrélation général et spécifique**[Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

LT-

Model D

D	V
Effect **RISK** (Sbj.)	Cause (Obj./Compl.)

EN

1) < … > the **market risk**[Effect] **that** *is generated* **by the internal hedge**[Cause] shall be dynamically managed in the trading book within the authorised limits. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

2) **Operational risks**[Effect] that *may be posed* **by critical utilities and critical service providers**[Cause] < … >. <*Commission Delegated Regulation (EU) 2017/392 of 11 November 2016*>

FR

1)< ...> **le risque cumulatif**[Effect] *résultant* **de défauts multiples**[Cause], y compris les différentes séquences de défauts, dans des produits subdivisés en tranches. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

2)Aux fins de l'article 45, paragraphe 3, point b), du règlement (UE) no 600/2014, les critères servant à déterminer **les situations**[Cause] **dans lesquelles un risque d'arbitrage réglementaire**[Effect] est susceptible de *survenir* sont les suivants < ...>. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>.

3) Les autorités compétentes veillent à ce que **le risque de concentration**[Effect] *découlant* **de l'exposition à chaque contrepartie**[Cause], y compris des contreparties centrales, des groupes de contreparties liées ou des contreparties opérant dans le même secteur économique ou la même région ou dont l'activité porte sur le même métier ou le même produit de base. <*DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

4) < ...> des processus et procédures solides en vue de contrôler les risques découlant de l'utilisation de sûretés, y compris le risque d'un échec ou d'une détérioration de la protection de crédit, les risques d'évaluation, les risques liés à la résiliation de la protection de crédit, **le risque de concentration**[Effect] *découlant* **de l'utilisation de sûretés et l'interaction avec le profil de risque global de l'établissement**[Cause]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

5) < ...> **«risque de levier excessif»**[Effect]**:** le risque de vulnérabilité d'un établissement, *résultant* **d'un levier ou d'un levier éventuel**[Cause] pouvant nécessiter la prise de mesures correctives non prévues au plan d'entreprise, y compris une vente en urgence d'actifs pouvant se solder par des pertes ou une réévaluation des actifs restants. <*DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

6)<...> **le risque de concentration**[Effect] *découlant* **de la mise en œuvre de techniques d'atténuation du risque de crédit**[Cause], et notamment les grandes expositions de crédit indirectes. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

7)**Le risque de liquidité**[Effect] **peut** *résulter* **de tout service accessoire de type bancaire fourni par le DCT**[Cause]. Le cadre de gestion des risques de liquidité devrait identifier **les risques** [Effect] *résultant* **des différents services accessoires de type bancaire**[Cause], y compris les prêts de titres<...>. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

174

LT

1) **Dėl prieigos** [Cause] *būtų sukelta* **sisteminė rizika**[Effect]. <*KOMISIJOS ĮGYVENDINIMO REGLAMENTAS (ES) 2017/394 2016m. lapkričio 11d.*>

2) <...> **dėl netinkamų arba nepavykusių vidaus procesų, žmonių ir sistemų** [Cause] *sukelta* **rizika** [Effect] . <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr 575/2013 2013m. birželio 26d.*>

Model E

EN-

FR-

LT
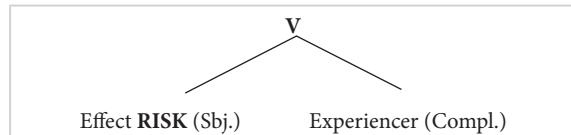
1) Politika, procedūros ir sistemos, kuriomis nustatoma, įvertinama, valdoma ir pranešama **rizika**[Effect]**,** *galinti grėsti* **paraišką teikiančiam CVPD**[Experiencer]**,** ir **rizika**[Effect], kurią **paraišką teikiantis CVPD**[Cause] *kelia* **kitiems subjektams**[Experiencer]. <*KOMISIJOS ĮGYVENDINIMO REGLAMENTAS (ES) 2017/394 2016m. lapkričio 11d.*>

2) <...> **subjektams**[Experiencer] kitais būdais *negresia* **didelė klaidingų sprendimų rizika**[Effect] , kaip apibrėžta Reglamento (ES) Nr. 575/2013 291 straipsnyje. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d* >

Type II: **Cause** exposes **Experiencer to Effect** (RISK)

Annotated examples:

Model A

EN

1) **The borrowing and lending operations**[Cause] related to the Union's macro-financial assistance shall be carried out in euro < … > and shall not involve the Union in the transformation of maturities, or *expose* **it (the Union)**[Experiencer] **to any exchange** or **interest rate risk**[Effect], or **to any other commercial risk**[Effect] < … >. <*Decision (EU) 2016/1112 of the European Parliament and of the Council of 6 July 2016*>

2) < … > **a systematic internaliser**[Cause] cannot execute the number or volume of those orders without *exposing* itself[Experiencer] **to undue risk**[Effect]. <*Commission Delegated Regulation (EU) 2017/567 of 18 May 2016*>

3) < … > when **the number or volume of orders**[Cause] sought by clients is considered *to expose* **the firm**[Experiencer] **to undue risk**[Effect]. <*Commission Delegated Regulation (EU) 2017/567 of 18 May 2016*>

FR

1)< ...> l'entreprise à l'avance, de façon objective et cohérente avec leur politique de gestion des risques et les procédures visées à l'article 23 du règlement délégué (UE) 2017/565 de la Commission (9), le point à partir duquel **le nombre ou le volume des ordres**[Cause] introduits par les clients est réputé *exposer* **l'entreprise**[Experiencer] à un risque excessif[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>

2) **Les opérations d'emprunt et de prêt**[Cause] relatives à l'assistance macrofinancière de l'Union sont effectuées en euros, en appliquant la même date de valeur, et n'impliquent pas pour l'Union de transformation d'échéance, ni *ne l'(l'Union*[Experiencer]*) exposent* **à un quelconque risque de change ou de taux d'intérêt, ou à un quelconque autre risque commercial**[Effect]. <*DÉCISION (UE)2016/2371 DU PARLEMENT EUROPÉEN ET DU CONSEIL du 14 décembre 2016*>

3) < ...> **une série de scénarios historiques**, **comprenant des périodes de mouvements extrêmes sur les marchés**[Cause] observés au cours des trente dernières années, ou sur des périodes aussi longues que possible pour lesquelles des données fiables ont été disponibles, qui *auraient exposé* **le DCT-prestataire de services bancaires**[Experiencer] **au plus grand risque financier**[Effect] < ...> . <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>.

LT -

Model B

EN

1) **An institution**[Experiencer]**,** other than when acting as an originator, a sponsor or original lender, *shall be exposed to* **the credit risk of a securitisation position**[Effect] in its trading book or non-trading book only if the originator, sponsor or original lender has explicitly disclosed to the institution that it will retain on an ongoing basis, a material net economic interest < …>. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

2) **The ECA**[Experiencer] *is normally not exposed to* **the transfer risk**[Effect]. <*Commission Delegated Regulation (EU) 2018/179 of 25 September 2017*>

FR

1) Lorsque les autorités compétentes constatent, conformément à l'article 97, que **des établissements**[Cause]présentant des profils de risque analogues en raison de la similitude de leurs modèles d'entreprise ou de la localisation géographique de leurs expositions sont ou sont susceptibles *d'être exposés* **à des risques analogues**[Effect] ou de représenter des risques analogues pour le système financier. < *DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

2) Les États membres devraient veiller à ce que **les établissements de crédit et les entreprises d'investissement**[Experiencer] disposent, au regard **des risques**[Effect] **auxquels ils** *sont ou peuvent être exposés*, d'un capital interne adéquat en termes de quantité, de qualité et de répartition. <*DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

3) **Les établissements**[Experiencer] démontrent aux autorités compétentes qu'ils disposent de procédures adéquates de gestion des risques leur permettant de contrôler **les risques**[Effect] **auxquels ils**[Experiencer] *peuvent s'exposer*. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

4)Pour surveiller et évaluer **les risques**[Effect] **auxquels le DCT**[Experiencer] *est exposé ou est susceptible d'être exposé* et qui peuvent menacer le fonctionnement harmonieux des marchés de titres, l'autorité compétente devrait pouvoir demander des informations complémentaires sur les risques et les activités d'un DCT. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

5) **L'organe**[Experiencer] de direction dispose collectivement des connaissances, des compétences et de l'expérience nécessaires à la compréhension des activités de l'établissement, y compris des principaux **risques**[Effect] **auxquels il** *est exposé.* < *DIRECTIVE 2013/36/UE DU PATLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

6)< ...> le nombre ou le volume des ordres est réputé dépasser considérablement la norme lorsqu'**un internalisateur systématique**[Experiencer] ne peut exécuter ce nombre ou ce volume d'ordres **sans** *s'exposer* **à un risque excessif**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/567 DE LA COMISSION du 18 mai 2016*>

7)<...> **l'établissement**[Experiencer] procède à un ajustement pour risque de crédit spécifique justifié par la perception d'une détérioration significative de la qualité de crédit depuis le moment où **il** [Experiencer] *s'est exposé* **au risque**[Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

LT -

Type III: Effect (RISK) arises from Cause

Annotated of examples

Model A
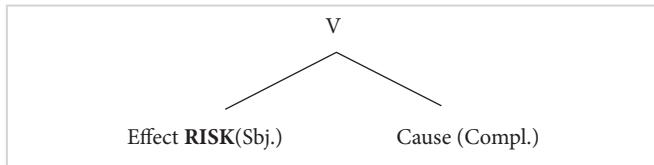
Annotated of examples

EN

1) Provisions set out in Directive 2013/36/EU of the European Parliament and of the Council (6), Regulation (EU) No 575/2013 and Delegated Regulation (EU) No 152/2013 are the appropriate benchmark for the purpose of establishing capital requirements to cover **credit risk**, **counterparty credit risk and market risks**[Effect] **that** *may arise from* **the investments of a CSD**[Cause]. *<Commission Delegated Regulation (EU) 2017/390 of 11 November 2016>*

2) **Liquidity risk**[Effect] *can* potentially *arise from* **any of the banking-type ancillary services**[Cause] performed by the CSD. *<Commission Delegated Regulation (EU) 2017/390 of 11 November 2016>*

3) < … > objective methodology that does not exclusively rely on external opinions and that takes into consideration **the risk** [Effect] *arising from* **the establishment of the issuer**[Cause] in a particular country. *<Commission Delegated Regulation (EU) 2017/390 of 11 November 2016>*

4) < … > "operational risk" means **the risk of loss**[Effect] *resulting from* **inadequate or failed internal processes, people and systems or from external events**[Cause], and includes legal risk. *<Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013>*

5) **"General Wrong-Way risk"**[Effect] *arises when*[Cause] the likelihood of default by counterparties is positively correlated with general market risk factors. *<Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013>*

6) **"Specific Wrong-Way risk"**[Effect] *arises when* **future exposure to a specific counterparty is positively correlated with the counterparty's PD due to the nature of the transactions**[Cause]. *<Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013>*

FR

1) **Risques juridiques/financiers/opérationels** [Effect] *découlant* **de la prestation des services**[-Cause]. *<RÈGLEMENT DÉLÉGUÉ (UE) 2017/394 DE LA COMISSION du 11 novembre 2016>*

LT

1) **Dėl paslaugų teikimo**[Cause] *kylanti* **finansinė rizika**[Effect]. *<KOMISIJOS ĮGYVENDINIMO REGLAMENTAS (ES) 2017/394 2016m. lapkričio 11d.>*

2) <...> sisteminės svarbos įstaiga – ES patronuojančioji įstaiga, ES patronuojančioji finansų kontroliuojančioji bendrovė, ES patronuojančioji mišrią veiklą vykdanti finansų **kontroliuo-**

jančioji bendrovė arba **įstaiga**[Cause]**, dėl kurios**, jei ji nevykdo įsipareigojimų arba jos veikla sutrinka, **galėtų** *kilti* **sisteminė rizika**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

3) Kompetentingos valdžios institucijos užtikrina, kad **rizika**[Effect]**,** *atsirandanti* **dėl pakeitimo vertybiniais popieriais sandorių**[Cause], kurių atžvilgiu kredito įstaiga yra investuotoja, iniciatorė arba rėmėja, įskaitant reputacijos riziką. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

4) <...> **likvidumo rizika**[Effect] *gali atsirasti* ir **dėl kitų dalyvių**[Cause], ne tik dėl paties didžiausio <...>. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016 m. lapkričio 11d >*

Model B

B	V	
Effect **RISK** (Sbj.)	Experiencer (Compl.)	Cause(Compl.)

EN –

FR

1)< ...> **les risques titrisés**[Effect] **sur des biens immobiliers résidentiels ou commerciaux** [Experiencer] *soient créés* **par un membre du groupe consolidé**[Cause] dont ľémetteur des obligations garanties est également membre < ...>. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013 >*

LT

1) <...> ar **dėl struktūrizuoto indėlio, finansinės veiklos arba finansinės praktikos**[Cause] **Sąjungos ekonomikai**[Experiencer] *kiltų* **rizika**[Effect]. <*KOMISIJOS DELEGUOTASIS RERGLAMENTAS (ES) 2017/567 2016m. gegužės 18d.*>

2) <...> kartotinis pakeitimas vertybiniais popieriais arba jeigu komercinį vekselį visiškai padengia finansuojanti įstaiga, kai **komercinio vekselio investuotojui**[Experiencer] iš esmės *kyla* **rizika**[Effect] , **kad rėmėjas neįvykdys įsipareigojimų** [Cause] <...>. <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr 575/2013 2013m. birželio 26d.*>

Note! In the argument structure with subordinate clause, the subordinate clause becomes the extent form of the Cause and completes the meaning of the term with the nominal base *rizika* explaining why and which conditions stimulate risk. The conjunctions *kai* and *dėl to, kad* attach the subordinate clause to the main clause. Such sentences can be considered as a definition for the term with the nominal base *rizika*.

3) CVPD taip pat gali patirti **investicinę riziką**[Effect]**,** *kylančią* **nuosavybės teise valdomam turtui arba investicijoms**[Experiencer], kurias jis vykdo naudodamasis įkaitu, dalyvių indėliais, paskolomis dalyviams ar bet kuria kita pozicija, kai teikia leidžiamas papildomas bankinio tipo

paslaugas. **Investicinė rizika yra nuostolio rizika**[Effect]**, kuri *kyla* CVPD**[Experiencer]**, kai jis investuoja nuosavus ar savo dalyvio išteklius, tokius kaip įkaitas**[Cause]. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016 m. lapkričio 11d* >

4) <...> pagal Reglamento (ES) Nr. 575/2013 trečios dalies IV antraštinės dalies 2 skyrių, yra tarpusavyje užskaičiusios vienos ar kelių akcijų, sudarančių akcijų indeksą, pozicijas su viena arba keliomis akcijų indeksų ateities sandorio arba kito akcijų indekso produkto pozicijomis, turi turėti pakankamai vidaus kapitalo, kad padengtų **pagrindinę nuostolių riziką**[Effect] **, kuri kyla dėl to, kad ateities sandorio arba kito produkto vertė kinta nevisiškai vienodai lyginant su jį sudarančių akcijų verte**[Cause]. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

5) Vis dėlto būtina leisti sukurti sąsajas su trečiųjų valstybių CVPD, net jei trečiosios valstybės CVPD nėra individualiai atskirtų sąskaitų, su sąlyga, kad prašančiojo CVPD turtas bet kuriuo atveju būtų tinkamai apsaugotas ir kompetentingos institucijos būtų informuojamos apie ... **riziką**[Effect]**, kylančią dėl to, kad nėra individualiai atskirtų sąskaitų, ir tinkamą tokios rizikos mažinimą**[Cause]. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016 m. lapkričio 11d.* >

6) Yra tikimybė, kad **kredito rizika**[Effect] **atsiras**, kai **skolininkas (garantas) susidurs su dideliais einamaisiais neaiškumais ar neigiamomis verslo, finansinėmis ar ekonominėmis sąlygomis** <...> [Cause]. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2018/179 2017 m. rugsėjo 25d.*>

Appendix 4.

EXPERIENCE_RISK frame

Argument structure

Type I: Experiencer bears **Effect (RISK)**

Annotated examples
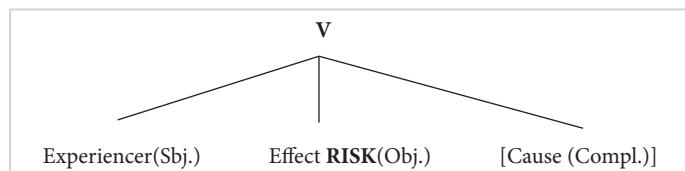
V

Experiencer(Sbj.)   Effect **RISK**(Obj.)   [Cause (Compl.)]

EN

1) < … > **Alki LP**[Experiencer] licenses the valuable intellectual property and ***bears* the entrepreneurial risk**[Effect]. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

2) < … > the Commission expressed doubts on the capacity of **Alki LP**[Experiencer] ***to bear*** and control **any business risk**[Effect]. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

3) < … > **SMBV**[Experiencer] only performs an administrative role in the management of stocks and **does not bear the ultimate stock risk**[Effect]. <*Commission Decision (EU) 2017/502 of 21 October 2015)*>

4) < … > **the entity**[Experiencer] ***has* inventory risk**[Effect] before the specified good or service has been transferred to a customer < … >. < *Commission Regulation (EU) 2017/1987 of 31 October 2017*>

5) < … > the financial instruments have been issued by **an issuer**[Experiencer] that ***has* low credit risk**[Effect] based on an adequate internal assessment by the CSD-banking service provider < … >. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

6) < … > **the financial instruments**[Experiencer] ***have* a low market risk**[Effect] based on an adequate internal assessment by the CSD-banking service provider. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

7) < … > Guidelines clarify that control should be understood, in this context, as **the capacity (of a company)**[Experiencer] to make decisions ***to take on* the risk**[Effect] and to manage it. <*Commission Decision (EU) 2017/502 of 21 October 2015)*>

8) < … > **the investment firms**[Experiencer] will be mandated to invest in financial instruments < … > or ***to undertake*** short sales, purchases with borrowed funds < … > or **foreign exchange risk**[Effect]. <*Commission Delegated Regulation (EU) 2017/565 of 25 April 2016)*>

9) < … > similarly, **custody risk**[Effect] ***faced* by a CSD**[Experiencer] on own assets held by a

custodian bank or other CSDs should not be double-counted. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

10) **Operational risk**[Effect] is **a significant risk** *faced* **by institutions**[Experiencer] requiring coverage by own funds < … >. <*Regulation (EU) №575/2013 of the European Parliament and of the Council of 26 June 2013*>

11) When **a company**[Experiencer] *assumes* **a risk**[Effect], it should be able, on the one hand, to control the risks (166) and, on the other hand, to financially *assume* **such a risk**[Effect]. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

12) According to the tax advisor, this set of comparable companies includes **full-fledged manufacturers**[Experiencer] that typically perform functions and *incur* **risk**[Effect] relating to their raw material. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

13) This should include **the risks**[Effect] **that the CSD**[Experiencer] *bears* **from any other entities**[Cause] and the risks that it poses to third parties, including its users and to the extent practicable their clients, as well as linked CSDs, central counterparties, trading venues, payment systems, settlement banks, liquidity providers and investors. <*Commission Delegated Regulation (EU) 2017/392 of 11 November 2016*>

14) Given the nature of the activities of CSDs, **a CSD**[Experiencer] *assumes* **business risk**[Effect] **due to potential changes in general business conditions**[Cause] that are likely to impair its financial position. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

FR

1)<…>le système de mesure du risque opérationnel de l'établissement utilise des données externes pertinentes, surtout s'il y a lieu de penser que **l'établissement**[Experiencer] *encourt* **le risque de pertes**[Effect] potentiellement sévères, quoiqu'exceptionnelles. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

2) <...> la Commission exprime des doutes quant à la capacité d'Alki LP à supporter et à contrôler les risques d'entreprise. Lorsqu'**une entreprise**[Experiencer] *prend un risque*[Effect], elle doit d'une part pouvoir contrôler les risques (166) et, d'autre part, pouvoir *assumer* **financièrement un tel risque**[Effect]. <*DÉCISION (UE)2017/502 DE LA COMMISSION du 21octobre 2015* >

3) <...> SMBV n'exécute que des tâches d'exécution journalières dans le domaine de la torréfaction du café, de la mise sous emballage du café et de l'offre de services logiques et administratifs, alors qu'**Alki LP**[Experiencer] prend la précieuse propriété intellectuelle sous licence et *supporte* **le risque commercial**[Effect] de sorte que SMBV est l'entité la moins complexe. <*DÉCISION (UE)2017/502 DE LA COMMISSION du 21octobre 2015* >

4)<...> l'établissement de crédit ne peut comptabiliser l'actif comme un actif de niveau 1 qu'à concurrence du montant de ses sorties nettes de trésorerie dans cette monnaie, en situation de tensions, correspondant à ses activités **dans le pays**[Experiencer] où **le risque de liquidité**[Effect] *est encouru*. <*RÈGLEMENT DÉLÉGUÉ (UE) 2015/61 DE LA COMISSION du 10 octobre 2014*>

5)**Le risque d'investissement**[Effect] **est le risque de pertes**[Effect] *encouru* par **un DCT**[Experiencer] lorsqu'il investit ses propres ressources ou celles de ses participants, telles que des garanties. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

6) Titres cessibles autres que ceux visés au point 3 représentent des créances sur, ou garanties par, des emprunteurs souverains ou des banques centrales, émis dans la monnaie locale par l'emprunteur souverain ou la banque centrale, dans la monnaie et **le pays**[Experiencer] dans lequel **le risque de liquidité**[Effect] *est pris*, ou en monnaie étrangère, dans la mesure où la détention de telles créances correspond aux besoins de liquidité aux fins des opérations. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

7) <...> Aux fins du calcul des exigences de fonds propres relatives au risque général et au risque spécifique de **la partie**[Experiencer] qui *assume le risque de crédit*[Effect] (ci-après dénommé «vendeur de la protection»), sauf indication contraire, le montant notionnel du contrat de dérivés de crédit est utilisé. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

8) <...> **«établissement prêteur»: l'établissement**[Experiencer] qui *détient* **le risque considéré**[Effect]**.** <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

9) 545) <... > comme «partie testée» sans prendre en considération la question de savoir si le bénéfice résiduel attribué à Alki LP est proportionnel aux rôles, risques et actifs d'Alki LP. Starbucks justifie ce choix par le fait que **SMBV**[Experiencer] ne possède aucune propriété intellectuelle de valeur et **ne** *court* **aucun risque d'entreprise significatif**[Effect] dans l'exercice d'activités de routine <... >. <*DÉCISION (UE)2017/502 DE LA COMMISSION du 21octobre 2015* >

10) **SMBV**[Experiencer] n'a qu'un rôle administratif dans la gestion des stocks et **ne supporte pas le risque final**[Effect] lié aux stocks. <*DÉCISION (UE)2017/502 DE LA COMMISSION du 21octobre 2015* >.

11) Les autorités néerlandaises affirment que depuis le début, l'intention de Starbucks a toujours été construire **une usine de torréfaction**[Experiencer] du café exécutante *supportant* **un faible risque**[Effect] et que les faits et circonstances n'ont pas fortement changé au fil des années. <*DÉCISION (UE)2017/502 DE LA COMMISSION du 21octobre 2015* >

12) **Un prêteur direct**[Experiencer] *assumerait* **toutefois ce risque**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2018/179 DE LA COMISSION du 25 septembre 2017*>

LT

1) <...> **CVPD**[Experiencer] taip pat *gali patirti* **investicinę riziką**[Effect]**,** kylančią nuosavybės teise valdomam turtui arba investicijoms, kurias jis vykdo naudodamasis įkaitu, dalyvių indėliais, paskolomis dalyviams ar bet kuria kita pozicija, kai teikia leidžiamas papildomas bankinio tipo paslaugas. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016 m. lapkričio 11d.* >

2) Duomenys pateikiami atskirai apie kiekvieną turto rinką Sąjungoje, kurioje atitinkama **įstaiga**[Experiencer] *patiria* **riziką**[Effect]. <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr 575/2013 2013m. birželio 26d.*>

3) <...> rizika grindžiamas nuosavų lėšų reikalavimas yra ypač svarbus, siekiant užtikrinti, kad nuosavų lėšų dydžio reikalavimas būtų pakankamas nenumatytiems nuostoliams padengti. Tačiau krizė parodė, kad vien to reikalavimo nepakanka, kad **įstaigoms**[Experiencer] būtų užkirstas kelias *prisiimti* **pernelyg didelę ir netvarią sverto riziką**[Effect]. <*EUROPOS PARLAMENTO TARYBOS REGLAMENTAS (ES) Nr 575/2013 2013m. birželio 26d.*>

4) **Bankas „Vestjysk"**[Experiencer] *negali prisiimti* **kredito rizikos**[Effect] dėl naujų klientų, kai vien tokia rizika konkrečiu metu sudaro daugiau kaip 10 % bendro kapitalo.<*KOMISIJOS SPRENDIMAS(ES) 2017/1959 2017 m. liepos 18d.*>

5) Kai **bendrovė**[Experiencer] *prisiima* **riziką**[Effect], ji turėtų galėti, iš vienos pusės, valdyti riziką (166), o iš kitos pusės – finansiškai *prisiimti* **tokią riziką**[Effect]. <*KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.*>

6) <...> siekdamas sukurti patikimą rizikos valdymo sistemą, CVPD turėtų integruotai ir visapusiškai apžvelgti visą svarbią riziką. Tai turėtų apimti **riziką**[Effect]**, kuri CVPD**[Experiencer] *tenka* **dėl kitų subjektų**[Cause], ir jo keliamą riziką trečiosioms šalims, įskaitant naudotojus ir, kiek įmanoma, jų klientus<...>. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016 m. lapkričio 11d.* >

7) Atlikdamos tikrinimą ir vertinimą, kompetentingos valdžios institucijos atsižvelgia į **įstaigoms**[Experiencer] *tenkančią* **palūkanų normos riziką**[Effect]**,** kylančią **dėl ne prekybos veiklos**[Cause]. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

8) <...> jokio papildomo reguliuojamojo kapitalo poreikio koeficiento ir ją reikėtų priskirti su operacine rizika susijusiam reguliuojamajam kapitalui. Panašiai **saugojimo rizika**[Effect]**, su kuria** *susiduria* **CVPD**[Experiencer] **dėl nuosavo turto**[Cause], kuris yra jį saugančiame banke ar kituose CVPD, neturėtų būti priskaičiuojama du kartus, ir reikalauti kokio nors papildomo reguliuojamojo kapitalo nereikėtų <...>. < *KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016 m. lapkričio 11d.* >

9) <...> **rizika**[Effect]**, su kuria įstaigos**[Experiencer] *susiduria* arba *galėtų susidurti*, įskaitant riziką, nustatytą atliekant testavimą nepalankiausiomis sąlygomis, atsižvelgiant į įstaigos veiklos pobūdį, mastą ir sudėtingumą. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

PERCEIVE and ASSESS_RISK frame

Argument structures

Type I: Agent identifies and assesses **Effect (RISK)**

Annotated examples

Model A
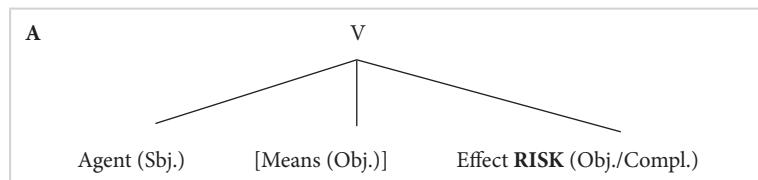
Annotated examples:

EN

1) <…> documentation showing that **the ICAAP**[Agent] clearly *identifies* **the concentration risk** [Effect] arising from the large exposures to the regional or central body and that this is actively manage <…>. < *Guideline (EU) 2017/697 of the European Central Bank of 4 April 2017*>

2) T**he risk- measurement model**[Agent] *shall capture* nonlinearities for options and other products as well as **correlation risk**[Effect] **and basis risk**[Effect]. < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

3) <…> **(IRC) model**[Agent] in place *to capture* **the default and migration risks**[Effect]. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

4) **An institution**[Agent] shall also *assess* **the model risk**[Effect]. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 of June 2013*>

5) <…> **the institution**[Agent] internally *measures* and manages **risk**[Effect]. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

6) For the purposes of *measuring* **intraday credit risk**[Effect]**, CSD-banking service providers**[Agent] should be in a position to anticipate peak exposures for the day. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

7) The variation in earnings, economic value or other relevant measure used by the management for upward and downward rate shocks according to **management's method** [Agent] for *measuring* **the interest rate risk**[Effect]**,** broken down by currency. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 of June 2013*>

8) <…> **any assumptions**[Agent] made within the internal model are appropriate and ***do not underestimate or overestimate*** the risk [Effect] <…>. <*Commission Delegated Regulation (EU) 2017/180 of 24 October 2016*>

9) To carry out a comprehensive risk evaluation of a CSD, **the competent authority**[Agent] will need to request statistical data on the scope of the CSD's business activities in order *to evaluate the risks*[Effect] related to CSDs operation and to the smooth operation of securities markets. <*Commission Delegated Regulation (EU) 2017/392 of 11 November 2016*>

10) The rules and procedures referred to in paragraph 1 shall include a requirement for the **CSD-banking service provider**[Agent] to *report* **any liquidity risk**[Effect] that has the potential to cause previously unforeseen and potentially uncovered liquidity shortfalls to <…>. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

11)Competent authorities shall ensure that **institutions**[Agent] implement **systems**[Means] ***to identify, evaluate*** and manage **the risk**[Effect] arising from potential changes in interest rates that affect an institution's non-trading activities. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

12) **Investment firms**[Agent] shall establish, implement and maintain **adequate policies and procedures** [Means] designed ***to detect*** any risk of failure by the firm[Effect] to comply with its obligations under Directive 2014/65/EU, as well as **the associated risks**[Effect], and put in place adequate measures and procedures designed to minimise such risk and to enable the competent authorities to exercise their powers effectively under that Directive. <*Commission Delegated Regulation (EU) 2017/565 of 25 April 2016*>

13) <...> **institutions**[Agent] have internal **methodologies**[Means] that enable them ***to assess*** the credit risk of exposures to individual obligors, securities or securitisation positions and credit risk[Effect] at the portfolio level. In particular, internal methodologies shall not rely solely or mechanistically on external credit ratings. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

14) <...> **a CSD-banking service provider**[Agent] shall design and implement **policies and procedures**[Means] that **measure intraday and overnight liquidity risk**[Effect], in accordance with sub-section 1. <*Commission Delegated Regulation (EU)2017/390 of 11 November 2016*>

15) **The institution**[Agent] shall have **procedures**[Means] in place *to identify* and control **the risks for counterparties**[Effect] where the exposure rises beyond the one-year horizon. The forecast increase in exposure shall be an input into the institution's internal capital model. < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

16) <...> **an institution**[Agent] shall have in place **a sound process**[Means] **for** ***determining*** the **credit risk**[Effect] associated with the receivables. < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

17) <...> **a CSD-banking service provider**[Agent] shall design and implement **policies and procedures**[Means] that *report* **intrday and overnight liquidity risk**[Effect] in accordance with sub-section 4. <*Commission Delegated Regulation (EU)2017/390 of 11 November 2016*>

18) In order ***to identify*** **General Wrong-Way risk**[Effect], **an institution**[Agent] shall design **stress testing and scenario analyses** [Means] to stress risk factors that are adversely related to counterparty creditworthiness. < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

19) **It (the operational risk-management function of a CSD)** [Agent] shall in particular: a) develop **strategies, policies and procedures**[Means] *to identify, measure*, monitor and ***report on*** **operational risks**[Effect]. <*Commission Delegated Regulation (EU)2017/392 of 11 November 2016*>

20) **A CSD**[Agent] shall have appropriate **IT systems, policies, procedures and controls**[Means]

to identify, measure, monitor, *report on* and mitigate **its operational risk**[Effect]. <*Commission Delegated Regulation (EU)2017/392 of 11 November 2016*>

FR

1) **Facteurs**[Agent] *indiquant* **un risque de contagion**[Effect] potentiellement élevé de la succursale par les activités du DCT description dès que possible. <*RÈGLEMENT D'EXÉCUTION (UE) 2017/394 DE LA COMISSION du 11 novembre 2016*>

2) **Des informations financières**[Agent] visées aux paragraphes 2 et 3 sont déclarées dans la mesure où cela est nécessaire pour obtenir une vue complète du profil de risque inhérent aux activités d'un établissement et pour *apprécier* **les risques systémiques**[Effect] que les établissements présentent pour le secteur financier ou l'économie réelle conformément au règlement (UE) no 1093/2010. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

3) <…>ce règlement prévoit **des règles prudentielles**[Agent] pour *mesurer* **le risque de crédit** [Effect] résultant des expositions de crédit à vingt-quatre heures ou de plus longue durée. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

4) Nonobstant le fait qu'une atténuation du risque de crédit a été prise en compte aux fins du calcul de leurs montants d'exposition pondérés et, le cas échéant, des montants de leurs pertes anticipées, **les établissements**[Agent] continuent à *procéder à une pleine évaluation* **du risque de crédit**[Effect] inhérent à l'exposition sous-jacente et sont en mesure de démontrer, à leurs autorités compétentes, qu'ils satisfont à cette exigence. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

5) **L'indicateur**[Agent] retenu par la France pour évaluer **le risque de rupture de l'équilibre** [Effect] entre l'offre et la demande d'électricité est l'espérance de la durée de défaillance pour des raisons de déséquilibre offre-demande. <*DÉCISION (UE) 2017/503 DE LA COMMISSION du 8 novembre 2016* >

6) En raison d'importantes différences méthodologiques dans le calcul des exigences de fonds propres selon que l'on utilise l'approche standard ou des approches internes, du fait principalement de différences majeures dans l'agrégation ou la diversification des différentes positions, une comparaison entre **les deux mesures effectuées**[Agent] pour *déterminer* **le risque de marché**[Effect] des petits portefeuilles ne donnerait pas d'indication valable sur la sous-estimation potentielle des exigences de fonds propres. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/180 DE LA COMISSION du 24 octobre 2016*>

7) Les entreprises d'investissement déterminent si **leur client**[Agent] possède le niveau d'expérience et de connaissance requis pour *appréhender* **les risques inhérents au produit ou au service d'investissement**[Effect] proposé ou demandé lorsqu'elles évaluent le caractère approprié pour un client d'un service d'investissement conformément à l'article 25, paragraphe 3, de la directive 2014/65/UE. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMMISSION du 25 avril 2016*>

8) < **…>le client**[Agent] possède l'expérience et la connaissance nécessaires pour *comprendre* **les risques inhérents à la transaction**[Effect] ou à la gestion de son portefeuille. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016*>

9) Afin de mieux *quantifier et définir* **les risques**[Effect] découlant de sa participation dans le capital d›une autre personne morale, **un DCT**[Agent] devrait réaliser des analyses de risques indépendantes, approuvées par un auditeur interne ou externe, portant sur les risques financiers et les passifs du DCT résultant de cette participation. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

10) Lorsqu'**un établissement**[Agent] *relève* de la troisième partie, titre II, chapitre 3, **ses vingt risques**[Effect] les plus grands sur base consolidée, à l'exception des risques exemptés de l'application

de l'article 395, paragraphe 1, sont notifiés aux autorités compétentes. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

11) Afin de garantir que **les coussins de fonds propres contracycliques**[Agent] *reflètent correctement le risque de croissance excessive du crédit*[Effect] pesant sur le secteur bancaire, les établissements de crédit et les entreprises d'investissement devraient calculer les coussins qui leur sont propres comme étant égaux à la moyenne pondérée des taux de coussin contracyclique s'appliquant dans les pays dans lesquels ces établissements . <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26juin 2013*>

12)**Le DCT**[Agent] met en place, dans le cadre de son dispositif de gouvernance, **des politiques, des procédures et des systèmes documentés**[Means] pour *détecter, mesurer,* contrôler, gérer et déclarer les risques[Effect] auxquels il est susceptible d'être exposé et qu'il est susceptible de faire courir à toute autre entité, y compris ses participants et ses clients, ainsi qu'aux DCT <...>. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

13) Les autorités compétentes veillent à ce que **les établissements**[Agent] mettent en œuvre **des systèmes**[Means] qui permettent *de détecter, d'évaluer* et de gérer **le risque**[Effect] découlant d'éventuelles variations des taux d'intérêt affectant leurs activités autres que de négociation. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26juin 2013*>

14) <...> **le DCT-prestataire de services bancaires** [Agent] conçoit et met en oeuvre **des politiques et procédures**[Means] permettant *mesurer* **le risque de liquidité intrajournalier et à vingt-quatre heures**[Effect], conformément à la sous-section 1. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

15)<...> **les établissements**[Agent] disposent **de méthodes internes**[Means] leur permettant **d'évaluer le risque de crédit**[Effect] afférent aux expositions sur les différents débiteurs, titres ou positions de titrisation, et le risque de crédit au niveau du portefeuille. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26juin 2013*>

16) <...> **les établissements**[Agent] disposent **de stratégies, de politiques, de processus et de systèmes solides**[Means] permettant de *détecter, de mesurer,* de gérer et de suivre **le risque de liquidité**[Effect] sur des périodes adéquates de différentes longueurs, y compris intrajournalières, de manière à garantir que ces établissements maintiennent des coussins adéquats de liquidité. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26juin 2013*>

17) **L'établissement**[Agent] met en place **des procédures**[Means] lui permettant *d'identifier* et de contrôler **le risque de contrepartie**[Effect] lorsque l'exposition dépasse l'horizon d'un an. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

18) <...> **les établissements**[Agent] disposent **d'une procédure adéquate**[Means] pour *déterminer* **le risque de crédit**[Effect] lié aux créances à recouvrer. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

19) <...> **le DCT-prestataire de services bancaires**[Agent] conçoit et met en oeuvre **des politiques et procedures**[Means] permettant de: d) *déclarer* **le risque de liquidité intrajournalier et à vingt-quatre heures**[Effect], conformément à la sous-section 4<...>. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

20) Pour *déceler* **le risque général de corrélation**[Effect], **l'établissement**[Agent] conçoit **des tests de résistance et des analyses**[Means] par scénario qui mettent en évidence les facteurs de risque corrélés négativement avec la qualité de crédit de la contrepartie. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

21) **Un établissement**[Agent] **ne peut utiliser de nouveau une approche moins sophistiquée** [Means] **pour *évaluer* le risque opérationnel**[Effect] que si les conditions suivantes sont remplies <...>. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

22) **Elle (la fonction de gestion du risque opérationnel du DCT)**[Agent] consiste à: a) élaborer **des stratégies, politiques et procédures** [Means] afin *d'identifier, mesurer*, contrôler et notifier **les risques opérationnels**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

23) **Le DCT**[Agent] dispose **de systèmes informatiques, de politiques, de procédures et de systèmes de contrôle**[Means] appropriés lui permettant *d'identifier, de mesurer*, de contrôler, *de déclarer* et d'atténuer **les risques opérationnels**[Effect] auxquels il est exposé. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

LT

1) **Komisija**[Agent] tiksliau *nustatė* **tris rizikas: pajėgumų sulaikymo riziką, pajėgumų garantijų sulaikymo riziką ir kainų skirtumo mažinimo riziką**[Effect]. <*KOMISIJOS SPRENDIMAS(ES) 2017/503 2016m. lapkričio 8d.*>

2) Valdymo organas ir aukščiausioji vadovybė užtikrina, kad CVPD politika, procedūros ir kontrolės priemonės atitiktų CVPD priimtiną riziką ir pajėgumą prisiimti riziką, ir kad ta politika, procedūromis ir kontrolės priemonėmis būtų nustatoma, kaip **CVPD**[Agent] *identifikuoja* **riziką**[Effect], apie ją praneša, ją stebi ir valdo. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS(ES)2017/392 2016m. lapkričio 11d. *>

3) <...> siekdamos teisingai ir subalansuotai *pristatyti* naudą ir **riziką**[Effect], **investicinės įmonės**[Agent], nurodydamos galimą paslaugos ar finansinės priemonės naudą, visuomet turėtų suprantamai ir aiškiai *nurodyti* **bet kokią atitinkamą riziką**[Effect], įskaitant trūkumus ir silpnybes; <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016m.balandžio 25d.*>

4) <...> siekdamas sumažinti operacinę riziką, kuri apima riziką, sukeltą informacinių sistemų, vidaus procesų ir darbuotojų veiklos trūkumų arba sutrikimų, kuriuos sukėlė išorės įvykiai, dėl kurių sumažėja, pablogėja arba sutrinka CVPD paslaugų teikimas, **CVPD**[Agent] *turėtų nurodyti* **visų rūšių riziką**[Effect]ir stebėti jos pokyčius, nepriklausomai nuo jos šaltinių, kurie gali apimti <...>. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS(ES)2017/392 2016m. lapkričio 11d. *>

5) <...>**informacija**[Agent] yra paremta veiklos scenarijais skirtingomis rinkos sąlygomis (tiek neigiamomis, tiek teigiamomis) ir *atspindi* konkrečių į analizę įtrauktų priemonių rūšių pobūdį ir **riziką**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016m.balandžio 25d.*>

6) Apskaičiuodamos nuosavų lėšų reikalavimą, be delta rizikos, **įstaigos**[Agent] turi tinkamai įvertinti ir **kitą su pasirinkimo sandoriais susijusią riziką**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

7) <...> prašantysis CVPD suteikia galimybę savo **dalyviams**[Agent] susipažinti su sąsajos susitarimo teisinėmis ir veiklos sąlygomis, kad **jie** [Agent] galėtų įvertinti ir valdyti **susijusią riziką**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS(ES)2017/392 2016m. lapkričio 11d. *>

8) **Įstaiga**[Agent] bent kartą per ketvirtį taiko daugelio veiksnių testavimo nepalankiausiomis sąlygomis scenarijus ir *vertina* **reikšmingą nekryptinę (netiesioginę) riziką, įskaitant pelningumo kreivės riziką ir bazinę riziką**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

9) **Įstaiga**[Agent] taip pat *vertina* **modelio riziką**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA (ES) NR.575/2013 2013m. birželio 26d.*>

10) Rizikos **komiteto nariai**[Agent] turi turėti tinkamų žinių, įgūdžių ir kompetencijos, kad visiškai *suprastų* ir kontroliuotų įstaigos rizikos strategiją ir įstaigai priimtiną riziką[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

11) Taikant 1 dalyje nurodytą **modelį**[Agent] reiktų tinkamai įvertinti šią riziką[Effect]. *<EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.>*

12)Kompetentingos valdžios institucijos užtikrina, kad **įstaigos**[Agent] įdiegtų **sistemas**[Means], skirtas **rizikai**[Effect], atsirandančiai dėl galimų palūkanų normų svyravimų, turinčių įtakos įstaigos ne prekybos veiklai, *nustatyti, vertinti* ir valdyti. *<EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA 2013/36/ES 2013m. birželio 26d.>*

13) **Investicinės įmonės**[Agent] parengia, įgyvendina ir taiko **tinkamą politiką ir procedūras**[Means], kurių tikslas – *nustatyti* **bet kokią riziką**[Effect], kad įmonė neįvykdys pareigų pagal Direktyvą 2014/65/ES, taip pat susijusią riziką, ir taiko tinkamas priemones bei procedūras, skirtas tokiai rizikai kuo labiau sumažinti ir suteikti galimybę kompetentingoms institucijoms veiksmingai vykdyti savo įgaliojimus pagal tą direktyvą. *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016m. balandžio 25d.>*

14)<...> įstaigos[Agent] taikytų **vidaus metodikas**[Means], leidžiančias joms įvertinti **atskirų skolininkų, vertybinių popierių ar pakeitimo vertybiniais popieriais pozicijų kredito riziką**[Effect], taip pat **kredito riziką**[Effect] portfelio lygiu. *<EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA 2013/36/ES 2013m. birželio 26d.>*

15) <...> **CVPD bankinio tipo paslaugų teikėjas**[Agent] sukuria ir įgyvendina **politiką ir procedūras**[Means], siekdamas *vertinti* **dienos ir vienos nakties likvidumo riziką**[Effect] pagal 1 poskirsnį. *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.>*

16) <...> **įstaiga**[Agent] taiko **patikimą procesą**[Means] su gautinomis sumomis siejamai **kredito rizikai**[Effect] *nustatyti.* *<EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.>*

17) **CVPD bankinio tipo paslaugų teikėjas**[Agent] sukuria ir įgyvendina **politiką ir procedūras**[Means], siekdamas *pranešti* **apie dienos ir vienos nakties likvidumo riziką**[Effect] pagal 4 poskirsnį. *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.>*

18) **Bendrajai klaidingų sprendimų rizikai**[Effect] *nustatyti* **įstaiga**[Agent] parengia **testavimo nepalankiausiomis sąlygomis ir scenarijų analizes**[Means], kad būtų akcentuoti rizikos veiksniai, turintys neigiamą įtaką sandorio šalies kreditingumui. *<EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.>*

19) **Visų pirma ji (CVPD operacinės rizikos valdymo funkcija)**[Agent]: a)kuria **strategijas, politiką ir procedūras**[Means], skirtas **operacinei rizikai**[Effect] *nustatyti, įvertinti*, stebėti ir apie ją *pranešti.* *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.>*

20) **CVPD**[Agent] įdiegia atitinkamas **IT sistemas, politiką, procedūras ir kontrolės priemones**[Means] savo **operacinei rizikai**[Effect] *nustatyti, įvertinti*, stebėti, apie *ją pranešti* ir jai sumažinti. *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.>*

21) Kompetentingos valdžios institucijos užtikrina, kad įstaigos[Agent]įgyvendintų **politiką ir procesus**[Means], skirtus **operacinei rizikai**[Effect], įskaitant **modelio riziką**[Effect] ir apsaugą nuo retai pasitaikančių didelio poveikio įvykių, *vertinti* ir valdyti. *<EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.>*

22) Siekdami laikytis šios dalies a ir b punktų, **atitikties užtikrinimo funkciją atliekantys asmenys**[Agent] atlieka **vertinimą**[Means], kuriuo remiantis *nustato* **riziką**[Effect]. *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016m.balandžio 25d.>*

Model B

B	V
Effect **RISK** (Sbj.)	Agent (Compl.)

EN

1)**The following risks**[Effect] *shall be adequately captured* **by the model**[Agent] referred to in paragraph 1. < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

2)Institurions calculating their capital requirements < …> sall disclose the following information< …> for each sub-portfolio covered< …> where applicable, for the internal models for incremental default and migration risk and for correlation trading, the methodologies used and **the risks**[Effect] *measured* **through the use of an internal model** [Agent] < …>. < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

3) A CSD should develop its own estimate of the capital required against business risk under a set of stress scenarios in order to cover **the risks**[Effect] that *are not already captured* **by the methodology**[Agent] used for operational risk. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

4) This process shall particulary address illiquidity of markets in stressed market conditions, concentration risk, < …> jump-to-default risks, non-linearity of products, deep out-of-the-money positions, positions subject to the gapping of prices and **other risks**[Effect] that *may not be captured appropriately* **in the internal models**[Agent]. < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

5) mental default and migration risk (IRC) model in place to capture the default and migration risks of its trading book positions that are incremental to **the risks**[Effect] *captured by* **the value-at-risk measure**[Agent] as specified in Article 365(1). < *Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

FR

1)Lorsque des expositions de crédit à vingt-quatre heures ou de plus longue durée résultent de l'octroi de crédit intrajournalier, **les risques correspondants**[Effect] *devraient être mesurés* et traités à l›aide des méthodes [Agent] déjà énoncées dans la partie III, titre II, chapitre 2 . <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

2) <…> **le risque de concentration** [Effect] survenu *a été* ou *sera clairement identifié* **dans le cadre du processus d'évaluation**[Agent] de l'adéquation du capital interne (ICAAP) de l'établissement de crédit et s'il sera géré activement. <*ORIENTATION (UE) 2017/697 DE LA BANQUE CENTRALE EUROPÉENNE du 4 avril 2017*>

3) Un DCT devrait élaborer sa propre estimation du capital requis pour faire face au risque économique au moyen d'une série de scénarios de crise visant à couvrir **les risques**[Effect] **qui *ne sont pas déjà pris en compte* par la méthode**[Agent] utilisée pour le risque opérationnel. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

4) Cette procédure porte en particulier sur l'illiquidité des marchés en situation de tensions, **le risque de concentration, les risques de marchés à sens unique, d'événement ou de défaillance soudaine** («jump-to-default»)[Effect], la non-linéarité des produits, les positions sérieusement hors

du cours, les positions sujettes à des écarts de prix, et **tout autre risque** [Effect] **susceptible de *ne pas être pris en compte*** de façon appropriée **par les modèles internes**[Agent]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013*

LT

1) <...> (investicinės įmonės) parengia, įgyvendina ir taiko tinkamą **rizikos valdymo politiką ir procedūras**[Agent], kuriomis ***nustatoma* rizika**[Effect], susijusi su įmonės veikla, procesais ir sistemomis, ir prireikus nustatomas įmonei priimtinas rizikos lygis. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016m.balandžio 25d.*>

2) <...> pagal **institucinę užtikrinimo sistemą**[Agent] ***nustatoma* pačios sistemos rizika**[Effect] ir apie ją pranešama atskiriems sistemos nariams.<*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

3) <...> testus, leidžiančius nustatyti, kad taikant **vidaus modelį**[Agent] padarytos prielaidos yra tinkamos ir jomis **nėra *pervertinama arba nepakankamai įvertinama* rizika**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/180 2016m. spalio 24d. >

4) <...> pagal **jį** (vidaus modelį[Agent]) įvertinama **įvykių rizika**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

5) <...> taikant įstaigos vidaus modelį[Agent] atsargiai įvertinama **rizika**[Effect], susijusi su mažiau likvidžiomis pozicijomis ir riboto kainų skaidrumo pozicijomis, atsižvelgiant į realų rinkos scenarijų. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

6) Išskyrus tuos atvejus, kai **valstybės rizika**[Effect] taikant **valstybės rizikos vertinimo metodiką**[Agent] įvertinama kaip gerokai didesnė už šalies riziką, dalyvės, siūlančios subjekto riziką priskirti geresnei nei valstybinė kategorijai, savo rekomendacijas pagrindžia nuorodomis į tokius reitingus. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

7) Kompetentingos valdžios institucijos užtikrina, kad **rizika**[Effect], jog įstaigų taikomos **pripažintos kredito rizikos mažinimo priemonės**[Agent] (gali būti mažiau veiksmingos, nei tikėtasi, ***būtų vertinama*** ir kontroliuojama. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

8) <...> kylanti **koncentracijos rizika**[Effect] ***buvo arba bus aiškiai nustatyta*** kredito įstaigos vidaus kapitalo pakankamumo vertinimo procese [Agent](ICAAP) ir bus aktyviai valdoma.<*EUROPOS CENTRINIO BANKO GAIRĖS (ES) 2017/687 2017m. balandžio 4d.*>

Model C

C	V
Effect **RISK** (Sbj.)	Agent (implicit)

EN

1) Member States shall ensure that the risk management function ensures that **all material risks**[Effect] **are *identified, measured*** and properly reported. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

2) The additional own funds requirements referred to in paragraph 1 (a) shall be imposed by the competent authorities at least where, (e) **the risks**[Effect] are **likely *to be underestimated*** despite compliance with the applicable requirements of this Directive and of Regulation (EU) No 575/2013. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

3) For all countries classified through the Country Risk Classification Methodology according to Article 25 (d), **the risk of the sovereign**[Effect] ***shall be assessed*** in order to identify, on an exceptional basis, those sovereigns. <*Commission Delegated Regulation (EU) 2018/179 of 25 September 2017*>

4) <...> it shall submit a qualitative statement that specifies the actions taken regarding how **credit risks**[Effect], including **intraday credit risks**[Effect] ***are measured***, monitored and managed, with at least an annual frequency. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

5) A CSD-banking service provider shall publicly disclose a comprehensive qualitative statement that specifies how **liquidity risks**[Effect], **including intraday liquidity risks**[Effect] ***are measured***, monitored and managed on an annual basis. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

FR

1)Selon les autorités, un indicateur de sécurité d'approvisionnement a bien été défini et **un risque de défaillance**[Effect] ***a été identifié*** dans les dernières études de RTE: dans le dernier Bilan prévisionnel de RTE établi avant l'entrée en vigueur du mécanisme.<*DÉCISION (UE) 2017/503 DE LA COMMISSION du 8 novembre 2016*>

2)L'ABE suit les pratiques de surveillance et émet des orientations précisant comment ***devraient être évalués*** **les risques analogues**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2013/36 DE LA COMISSION du 26 juin 2013*>

3)Pour tous les pays classés selon la méthodologie de classification des risques pays conformément à l'article 25 d), **le risque du souverain**[Effect] ***est évalué*** afin d'identifier, à titre exceptionnel, les souverains. <*RÈGLEMENT DÉLÉGUÉ (UE) 2018/179 DE LA COMISSION du 25 septembre 2017*>

4) Les États membres veillent à ce que la fonction de gestion du risque veille à ce que tous **les risques significatifs**[Effect] ***soient détectés, mesurés*** et correctement déclarés. <*RÈGLEMENT DÉLÉGUÉ (UE) 2013/36 DE LA COMISSION du 26 juin 2013*>

LT

1)Visų šalių, kurios pagal 25 straipsnio d dalį klasifikuojamos pagal šalių rizikos klasifikavimo metodiką, **valstybės rizika**[Effect] ***vertinama*** norint išskirtinėmis aplinkybėmis nustatyti valstybių Vyriausybes arba kitas valdžios institucijas. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2018/179 2017m. rugsėjo 25d.*>

2) <...> jis bent kartą per metus pateikia kokybinį pranešimą, kuriame aprašoma, kokių veiksmų imtasi ***vertinant***, stebint ir valdant **kredito riziką**[Effect]**,** įskaitant **dienos kredito riziką**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS(ES)2017/390 2016m. lapkričio 11d.* >

3) <...> siekiant tinkamai įvertinti **riziką**[Effect], kurį kyla iš pakeitimo vertybiniais popieriais pozicijų ir prekybos <...>. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) NR.575/2013 2013m. birželio 26d.*>

4)CVPD bankinio tipo paslaugų teikėjas kasmet viešai skelbia visapusišką kokybinį pareiškimą, kuriame aprašo, kaip **likvidumo rizika**[Effect], įskaitant **dienos likvidumo riziką**[Effect], ***vertinama***, stebima ir valdoma. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS(ES)2017/392 2016m. lapkričio 11d.* >

5) <...> korporaciniai subjektai, kurių itin aukštas kreditingumo reitingas, pasižymi tokiomis nemokumo ir atsigavimo perspektyvos savybėmis, kurios rodo, kad jų **rizika**[Effect] ***gali būti vertinama*** kaip atitinkanti valstybės riziką. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2018/179 2017m. rugsėjo 25d.*>

6) Valstybės narės užtikrina, kad rizikos valdymo funkciją atliekantys asmenys užtikrintų, jog **visa reikšminga rizika**[Effect] ***būtų nustatyta, įvertinta*** ir apie ją būtų tinkamai pranešta. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

Type II: **Agent** calculates **Amount for Effect RISK**

Annotated examples

Model A

EN

1) <…> **the institution**[Agent] ***shall calculate*** **an own funds requirement**[Amount] **for foreign exchange risk**[Effect]. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

2) <…> **the institution**[Agent] shall use the method set out in Article 384 ***to calculate*** **the own funds requirement**[Amount] for **CVA risk**[Effect]. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

3) A**ny internal model**[Agent] used ***to calculate*** **capital requirements**[Amount] for **position risk, foreign exchange risk, commodities risk**[Effect] and any internal model for correlation trading shall meet all of the following requirements. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

4) <…> **CSD**[Agent] shall ***calculate*** **its capital requirements**[Amount] **for investment risk**[Effect] as the sum of the following <…>. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

FR

1) À cette fin, **les établissements**[Agent] ***calculent*** **la valeur exposée**[Amount] **au risque des éléments**[Effect] visés à l'article 166, paragraphes 8 à 10, en appliquant un facteur de conversion ou un pourcentage de 100 % au lieu des facteurs de conversion ou des pourcentages prévus par ces paragraphes. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

2) **Les établissements**[Agent] ***déterminent*** **la valeur exposée**[Amount] **au risque des contrats**[Effect] visés à l'annexe II et des dérivés de crédit, y compris ceux hors bilan, conformément à l'article 429 bis. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016*>

3) Lorsqu´**un établissement**[Agent] est autorisé à utiliser la méthode du modèle interne pour *calculer la valeur exposée*[Amount] **au risque**[Effect] de plusieurs ou de l'ensemble des opérations visées audit paragraphe, **il**[Agent] *mesure la valeur exposée*[Amount] **au risque** [Effect] de ces opérations au niveau de l'ensemble de compensation. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

4) **Les établissements**[Agent] *peuvent calculer* **leurs exigences de fonds propres**[Amount] **pour le risque de position (général et spécifique)**[Effect] lié à leurs positions sur des OPC en se fondant sur des positions hypothétiques représentants celles qu'ils devraient détenir pour reproduire la composition et la performance de l'indice ou du panier d'actions ou de titres de créance généré en externe visé< ...>. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

5)Pour les opérations visées à l'article 89 du règlement (UE) no 648/2012 et effectuées avec des dispositifs de régime de retraite au sens de l'article 2 dudit règlement, **les établissements** [Agent] *ne calculent pas* **les exigences de fonds propres**[Amount] **pour risque d'ajustement de l'évaluation de crédit**[Effect] comme le prévoit l'article 382. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

6)< ...> les **établissements**[Agent] qui *calculent* les montants d'exposition pondérés[Amount] conformément à la troisième partie, titre II, chapitre 2, les ajustements **pour risque de crédit**[Effect], bruts des effets fiscaux, jusqu'à concurrence de 1,25 % des montants d'exposition pondérés calculés conformément à la troisième partie. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

7) **Les établissements**[Agent] *calculent*, pour toutes leurs activités, **les exigences de fonds propres**[Amount] **pour risque de CVA**[Effect] conformément au présent titre pour tous les dérivés < ...>. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

LT

1) **Vidaus modelis**[Agent], taikomas *apskaičiuojant* **kapitalo poreikį**[Amount] **pozicijų rizikai**[Effect]**, užsienio valiutos kurso rizikai**[Effect]**, biržos prekių kainos rizikai**[Effect] padengti, ir vidaus modelis, taikomas koreliacinei prekybai, turi tenkinti visus šiuos reikalavimus. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA (ES) NR.575/2013 2013m. birželio 26d.*>

2) Bet kurią iš toliau išvardytų sąlygų atitinkantis **CVPD**[Agent] *apskaičiuoja* **su operacine, teisine ir saugojimo rizika**[Effect] **susijusius kapitalo reikalavimus**[Amount] laikydamasis bazinio indikatoriaus metodo, nurodyto Reglamento (ES) Nr. 575/2013 315–316 straipsniuose, nuostatus < ...>. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.* >

3) < ...> įstaigos[Agent] turi turėti aiškiai suformuluotus kriterijus garantų, pripažįstamų *skaičiuojant pagal riziką*[Effect] **įvertintas pozicijų sumas**[Amount], rūšims nustatyti < ...>. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA (ES) NR.575/2013 2013m. birželio 26d.*>

4) Jeigu įvykdomos šiame skyriuje nustatytos sąlygos, kompetentinga institucija leidžia įstaigoms[Agent] *apskaičiuoti* **savo pagal riziką**[Effect] **įvertintų pozicijų sumas**[Amount] taikant vidaus reitingais pagrįstą metodą (toliau – IRB metodas) <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA (ES) NR.575/2013 2013m. birželio 26d.*>

5)Kai įstaigos[Agent] *apskaičiuoja* **pagal riziką**[Effect] **įvertintų pozicijų sumas**[Amount] ir tikėtinų nuostolių sumas pagal IRB metodą, kad garantas būtų pripažintas reikalavimus atitinkančiu netiesioginio kredito užtikrinimo teikėju, jam turi būti nustatytas įstaigos vidaus reitingas pagal 3 skyriaus 6 skirsnio nuostatas. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA (ES) NR.575/2013 2013m. birželio 26d.*>

Model B

B	V
	Agent (implicit)　　　Effect **RISK** (Obj.)
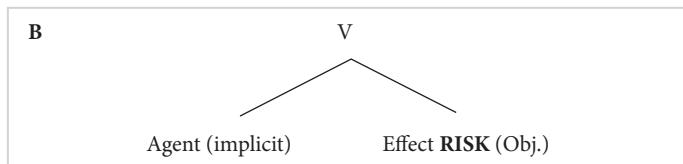
EN –

FR –

LT

1) Įstaigos taip pat turi deramai atsižvelgti į modelio rizikos, būdingos vertinant ir ***apskaičiuojant kainų riziką***[Effect] <...>. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA (ES) NR.575/2013 2013m. birželio 26d.*>

2) <...> Komisijos deleguotuoju reglamentu (ES) Nr 526(2014), kuriuo papildomos Reglamento (ES) Nr 575/2013 nuostatos susijusios su pakaitinio skirtumo ir riboto mažesnių portfelių skaičiaus nustatymo ***apskaičiuojant kredito vertinimo koregavimo riziką*** [Effect] techniniais reguliavimo standartais. <*KOMISIJOS SPRENDIMAS (ES) 2017/125, 2017m. sausio 24d.*>

196

Appendix 6.

CHANGE and CONTROL_RISK frame

Argument structure

Type I: Agent reduces and controls **Effect RISK**

Annotated examples
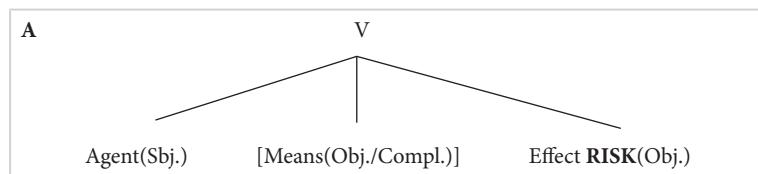
Model A

A	V	
Agent(Sbj.)	[Means(Obj./Compl.)]	Effect **RISK**(Obj.)

EN

1) **The ABCP programme**[Agent] *shall mitigate* **risk**[Effect] relating to the performance of the seller and the servicer through various methods. <*Regulation (EU) № 575/2013 of the European Parliament and of the Council of 26 June 2013*>

2) The same Regulation requires **the CSD-banking service provider**[Agent] *to mitigate* **intraday risks with highly liquid collateral with minimal credit and market risk**[Effect]. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

3) Contract and financing negotiated in convertible and available local, other than hard, **currencies and financed**[Agent] locally that *eliminates or mitigates* **the transfer risk**[Effect]. <*Commission Delegated Regulation (EU) 2018/179 of 25 September 2017*>

4) Provisions set out in Directive 2013/36/EU of the European Parliament <…> are the appropriate benchmark for the purpose of establishing **capital requirements**[Agent] **to** *cover* **credit risk, counterparty credit risk and market risks**[Effect] that may arise from the investments of a CSD. <*Commission Delegated Regulation (EU) 2017/390 of 11November 2016*>

5) <…> **other variables**[Agent] that the designated authority considers relevant for *addressing* **cyclical systemic risk**[Effect] <…>. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

6) **Institutions**[Agent] referred to in the first subparagraph shall include the following in their strategies to *address* **concentration risk**[Effect]. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

7) If **the institution**[Agent] *hedges* **the price risk**[Effect] associated with an asset, it shall take into account the cash flow resulting from the potential close-out. <*Regulation (EU)Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

8) <...> **the policies**[Agent] for ***hedging and mitigating* risk**[Effect], and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants. <*Regulation (EU)Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

9) For the purposes of ***monitoring* intraday credit risk**[Effect], **a CSD- banking service provider**[Agent] shall, in particular, monitor on an ongoing basis, through an automatic reporting system <…>. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

10) <…> the Commission expressed doubts on the capacity of **Alki LP**[Agent] to bear and ***control any business risk***[Effect]. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

11) <…> **a CSD- banking service provider**[Agent] ***shall monitor* the liquidity risk** [Effect] created by the overnight credit extended against the maximum liquidity exposure created by the overnight credit extended, historically recorded. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

12) <…> the justification for why **the O-SII buffer**[Agent] is considered likely to be effective and proportionate ***to mitigate* the risk**[Effect] <…>. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

13) In any event, it is **a standard business arrangement**[Agent] that ***does not reduce* the risk of SMBV**[Effect] compared to normal market conditions. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

14) <…> the underlying exposures do not include transferable financial instruments or derivatives, except financial instruments issued by the SSPE itself or other parties within **the securitisation structure and derivatives**[Agent] used ***to hedge* currency risk and interest rate risk**[Effect] <…>. <*Commission Delegated Regulation (EU) 2015/61 of 10 October 2014*>

15) In view of these reactions to the Opening Decision by market operators, the French authorities expressed their willingness to improve **the mechanism**[Agent] ***to minimise* any risk of abuse of market power**[Effect]. <*Commission Decision (EU) 2017/503 of 8 November 2016*>

16) The primary purpose of **the legal framework**[Agent] for credit institutions should be to ensure the operation of vital services to the real economy while ***limiting* the risk of moral hazard**[Effect]. <*Regulation (EU)Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

17) **This remedy**[Agent] therefore ***prevents* the risk of capacity guarantees being withheld** [Effect] by the largest capacity operators for financial reasons, encourages market transparency, improves the liquidity of the organised market and facilitates market surveillance by the regulator. <*Commission Decision (EU) 2017/503 of 8 November 2016*>

18) <…>**the operation and legal arrangements of the DVP process**[Agent] and, in particular, **the procedures** used ***to address* the credit risk**[Effect] resulting from the settlement of the cash leg of securities transactions<…>. <*Commission Delegated Regulation (EU) 2017/390 of 11 November 2016*>

19) <…> whether **the requirements**[Agent] laid out in Articles 76 and 87 of Directive 2013/36/EU in accordance with Articles 73 and 97 of Directive 2013/36/EU for ***addressing* the risk of excessive leverage**[Effect] are sufficient to ensure sound management of this risk by institutions and, if not, which further enhancements are needed in order to ensure these objectives <…>. <*Regulation (EU)Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

20) <…> where concluding OTC financial derivatives transactions or repurchase transactions or securities borrowing or lending is allowed, **a policy**[Agent] ***to limit* counterparty risk**[Effect] arising from these transactions<…>. <*Regulation (EU)Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

21) <…> a lessor shall disclose its risks management strategy for the rights it retains in underlying assets, including **any means**[Means] by which **the lessor**[Agent] *reduces* **that risk** [Effect]. <*Commission Regulation (EU) 2017/1986 of 31 October 2017*>

22) **An institution** [Agent] shall be able to demonstrate to competent authorities that it has **adequate risk management processes**[Means] *to control* **those risks**[Effect] to which it may be exposed as a result of carrying out credit risk mitigation practices. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

23)**Investment firms shall** [Agent] establish, implement and maintain adequate policies and procedures designed to detect any risk of failure by the firm to comply with its obligations under Directive 2014/65/EU, as well as the associated risks, and put in place **adequate measures and procedures**[Means] designed *to minimise* **such risk**[Effect]. <*Commission Delegated Regulation (EU) 2017/656 of 25 April 2016*>

24) Point (d) of Article 59(3) of Regulation (EU) No 909/2014 requires that **a CSD-banking service provider**[Agent] accepts **highly liquid collateral with minimal credit and market risk**[Means] *to manage* **its corresponding credit risk**[Effect]. <*Commission Delegated Regulation (EU) 2017/390 of 11November2016*>

25) **An institution** [Agent] shall *monitor* **General Wrong Way risk**[Effect] **by product, by region, by industry, or by other categories**[Means] that are relevant to the business. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

26) That limit shall be determined by **the institution**[Agent] in accordance **with the policies and procedures**[Means] referred to in Article 81 of Directive 2013/36/EU, *to address and control* **concentration risk**[Effect]. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

27) However, in situations where there are **no other means**[Means] available to **the trader**[Agent] *to reduce* **the risk of default by customers**[Effect], including in particular difficulties related to assessing of the creditworthiness of the customer, traders should be allowed to withhold the delivery of the goods or the provision of the service until they have received confirmation that the payment transaction has been properly initiated. <*Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018*>

28) **Institutions**[Agent] should also be required to considerably improve **measurement and management of counterparty credit risk**[Means] **by better** *addressing* **wrong-way risk**[Effect], highly leveraged counterparties and collateral, accompanied by the corresponding enhancements in the areas of back-testing and stress testing. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

29) For the purposes of point (a) of Article 17(2), **a CSD-banking service provider**[Agent] shall design and implement **policies and procedures**[Means] that: <…> b) *monitor* **intraday and overnight credit risk**[Effect] in accordance with Sub-section 2; c) *manage* **intraday and overnight credit risk**[Effect] in accordance with Sub-section 3. <*Commission Delegated Regulation (EU) 2017/390 of 11November2016*>

30) **The CSD-banking service provider**[Agent] shall ensure, at least **through rigorous due diligence and stress testing**[Means] that each liquidity provider of its minimum required qualifying liquid resources established in accordance with Article 34, has sufficient information *to understand and manage* **its associated liquidity risk**[Effect], and is able to comply with the conditions of a prearranged and highly reliable funding arrangement set out in points (d) and (e) of Article 59(4) of Regulation (EU) No 909/2014. <*Commission Delegated Regulation (EU) 2017/390 of 11November2016*>

31) **The measures**[Means] put in place by **the applicant CSD**[Agent] *to mitigate* the risk of over-**reliance**[Effect] on the responsibilities entrusted to any individual person <…>. <*Commission Delegated Regulation (EU) 2017/392 of 11November2016*>

32) Notwithstanding paragraph 14, where **the systemic risk buffer** [Means] applies to all exposures located in **the Member State** [Agent] that sets that buffer *to address* **the macroprudential risk of that Member State**[Effect], but does not apply to exposures outside the Member State, that systemic risk buffer shall be cumulative with the O-SII or G-SII buffer that is applied in accordance with this Article. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

33) Member States should be able to require certain **institutions**[Agent] to hold, in addition to a capital conservation buffer and a countercyclical capital buffer, **a systemic risk buffer**[Means] in order *to prevent and mitigate* **long-term non-cyclical systemic or macroprudential risks** [Effect] not covered by Regulation (EU) No 575/2013, where there is a risk of disruption in the financial system with the potential to have serious negative consequences for the financial system and the real economy in a specific Member State. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

34) **Institutions**[Agent] *should address and control* all concentration risks[Effect] **by means of written policies and procedures**[Means]. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

35) **A CSD** [Agent] may only contract **insurance**[Means] *to mitigate* the operational risks[Effect] referred to in this Chapter where the measures referred to in this Chapter do not fully mitigate operational risks. <*Commission Delegated Regulation (EU) 2017/392 of 11November2016*>

FR

1) Certaines précisent que **la solution de rechange**[Agent] aura des répercussions plus rapides sur la concurrence, **atténuera le risque**[Effect] lié à l'exécution et permettra de renforcer plusieurs entités challenger (et non pas une comme dans le cas de la cession de Rainbow).<*DÉCISION (UE) 2018/119 DE LA COMMISSION du 18 septembre 2017*>

2) **Le capital interne**[Agent] doit être adéquat pour *couvrir* **les risques de marché significatifs** [Effect] non soumis à des exigences de fonds propres. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

3) < … > **il (le DCT-prestataire de services bancaires)**[Agent] *effectue un suivi* **du risque de liquidité**[Effect] engendré par le crédit à vingt-quatre heures par rapport à l'exposition de liquidité la plus élevée jamais enregistrée engendrée par le crédit à vingt-quatre heures. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

4)<…> les raisons pour lesquelles **le coussin** [Agent] pour les autres EIS est susceptible d'être efficace et proportionné en vue d'*atténuer* **le risque** [Effect] <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

5)Par ailleurs, **les exigences de fonds propres**[Agent] devraient comprendre un élément adapté aux situations de tensions afin qu'elles soient renforcées en cas de détérioration du marché et afin de *réduire* **les risques de procyclicité**[Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

6) < …> les expositions sous-jacentes n'incluent pas d'instruments financiers trasférables ou dérivés, à l'exception des instruments financiers émis par l'entité de titrisation elle-même, ou par d'autres parties au sein de la structure de titrisation, et **des produits dérivés**[Agent] utilisés pour *couvrir* **le risque de change et le risque de taux d'intérêt**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2015/61 DE LA COMISSION du 10 octobre 2014*>

7) Quoi qu'il en soit, **cet accord**[Agent] suit une pratique commerciale normale qui **ne réduit pas le risque**[Effect]couru par SMBV par rapport aux conditions normales du marché. <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015* >

8) Compte tenu de ces réactions par les acteurs de marché à la décision d'ouverture, les autorités françaises ont exprimé leur volonté d'améliorer **le dispositif**[Agent] afin de *réduire au minimum* tout risque d'abus de pouvoir de marché[Effect]. <*DÉCISION (UE) 2017/503 DE LA COMMISSION du 8 novembre 2016* >

9) Le premier objectif **du cadre juridique**[Agent] relatif aux établissements de crédit devrait être d'assurer le fonctionnement des services indispensables à l'économie réelle tout **en limitant le risque d'aléa moral**[Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

10) **Alki LP**[Agent] n'est donc pas en mesure de *maîtriser* **le risque d'entreprise**[Effect]avec la même efficacité que des salariés ou cadres directs de SMBV, de sorte que le transfert contractuel de ces risques à Alki LP ne pourrait, au plus, limiter ce risque que partiellement. <*DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015* >

11) **Ce remède**[Agent] (**le renforcement des enchères organisées**) permet ainsi de *prévenir* **le risque d'une «rétention économique» des garanties de capacité**[Effect] par les plus grands exploitants de capacité, de favoriser la transparence sur le marché, d'accroître la liquidité du marché organisé et de faciliter la surveillance du marché par le régulateur. <*DÉCISION (UE) 2017/503 DE LA COMMISSION du 8 novembre 2016*

12) <...> l'OPC est autorisé à réaliser des opérations sur dérivés de gré à gré, des opérations de pension ou des opérations d'emprunt ou de prêt de titres, **les mesures**[Agent] mises en place pour *limiter* **le risque de contrepartie**[Effect] lié à ces opérations. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

13) <...> **le fonctionnement et les arrangements juridiques du mécanisme de DVP**[Agent] et, en particulier, **les procédures**[Agent] utilisées pour *remédier* **au risque de crédit**[Effect] résultant du règlement du volet «espèces» des transactions sur titres. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

14) Pour les transactions à distance, telles que les paiements en ligne, **les exigences de sécurité**[Agent] sont encore plus strictes, puisqu'elles imposent un lien dynamique vers le montant de l'opération et le compte du bénéficiaire, de façon à renforcer la protection de l'utilisateur *en réduisant au minimum* **les risques**[Effect] en cas d'erreurs ou d'attaques frauduleuses. <*RÈGLEMENT DÉLÉGUÉ (UE) 2018/302 DU PARLEMENT EUROPÉEN ET DU CONSEIL du 28 février 2018*>

15) < ...> **il (un instrument financier)**[Agent] ne comprend aucune clause, condition ou déclencheur pouvant *modifier* fondamentalement la nature ou **le risque de l'investissement** [Effect] ou son profil de rémunération, tel que des investissements comprenant un droit de conversion en un autre investissement. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016*>

16) Afin d'évaluer si **la nature spécifique de l'exposition de l'organ régional ou central** [Agent] ou de la relation entre l'établissement de crédit et l'organe régional ou central élimine ou réduit **le risque de l'exposition**[Effect], comme le prévoit l'article 400 < ...>. <*ORIENTATION (UE) 2017/697 DE LA BANQUE CENTRALE EUROPÉENNE du 4 avril 2017*>

17) Lorsqu'elles (les autorités compétentes) apprécient l'adéquation du ratio de levier des établissements et **des dispositions, stratégies, processus et mécanismes**[Mean] que ceux-ci **(des établissements)**[Agent] mettent en œuvre pour *gérer* **le risque de levier excessif**[Effect]. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

18) <... > si le cadre pour le ratio de levier prévu par le présent règlement et les articles 87 et 98 de la directive 2013/36/UE constitue **l'outil adéquat**[Agent] pour *supprimer* **le risque de levier excessif**[Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

19) <... > si **les exigences prévues**[Agent] aux articles 76 et 87 de la directive 2013/36/UE conformément aux articles 73 et 97 de la directive 2013/36/UE visant à *limiter* **le risque de levier excessif**[Effect] sont suffisantes pour garantir une saine gestion de ce risque. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

20) Au cours de la phase initiale de «crise de liquidité» de la crise financière qui s'est déclarée en 2007, de nombreux établissements de crédit, bien que dotés d'un niveau de fonds propres adéquat, se sont trouvés confrontés à d'importantes difficultés parce **qu'ils** (de nombreux établissements de crédit)[Agent] *n'avaient pas géré* avec prudence **leur risque de liquidité**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2015/61 DE LA COMISSION du 10 octobre 2014*>

21) S'il est satisfait aux critères ci-après sous réserve de la prise en compte des facteurs additionnels mentionnés, **cette technique**[Agent] peut *réduire* ou éliminer **le risque de non-transfert**[Effect], principalement dans les catégories de pays à haut risque. <*RÈGLEMENT DÉLÉGUÉ (UE) 2018/179 DE LA COMISSION du 25 septembre 2017*>

22) **Contrat et financement**[Agent] négociés en monnaies locales convertibles et disponibles, autres que les monnaies fortes, et financés localement, ce qui élimine ou atténue **le risque de non-transfert**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2018/179 DE LA COMISSION du 25 septembre 2017*>

23) Si **l'établissement**[Agent] *couvre* **le risque de prix**[Effect]associé à un actif, il tient compte du flux de trésorerie résultant du dénouement éventuel de la couverture. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

24) <...> **une pertie des actifs liquides** [Agent] <...> est périodiquement <...> liquidé par une vente ou par de contrats de mise en pension simple sur un marché de mise en pension approuvé, afin de *minimiser* **le risque de signal négatif** [Effect] en période de tensions. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

25) **Les établissements**[Agent] qui évaluent au prix du marché et *gèrent* **le risque de taux d'intérêt des instruments dérivés**[Effect] visés aux articles 328 à 330 sur la base des flux financiers actualisés peuvent, moyennant l'autorisation des autorités compétentes, utiliser des modèles de sensibilité pour calculer les positions visées par ces articles et peuvent les utiliser pour toute obligation qui est amortie sur <...>. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

26) **Les DCT**[Agent] *devraient gérer* **leur risque**[Effect] en interne. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

27) Outre l'outil que constitue le coussin pour le risque systémique intégré dans la directive 2013/36/UE, lorsque le risque macroprudentiel ou systémique concerne un État membre, les autorités compétentes ou désignées de l'État membre concerné devraient avoir la possibilité de réagir à ces risques par certaines mesures macroprudentielles nationales spécifiques lorsque **cette méthode**[Agent] est jugée plus efficace **pour** *faire face* **auxdits risques**[Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

28) **Les établissements**[Agent] *suivent et contrôlent* leurs **grands risques**[Effect] conformément à la présente partie. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

29) **L'établissement**[Agent] *suit* **le risque général de corrélation**[Effect] **par produit, par région, par secteur d'activité ou selon d'autres critères adaptés à son activité**[Means]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

30) **Les DCT**[Agent] ne devraient conclure **des contrats dérivés**[Means] que s'ils sont obligés **de couvrir un risque**[Effect] qu'ils ne peuvent pas *réduire* d'une autre manière. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

31) **Les Participants**[Agent] doivent percevoir, en plus **des taux d'intérêt, des primes** [Means] destinées à *couvrir le risque de non-remboursement des crédits*[Effect] à l'exportation. Les taux de primes perçus par les Participants doivent être calculés en fonction du risque, converger et ne pas être insuffisants pour couvrir les frais d›exploitation et les pertes à long terme.

<*RÈGLEMENT DÉLÉGUÉ (UE) 2018/179 DE LA COMISSION du 25 septembre 2017*>

32) Cette limite est déterminée par **l'établissement**[Agent], conformément aux **politiques et procédures**[Means], visées à l'article 81 de la directive 2013/36/UE, qu'il a mises en place pour *traiter et contrôler* **le risque de concentration**[Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

33)Les établissements qui utilisent l'approche prévue aux articles 321 à 324 pour le calcul de leurs exigences de fonds propres pour risque opérationnel publient une description de l'usage qu'**ils (les établissements)**[Agent] font de **l'assurance et des autres mécanismes de transfert de risque**[Means] aux fins d'*atténuer* ce risque[Effect]. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

34) Il devrait également être exigé **des établissements**[Agent] qu'ils améliorent fortement la mesure et la gestion du risque de crédit de contrepartie par **des mesures**[Means] permettant de **mieux faire face au risque de corrélation**[Effect], aux contreparties à fort effet de levier et aux sûretés, accompagnées d'améliorations adéquates dans les domaines des contrôles a posteriori et des tests de résistance. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

35) **Les établissements**[Agent] démontrent aux autorités compétentes qu'ils disposent de **procédures adéquates de gestion des risques** [Means] leur permettant de *contrôler* **les risques** [Effect] auxquels ils peuvent s'exposer du fait de l'emploi de techniques d'atténuation du risque de crédit. <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013* >

36) En vertu de l'article 59, paragraphe 3, point d), du règlement (UE) no 909/2014, **un DCT-prestataire de services bancaires** [Agent] est tenu d'accepter **des garanties hautement liquides** [Means] présentant des risques de crédit et de marché minimaux pour *gérer* **le risque de crédit correspondant**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

37) Toutefois, dans les situations où **le professionnel**[Agent] ne dispose d'aucun autre **moyen** [Means] pour *réduire* **le risque de défaillance du client**[Effect], notamment en cas de difficultés pour évaluer sa solvabilité. <*RÈGLEMENT DÉLÉGUÉ (UE) 2018/302 DU PARLEMENT EUROPÉEN ET DU CONSEIL du 28 février 2018*>

38) Aux fins de l'article 17, paragraphe 2, point a), **le DCT-prestataire de services bancaires**[Agent] conçoit et met en oeuvre **des politiques et procédures**[Means] permettant de: <...> b) *suivre* **le risque de liquidité intrajournalier et à vingt-quatre heures**[Effect], conformément à la sous-section 2; c) *gérer* **le risque de liquidité**[Effect], conformément à la sous-section 3. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

39) **Le DCT-prestataire de services bancaires**[Agent] veille, au moins **par l'exercice de la diligence requise et la conduite de tests de résistance rigoureux**[Means], à ce que chacun des fournisseurs de liquidité qui lui procure ses ressources liquides exigibles minimales établies conformément à l'article 34 dispose d'informations suffisantes pour *comprendre et gérer* **le risque de liquidité connexe**[Effect], et soit en mesure de respecter les conditions applicables à un dispositif de financement prédéfini et très fiable énoncées à l'article 59 <... >. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/390 DE LA COMISSION du 11 novembre 2016*>

40) Lorsqu'il recourt à la procédure visée à l'article 345 du règlement (UE) no 575/2013, **l'établissement**[Agent] s'assure qu'il détient **un capital interne suffisant**[Means] pour *couvrir le risque de pertes*[Effect] qui existe entre le moment de l'engagement initial et le premier jour ouvrable qui suit. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

41) **Les mesures mises**[Means] en place par **le DCT demandeur**[Agent] pour **atténuer le risque**[Effect] de se reposer de manière excessive sur des responsabilités confiées à une personne particulière. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

42) Lorsque les contrôles internes sont insuffisants ou que l'élimination de certains risques n'est pas raisonnablement envisageable, **un DCT**[Agent] devrait pouvoir prendre **une assurance**[Means] pour **couvrir financièrement ces risques**[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

43) **Les entreprises d'investissement** [Agent] établissent, mettent en oeuvre et gardent opérationnelles des politiques et des procédures conçues pour détecter tout risque de défaillance de l'entreprise afin de se conformer à ses obligations au titre de la directive 2014/65/UE, ainsi que les risques associés, et mettent en place **des mesures et des procédures adéquates**[Means] conçues pour *minimiser ce risque*[Effect] et permettre aux autorités compétentes d'exercer effectivement les pouvoirs que leur confère la directive. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/565 DE LA COMISSION du 25 avril 2016*>

44) Nonobstant le paragraphe 4, lorsque le coussin pour le risque systémique s'applique à toutes les expositions situées dans **l'État membre**[Agent] qui fixe **ce coussin** [Means] pour *faire face* **au risque macroprudentiel**[Effect] dudit État membre <...>. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

45) Les États membres devraient être en mesure d'exiger de **certains établissements**[Agent] qu'ils détiennent, en sus d'un coussin de conservation des fonds propres et d'un coussin de fonds propres contracyclique, **un coussin**[Means] pour le risque systémique afin *de prévenir et d'atténuer* **le risque macroprudentiel ou systémique non cyclique à long terme**[Effect] qui n'est pas couvert par le règlement (UE) no 575/2013, lorsqu'un risque de perturbation du système financier est susceptible d'avoir de graves répercussions négatives sur le système financier et l'économie réelle dans un État membre particulier. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

46) Il est néamoins nécessaire de permettre **l'établissement de lien**[Agent] avec des DCT de pays tiers, même lorsque des comptes ségrégués individuellement ne sont pas disponible chez ce DCT de pays tiers, à condition que les actifs du DCT demandeur soient en tout état de cause protégés de façon appropriée et que les autorités compétentes soient informées des risques résultant de l'absence de comptes ségrégués individuellement et **des mesures adéquates**[Means] prises pour *atténuer ces risques*[Effect]. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

47) **Les établissements**[Agent] devraient *traiter et contrôler* **tous les risques de concentration**[Effect] **au moyen de politiques et de procédures écrites**[Means]. <*DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013*>

48) Ces exigences de capital garantissent qu'**un DCT**[Agent] est doté en permanence **d'un capital suffisant**[Means] pour pouvoir **faire face aux risques**[Effect] auxquels il est exposé < ...>. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

1) **Garantas grynaisiais pinigais** [Agent] labai *sumažina* **draustų kredito grąžinimo sumų nemokėjimo riziką**[Effect].<*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2018/179 2017m. rugsėjo 25d.*>

2) Vertė pagal KRR 418 straipsnį-perleidžiamasis turtas, kurį sudaro reikalavimai valstybės narės centrinei valdžiai (arba kuriuos ji užtikrina), regionui, turinčiam fiskalinę autonomiją nustatyti ir rinkti mokesčius, arba trečiosios valstybės reikalavimai, išleisti centrinės arba regioninės valdžios nacionaline valiuta, jeigu įstaigai toje valstybėje narėje arba trečiojoje valstybėje kyla **likvidumo rizika**[Effect]**, kurią ji (įstaiga)**[Agent] *padengia* turėdama tą likvidųjį turtą <...>. <*EUROPOS CENTRINIO BANKO GAIRĖS (ES) 2017/148 2016m. gruodžio 16d.*>

3) <...> **modelis**[Agent] *turi tiksliai padengti* **visą reikšmingą kainos riziką**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

4) <...> **nuosavų lėšų reikalavimas**[Agent] **kredito rizikai ir rinkos rizikai**[Effect] *padengti* turėtų būti grindžiamas kreditų reitingais tik tokia apimtimi, kokia yra būtina. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

5) <...> šiame reglamente ir direktyvoje 2013/36/ES numatyta **įvairių priemonių** [Agent], kuriomis *būtų užkirstas kelias* **makrolygio rizikos ribojimo rizikai bei sisteminei rizikai** [Effect] **ir tokia rizika**[Effect] *būtų sumažinta*. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

6) <...> **nuomotojas**[Agent] patikimai *valdo* **riziką**[Effect], susijusią su nuomojamo turto panaudojimu, jo vieta, amžiumi ir planuojama naudojimo trukme, įskaitant deramą užtikrinimo priemonės vertės stebėseną <...>. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

7) <...> Komisija išreiškė abejones dėl **„Alki LP"**[Agent] pajėgumo prisiimti ir *valdyti* **bet kokią verslo riziką**[Effect]. Kai **bendrovė**[Agent] prisiima riziką, ji turėtų galėti, iš vienos pusės, *valdyti* **riziką**[Effect] (166), o iš kitos pusės – finansiškai prisiimti tokią riziką. <*KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.*>

8) Vidaus modelis turi derėti su įstaigos **vidaus rizikos valdymo metodika**[Agent] , taikoma nustatant, vertinant ir *valdant* **prekybos riziką**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

9) Sąsają įdiegę **CVPD**[Agent] turėtų vertinti**, *stebėti ir valdyti* **tarpusavio kredito ir likvidumo riziką**[Effect]. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.*>

10) **CVPD bankinio tipo paslaugų teikėjas**[Agent] *stebi* **savo likvidumo riziką**[Effect], atsiradusią suteikus vienos nakties kreditą, lygindamas ją su didžiausia kada nors užfiksuota likvidumo pozicija, atsiradusia suteikus vienos nakties kreditą. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.*>

11) **Įstaiga**[Agent] *stebi* **atitinkamą riziką**[Effect] ir taiko procedūras, pagal kurias gali koreguoti savo faktinės EPE skaičiavimus, jeigu tokia rizika taptų svarbesnė. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

12) <...> **teminės analizės**[Agent], padedančios *stebėti* **specifinę riziką**[Effect]**, kuri gali realizuotis. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA 2013/36/ES 2013m. birželio 26d.*>

13) <...> kad **kompetentinga institucija**[Agent] *galėtų stebėti ir įvertinti* **riziką**[Effect]**, kuri iškyla ar gali iškilti CVPD, taip pat sklandžiam vertybinių popierių rinkų veikimui, ji turėtų turėti galimybę paprašyti papildomos informacijos apie CVPD riziką ir veiklą. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.*>

14) **Rizikos komiteto nariai**[Agent] turi turėti tinkamų žinių, įgūdžių ir kompetencijos, kad visiškai suprastų ir **kontroliuotų** įstaigos rizikos strategiją ir **įstaigai priimtiną riziką**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS DEREKTYVA 2013/36/ES 2013m. birželio 26d.*>

15) Įstaiga turi gebėti įrodyti kompetentingoms institucijoms, kad ji turi tinkamus **rizikos valdymo procesus**[Agent], leidžiančius **kontroliuoti riziką**[Effect]**,** kurią įstaiga gali patirti taikydama kredito rizikos mažinimo praktiką. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

16) <...> **įstaigos** [Agent] *nuolat stebi ir kontroliuoja* **riziką**[Effect], susijusią su kredito užtikrinimo nutraukimu <...> . <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

17) < ...> **veiklą reglamentuojančios teisinės sistemos**[Agent] uždavinys turėtų būti užtikrinti svarbiausių paslaugų realiajai ekonomikai teikimą, sykiu *ribojant* neatsakingo elgesio **riziką**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

19) **Taip šiuo taisomuoju veiksmu**[Agent] **galima** *užkirsti kelią* **rizikai**[Effect], kad didžiausi pajėgumų operatoriai vykdys pajėgumų garantijų ekonominį sulaikymą, skatinti rinkos skaidrumą, didinti reguliuojamos rinkos likvidumą ir palengvinti reguliuotojo vykdomą rinkos priežiūrą.<*KOMISIJOS SPRENDIMAS (ES) 2017/503 2016m. lapkričio 8d.*>

20)**CVPD**[Agent] turėtų sudaryti išvestinių **finansinių priemonių sutartis**[Means] tik tuomet, jei jie turi apsidrausti nuo **rizikos**[Effect], **kurios** *negali kitaip sumažinti*. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.*>

21)Įstaiga[Agent] **bendrąją klaidingų sprendimų riziką**[Effect] *stebi* **pagal produktus, regionus, sektorius arba kitas su verslu susijusias kategorijas**[Means]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

22)**Įstaigos**[Agent], kurios nuosavų lėšų reikalavimą operacinei rizikai padengti skaičiuoja pagal 321–324 straipsniuose nurodytus pažangiuosius vertinimo metodus, atskleidžia **draudimo ir kitų rizikos perleidimo mechanizmų**[Means], naudojamų **šiai rizikai**[Effect] **mažinti**, aprašymą.

<*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

23)Taip pat turėtų būti reikalaujama, kad **įstaigos**[Agent] iš esmės sustiprintų **sandorio šalies kredito rizikos vertinimą ir valdymą**[Means], **geriau šalindamos riziką, susijusią su klaidingais sprendimais**[Effect], aukštą sverto lygį turinčiomis sandorio šalimis ir užtikrinimo priemonėmis, taip pat atitinkamais kredito vertės padidinimais grįžtamojo patikrinimo ir testavimo nepalankiausiomis sąlygomis srityse. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

24)Įstaiga[Agent] turi gebėti įrodyti kompetentingoms institucijoms, kad ji turi tinkamus **rizikos valdymo procesus**[Means], **leidžiančius** *kontroliuoti* **riziką**[Effect], kurią įstaiga gali patirti taikydama kredito rizikos mažinimo praktiką. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

25)(18) Reglamento (ES) Nr. 909/2014 59 straipsnio 3 dalies d punkte reikalaujama, kad atitinkamai **kredito rizikai**[Effect] *valdyti* **CVPD bankinio tipo paslaugų teikėjas**[Agent] priimtų labai **likvidžius įkaitus**[Means], kurių kredito ir rinkos rizika yra minimali. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.*>

26)17 straipsnio 2 dalies a punkto tikslais **CVPD bankinio tipo paslaugų teikėjas**[Agent] sukuria ir įgyvendina **politiką ir procedūras**[Means], siekdamas: < …> b) *stebėti* dienos ir vienos nakties **kredito riziką**[Effect] pagal 2 poskirsnį; c) *valdyti* dienos ir vienos nakties kredito **riziką**[Effect] pagal 3 poskirsnį.<*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.*>

27)Taikydamos Reglamento (ES) Nr. 575/2013 345 straipsnyje numatytą tvarką, **įstaigos**[Agent] užtikrina, kad turėtų pakankamai **vidaus kapitalo**[Means], kad *padengtų* **nuostolių riziką**[Effect], egzistuojančią laikotarpiu nuo pradinio įsipareigojimo dienos iki kitos darbo dienos. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

28) **Paraišką teikiančio CVPD**[Agent] **nustatytos priemonės**[Means] **rizikai**[Effect], atsirandančiai dėl per didelio pasikliovimo pavieniam asmeniui patikėta atsakomybe, *mažinti* < …>. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/390 2016m. lapkričio 11d.*>

29) Kai vidaus kontrolės priemonių nepakanka arba kai panaikinti tam tikrą riziką nėra pagrįstai įmanoma, **CVPD**[Agent] turėtų galėti *finansiškai padengti* **tą riziką**[Effect] **per draudimą**[Means]. <…>. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.*>

30) **Investicinės įmonės**[Agent] parengia, įgyvendina ir taiko tinkamą politiką ir procedūras, kurių tikslas – nustatyti bet kokią riziką, kad įmonė neįvykdys pareigų pagal Direktyvą 2014/65/ES, taip pat susijusią riziką, ir taiko **tinkamas priemones bei procedūras**[Means], skirtas **tokiai rizikai**[Effect] kuo labiau *sumažinti* ir suteikti galimybę kompetentingoms institucijoms veiksmingai vykdyti savo įgaliojimus pagal tą direktyvą. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/565 2016m. balandžio 25d.*>

31) <…> valstybės narės turėtų turėti galimybę reikalauti, kad, be kapitalo apsaugos rezervo ir anticiklinio rezervo, tam tikros įstaigos[Agent] turėtų **sisteminės rizikos rezervą**[Means], **siekiant** *užkirsti kelią* **ilgalaikei neciklinei sisteminei ar makrolygio rizikai**[Effect], kuriai Reglamentas (ES) Nr. 575/2013 netaikomas, ir tokią riziką sumažinti, kai yra finansų sistemos sutrikimo rizika, kuri gali turėti rimtų neigiamų pasekmių finansų sistemai ir realiajai ekonomikai konkrečioje valstybėje narėje. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

32) <…> įstaigos[Agent] turėtų spręsti su visomis koncentracijos rizikos rūšimis susijusius klausimus ir *kontroliuoti* **visą tokią riziką** [Effect] remdamosi **rašytine politika ir procedūromis**[Means]. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

33) **CVPD**[Agent] gali sudaryti **draudimo sutartį**[Means] šiame skyriuje nurodytai **operacinei rizikai**[Effect] *sumažinti* tik kai operacinė rizika nėra visiškai sumažinta šiame skyriuje nurodytomis priemonėmis. <*KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.*>

Model B

B	V	
Effect **RISK** (Sbj.)	[Means (Compl.)]	Agent (implicit)

EN
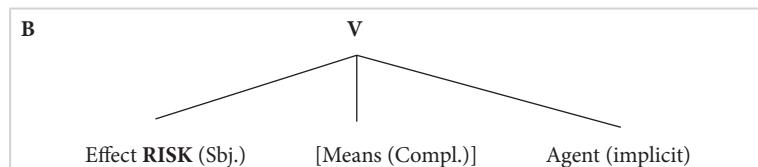
1)**Operational risks**[Effect] *should be managed* in accordance to a well-documented and robust framework with clearly assigned roles and responsibilities. <*Commission Delegated Regulation (EU) 2017/392 of 11November2016*>

2) Inflows and outflows are usually matched and **liquidity risk**[Effect] **is** therefore *limited*. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

3)<...> the CSD's analysis of the risks arising from that participation, including any analysis approved by an internal or external auditor, demonstrating that **all risks**[Effect] resulting from the participation *are* adequately *managed*. <*Commission Delegated Regulation (EU) 2017/392 of 11November2016*>

4) <...> "margin period of risk" means the time period from the most recent exchange of collateral covering a netting set of transactions with a defaulting counterparty until the transactions are closed out and **the resulting market risk**[Effect] *is re-hedged*. <*Regulation (EU) Nr575/2013 of the European Parliament and of the Council of 26 June 2013*>

5)Therefore, Alki LP cannot ensure the management of SMBV's business risks as effectively as direct employees or managers of SMBV could, and therefore **that risk**[Effect] *could,* at best, *be* partially *mitigated* **through its contractual transfer**[Means] to Alki LP. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

6) Fifth, while the Commission accepts the claim of the Netherlands and Starbucks that **certain sales risks of SMBV**[Effect] *are mitigated* **through the arrangements**[Means] with the Shops, this fact has no bearing on SMBV's relationship with Alki LP. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

7) Third, and most important, the Commission considers that if the Netherlands' claim were accepted, **the business risk of any group company**[Effect] *could be eliminated* **through intra-group reallocation of risks by simple means of contract**[Means]. <*Commission Decision (EU) 2017/502 of 21 October 2015*>

8) <...> for the purpose of assessing whether **any remaining concentration risk**[Effect] *can be addressed* **by other equally effective means such as the arrangements, processes and mechanisms**[Means] provided for in Article 81 of Directive 2013/36/EU of the European Parliament and of the Council (2), as provided for in Article 400(3)(b) of Regulation (EU) No 575/2013<...>. <*Guideline (EU) 2017/697 of The European Central Bank of 4 April 2017*>

9) Competent authorities shall ensure that **the risk**[Effect] that recognised credit risk mitigation techniques used by institutions prove less effective than expected *is addressed and controlled* including **by means of written policies and procedures**[Means]. <*Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013*>

10) **The credit risk of those counterparties**[Effect] *is mitigated* **through the posting of collateral**[Means] which is calculated to cover any potential losses upon a default. CCPs accept only highly liquid assets, generally cash, as collateral to meet variation margin (VM) calls in order to allow for a rapid liquidation in the event of a default.<*Commission Delegated Regulation (EU) 2017/610 of 20 December 2016*>

FR

1) Les entrées correspondent généralement aux sorties et **le risque de liquidité**[Effect] *est* dès lors *limité.* <*RÉGLEMENT (UE) Nr 575/2013 EUROPÉEN ET DU CONSEIL du 26 juin 2013 >*

2)< ...>l'analyse par le DCT des risques liés à cette participation, incluant toute analyse approuvée par un auditeur interne ou externe, et démontrant que tous **les risques liés à la participation**[Effect] *sont gérés* de manière adéquate. <*RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016*>

3) Cinquièmement, la Commission accepte l'argument des autorités néerlandaises et de Starbucks selon lequel **les risques de vente de SMBV**[Effect] *sont limités* **par les accords conclus**[Means] avec les magasins, mais ce fait n'a pas d'incidence sur la relation entre SMBV et Alki LP. <*DÉCISION*

4) Troisièmement, et c'est là le point le plus important, la Commission est d'avis que si l'argument avancé par les autorités néerlandaises était accepté, **le risque d'entreprise de n'importe quelle entreprise du groupe**[Effect] *pourrait être supprimé* **sur base d'un simple contrat par une réaffectation des risques**[Means] au sein du groupe. *<DÉCISION (UE) 2017/502 DE LA COMMISSION du 21 octobre 2015 >*

5) Afin d'évaluer si **un risque de concentration résiduel**[Effect] *peut être traité* **par d'autres moyens d'une efficacité équivalente, tels que les dispositifs, processus et mécanismes** [Means] visés à l'article 81 de la directive 2013/36/UE du Parlement européen et du Conseil < ...>. *<ORIENTATION (UE) 2017/697 DE LA BANQUE CENTRALE EUROPÉENNE du 4 avril 2017>*

6) Les autorités compétentes veillent à ce que **le risque**[Effect] que les techniques reconnues d'atténuation du risque de crédit utilisées par les établissements se révèlent moins efficaces que prévu *soit traité et contrôlé* notamment **dans le cadre de politiques et procédures écrites**[Means]. *<DIRECTIVE 2013/36/UE DU PARLEMENT EUROPÉEN ET DU CONSEIL du 26 juin 2013>*

7) **Le risque de crédit**[Effect] de ces dernières *est atténué* **par le dépôt d'une garantie (collateral)** [Means], qui est calculée de manière à couvrir les éventuelles pertes en cas de défaillance. *<RÈGLEMENT DÉLÉGUÉ (UE) 2017/610 DE LA COMISSION du 20 décembre 2016>*

8) **Grâce à ces exigences**[Means], **le risque de fraudes**[Effect] en matière de paiement dans le cadre d'achats sur le territoire national et à l'étranger *a été sensiblement réduit*. *<RÈGLEMENT DÉLÉGUÉ (UE) 2018/302 DU PARLEMENT EUROPÉEN ET DU CONSEIL du 28 février 2018>*

9) Le DCT ne peut prendre une assurance pour atténuer le risque opérationnel visé dans le présent chapitre que si **ce risque**[Effect] *n'est pas* pleinement *atténué* **par les mesures** [Means]visées dans ledit chapitre. *<RÈGLEMENT DÉLÉGUÉ (UE) 2017/392 DE LA COMISSION du 11 novembre 2016>*

LT

1) <...>buvęs efektyvumas turėtų būti parodomas, jei santykis tarp **vertybinių popierių**, kurių **rizika**[Effect] *apdrausta*, faktinio prieaugio (nuostolio) ir riziką apdraudžiančių priemonių yra nuo 80 % iki 125 %. *<EUROPOS CENTRINIO BANKO GAIRĖS (ES) 2016/2249 2016m. lapkričio 3d.>*

2) Taigi, „Alki LP" negali užtikrinti SMBV verslo rizikos valdymo taip veiksmingai, kaip tai galėtų atlikti SMBV tiesioginiai darbuotojai arba vadovai, ir todėl **ta rizika (valdymo rizika)** [Effect] **galėtų** geriausiu atveju **būti sumažinta** <...>. *<KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.>*

3) <...> garantinės įmokos rizikos laikotarpis-laikotarpis nuo paskutinio pasikeitimo priemone, kuria užtikrinami užskaitos grupės sandoriai su įsipareigojimų nevykdančia sandorio šalimi, iki tol, kol sandoriai likviduojami, o atitinkama **rinkos rizika**[Effect] *apdraudžiama iš naujo* <...>. *<EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.>*

4) CVPD rizikos, kylančios dėl to dalyvavimo, analizę, įskaitant bet kokią vidaus arba išorės auditoriaus patvirtintą analizę, iš kurios matyti, kad **visa dėl dalyvavimo kylanti rizika**[Effect] *yra* tinkamai *valdoma*. *<KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) 2017/392 2016m. lapkričio 11d.>*

5) <...> Atsižvelgdamos į šias rinkos dalyvių reakcijas į sprendimą pradėti procedūrą, Prancūzijos valdžios institucijos pareiškė norą pagerinti **priemonę**[Means], kad *būtų* kuo labiau *sumažinta* **piktnaudžiavimo** įtaka rinkoje **rizika**[Effect]. *<KOMISIJOS SPRENDIMAS (ES) 2017/503 2016m. lapkričio 8d.>*

6) Komisija mano, kad **visais šiais taisomaisiais veiksmais**[Means] **pajėgumų sulaikymo rizika**[Effect] bent jau *sumažinama iki minimumo,* nors jos visiškai atmesti negalima. <*KOMISIJOS SPRENDIMAS (ES) 2017/503 2016m. lapkričio 8d.*>

7) <...> šiame reglamente ir direktyvoje 2013/36/ES numatyta **įvairių priemonių**[Means], kuriomis būtų užkirstas kelias makrolygio rizikos ribojimo rizikai bei sisteminei rizikai ir **tokia rizika**[Effect] *būtų sumažinta .*<*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

8) Trečia ir visų svarbiausia, Komisija mano, kad, jeigu Nyderlandų reikalavimas būtų patvirtintas, bet kurios grupės bendrovės **verslo rizika**[Effect] *būtų pašalinta,* perkeliant riziką grupės viduje **paprastomis sutarties priemonėmis**[Means]. <*KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.*>

9) Jei per tą vieno mėnesio laikotarpį Komisija nepateikia pasiūlymo, atitinkama valstybė narė gali nedelsdama patvirtinti **nacionalinių priemonių**[Means], kurios būtų taikomos ne ilgesnį nei dvejų metų laikotarpį arba tol, kol *bus panaikinta* **makrolygio rizikos ribojimo priežiūros rizika arba sisteminė rizika**[Effect], jei ši rizika būtų panaikinta anksčiau, projektą. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

10) < ...> nustačius reikalavimą įstaigoms taikyti **sverto koeficientą**[Means], *būtų* veiksmingai *apribota* tų įstaigų **pernelyg didelio sverto rizika**[Effect]**.** <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

11) <... > tikimasi, kad valdžios institucijos nustatys griežtesnius **nuosavų lėšų reikalavimus** [Means] pasaulinės sisteminės svarbos įstaigoms (G-SII), kad *būtų padengta* **didesnė rizika**[Effect], kurią G-SII kelia finansų sistemai . <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

12) (328) Taigi, „Alki LP" negali užtikrinti SMBV verslo rizikos valdymo taip veiksmingai, kaip tai galėtų atlikti SMBV tiesioginiai darbuotojai arba vadovai, ir todėl **ta rizika**[Effect] *galėtų* geriausiu atveju *būti sumažinta*, ją perkeliant **sutarties būdu**[Means] į „Alki LP". <*KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.*>

13) Atsižvelgdamos į šias rinkos dalyvių reakcijas į sprendimą pradėti procedūrą, Prancūzijos valdžios institucijos pareiškė norą pagerinti **priemonę**[Means], kad *būtų kuo labiau sumažinta* **piktnaudžiavimo įtaka rinkoje rizika**[Effect]. <*KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.*>

14) Tą ribą nustato įstaiga, laikydamasi Direktyvos 2013/36/ES 81 straipsnyje nurodytos **politikos ir procedūrų**[Means], kad *būtų mažinama ir kontroliuojama* koncentracijos rizika[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

15) **Gaunamų ir netenkamų pinigų srautai paprastai suderinami ir taip**[Means] *apribojama* **likvidumo rizika**[Effect]. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS (ES) Nr.575/2013 2013 m. birželio 26d.*>

16) Penkta, kadangi Komisija priima Nyderlandų ir „Starbucks" tvirtinimą, kad tam tikra **SMBV pardavimo rizika**[Effect] *sumažėja* dėl susitarimų su parduotuvėmis[Means], šis faktas neturi įtakos SMBV ir „Alki LP" santykiams. <*KOMISIJOS SPRENDIMAS (ES) 2017/502 2015m. spalio 21d.*>

17) Vertindamos, ar **bet kokia išlikusi koncentracijos rizika**[Effect] *gali būti pašalinta* **kitais tapačiai veiksmingais būdais**[Means], pavyzdžiui, pasitelkiant Europos Parlamento ir Tarybos direktyvos 2013/36/ES (2) 81 straipsnyje nurodytus **priemones, procesus ir mechanizmus**[Mean], kaip įtvirtinta Reglamento (ES) Nr. 575/2013 400 straipsnio 3 dalies b punkte.<*EUROPOS CENTRINIO BANKO GAIRĖS (ES)2017/697 2017m. balandžio 4d.*>

18) Kompetentingos valdžios institucijos užtikrina, kad **rizika**[Effect], jog įstaigų taikomos

pripažintos kredito rizikos mažinimo priemonės gali būti mažiau veiksmingos, nei tikėtasi, ***būtų vertinama ir kontroliuojama***, be kita ko, **remiantis rašytine politika ir procedūromis**[Means]. <*EUROPOS PARLAMENTO IR TARYBOS DIREKTYVA 2013/36/ES 2013m. birželio 26d.*>

19) **Tais reikalavimais**[Means] ***buvo sumažinta*** **sukčiavimo rizika**[Effect], siejama su visomis naujomis ir tradicinėmis mokėjimo priemonėmis, ypač elektroniniu mokėjimu. <*EUROPOS PARLAMENTO IR TARYBOS REGLAMENTAS 2018/302 2018m. vasario 28d.*>

MYKOLAS ROMERIS UNIVERSITY

Oksana Smirnova

FRAME-BASED APPROACH
TO THE EU FINANCIAL TERMS
WITH THE NOMINAL BASE
RISK/RISQUE/RIZIKA
IN ENGLISH, FRENCH AND LITHUANIAN

Summary of the Doctoral thesis
Humanities, Philology (04H)

Vilnius, 2020

The doctoral thesis was prepared in 2015-2019, defended at Mykolas Romeris University in accordance with the right to doctoral studies granted to Mykolas Romeris University and Vytautas Magnus University by the order of the Minister of Education, Science and Sport of the Republic of Lithuania No V-160 dated 22 February, 2019.

Scientific supervisor:
Prof. Dr. Sigita Rackevičienė (Mykolas Romeris University, Humanities, Philology H 004).

The dissertation will be defended before the Council of Philological Sciences of Mykolas Romeris University and Vytautas Magnus University:

Chair:
Prof. Dr. Linas Selmistraitis (Mykolas Romeris University, Humanities, Philology H 004)

Members:
Dr. Loïc Boizou (Vytautas Magnus University, Humanities, Philology H 004);
Prof. Dr. Violeta Janulevičienė (Mykolas Romeris University, Humanities, Philology H 004);
Assoc. Prof. Dr. Liudmila Mockienė (Mykolas Romeris University, Humanities, Philology H 004);
Assoc. Prof. Dr. Nadežda Stojković (University of Niš, Serbia, Humanities, Philology H 004).

The defence of the dissertation will be held at a public meeting of the Council of Philological Sciences at 11.00 on September 4, 2020, at Mykolas Romeris University, Room 414-I.
Address: Ateities st. 20, LT-08303 Vilnius, Lithuania.

The summary of the doctoral dissertation was sent out on August 4, 2020.

The doctoral dissertation is available at Martynas Mažvydas National Library, Vytautas Magnus Library and Mykolas Romeris University Library.

Oksana Smirnova

FRAME-BASED APPROACH TO THE FINANCIAL TERMS WITH THENOMINAL BASE *RISK/RISQUE /RIZIKA* IN ENGLISH, FRENCH AND LITHUANIAN

Summary

Introduction

Terminology is a key component of legislative acts as terms represent concepts and establish a conceptual framework of the specialised field. In the multilingual society of the EU, it is essential that terms would be understood in the same way in different languages. The application of Cognitive Linguistics in legislative language analysis enables researchers to go beyond the visible structure of language and provides significant information on the way in which people perceive the world. Frame Semantics, being one of the branches of Cognitive Linguistics, allows for the revelation of semantic and syntactic patterns representing conceptual frames and explains how language functions to make meaning possible. Frame-based terminology studies investigate terms in discourse seeking to develop conceptual structures of specialised domains and organise packages of knowledge into domain-specific frames. The present research is devoted to frame-based study of trilingual (English, French and Lithuanian) terminological units representing the concept RISK and seeks to disclose conceptualisation of specialised knowledge on risk-related situations in the financial field.

The aim of the research

The aim of the research is to carry out a frame-based analysis of the terms designating the concept RISK in an ad hoc trilingual parallel corpus of financial documents, organise them into conceptual frames which represent risk-related situations in the financial field and contrast the linguistic means used to express these situations in English, French and Lithuanian.

Objectives of the research

In order to achieve the aim of this research, the following objectives were set:
1. to perform the analysis of the principles of Cognitive Linguistics and Frame Semantics in particular, Corpus Linguistics and Contrastive Linguistics, as well as their application in terminological research;
2. to compile a trilingual parallel ad hoc corpus of the EU financial documents consisting of three subcorpora: English, French and Lithuanian;
3. to apply the frame-based approach to the micro-context analysis of the selected nominal term *risk/risque/rizika*:

- to establish the most typical modifiers of the selected term and to extract the multi-word terms with the nominal base *risk/risque/rizika*;
- to analyse the semantics of the modifiers and to classify the multi-word terms according to the elements of the RISK_scenario frame;
- to analyse and contrast the formal patterns of the investigated multi-word terms in English, French and Lithuanian;
- 4) to apply the frame-based approach to the macro-context analysis of the selected nominal term *risk/risque/rizika*:
- to annotate the predicative argument structures with the term *risk/risque/rizika*;
- to analyse the semantics of the annotated verbs;
- to establish and analyse the frames evoked by the annotated verbs;
- to contrast the semantico-syntactic structures and lexical expression of the frames in English, French and Lithuanian;
4. to discuss the peculiarities of the linguistic means used to express the same risk-related concepts and their relations in the English, French and Lithuanian subcorpora;
5. to develop a cognitive map of the concept RISK arising from the analysis of the macro- and micro-contexts of the term *risk/risque/rizika*.

The data sources and the object of the research

The present study is a corpus-driven research focused on the micro- and macro-contexts of the term *risk/risque/rizika.* The ad hoc parallel corpus of the EU legislative documents of the financial field was compiled for the purposes of the given research. The compiled corpus is a trilingual corpus composed of three subcorpora in the English, French and Lithuanian languages. The legislative documents were downloaded from the Official Journal of the European Union which is an open access online source. In total, 154 legislative documents in three languages related to various financial issues of the EU and enacted in the period 2013-2018 were collected. The documents were transformed into plain text and aligned for term extraction and analysis. The size of the subcorpora is as follows: the English subcorpus consists of 1,006,485 words, the French subbcorpus contains 1,181,647 words, and the Lithuanian subcorpus comprises 803,845 words. The size of the parallel corpus is about 3,000,000 words.

In total, 203 financial multi-word terms with the nominal base *risk/risque/rizika* were extracted for the micro-context analysis (70 English terms and their French and Lithuanian equivalents). During this research, 4314 English sentences which include 45 different verbs, 4360 French sentences which include 54 verbs, and 2075 Lithuanian sentences which include 25 verbs that form argument structures with the term *risk/risque/rizika* were extracted and annotated for the macro-context analysis.

Scientific novelty and value of the research

The scientific novelty and value of the research is stipulated by the following aspects of the research:

1. Frame-based approach to the analysis of the terminological data. This is the first scientific work in which Frame Semantics methodology is applied for the contrastive analysis of the English, French and Lithuanian terminology. While the English and French terminology has been investigated using frame-based approach for several decades, it is the first attempt to apply this methodology for the Lithuanian terminological data of the financial field.

2. Corpus-driven analysis of trilingual terminological data. Corpus Linguistics offers new possibilities for the language analysis, the ability to deal with a big amount of data, to disclose the real use of terms and, to reveal the perception of the universal conceptualisation of a domain in question and peculiarities of its linguistic expression in different languages.

3. Object of the research – the terminology of the financial field. This is the first work, in which a granular analysis in the three languages of the micro- and macro-contexts of a financial term *risk* is performed and a cognitive-conceptual map is developed.

This doctoral thesis provides new insights into the identification of the knowledge structures underlying specialised financial texts, highlights important shades of term meanings and their conceptual interrelations in the domain.

Relevance of the research and practical application of the findings of the research

The relevance of the research is multidimensional. The current development of terminology is the result of advances in technology and the ever-increasing need for specialised communication among communities with different languages. The main task of terminology in translation is to convey the sameness of the conceptual meaning of the terms through the language. The quality of translation depends on the translator's ability to decode correctly the meaning and activate the knowledge structure. Thus, it is important to understand not only a single term, but also the whole conceptual structure of a particular domain in order to correctly place the relevant term in the whole terminology system. Thus, the current research contributes to the development of specialised communication in the following aspects:

1. It provides a methodology to develop cognitive structure revealing interrelations among the concepts of a particular domain. The awareness of the structure is indispensable in order to convey the fine distinctions of the meanings of the terms.

2. It establishes and contrasts typical syntactic structures of the multi-word terms with the nominal base *risk/risque/rizika* in English, French and Lithuanian, and thus provides useful information on term formation patterns in the investigated languages to translators and terminology managers as well as to specialists of natural language processing who develop automatic term extraction applications.

3. The research also reveals typical predicative arguments that include the term *risk/risque/ rizika* which are important for the translation of specialised (financial) texts. Awareness of fixed predicative structures facilitates the process of translation as it enables translators to formulate coherent text sections. Typical semantico-syntactic models can also be used in various machine translation applications. This work is the first attempt to systematise the English, French and Lithuanian verb - term relations and provide their systemic description.
4. The parallel corpus developed for the research (consisting of three monolingual subcorpora) is available to the public in CLARIN repository and might be used for various research purposes.
5. The results of the research might be used as a model for the development of a new-generation dictionary which would give access to rich terminological information based on data collected from specialised corpora: combinatorial possibilities of terms with other terms in the domain, syntactic and semantic annotations of contexts in which terms appear, typical argument structure that include terms, etc.

Therefore, the findings of this research might be applied by terminology researchers, practitioners, trainers, users and other participants of the international specialised communication whose interests and work concern the links between language and knowledge.

Structure of the doctoral thesis

This doctoral thesis includes an introduction, theoretical and methodological parts, empirical part and conclusions.

The introduction is devoted to the discussion of the aim, objectives, data sources and object of the research. It also highlights the originality and relevance of the research, presents the applied methods and introduces the theses to be defended and the list of publications on the topic.

The first part presents the theoretical background of the research, i.e. the linguistic theories relevant to frame-based terminology: principles of Cognitive Linguistics, Frame Semantics, Corpus Linguistics and Contrastive Linguistics and their application in terminology research. The second part is devoted to the methodology of the research and issues related to the selection of the data used. The third part presents the empirical analysis of the collected data: analysis of the micro-context of the term *risk/risque/rizika* and analysis of the macro-context of the term *risk/risque/rizika*. In the fourth part the peculiarities of the linguistic means used in the parallel texts are discussed. The fifth part introduces the final results of the thesis – the cognitive map of the concept RISK. The thesis ends with the conclusions of the research.

Theses to be defended

1. The frame 'RISK_ scenario' enables to classify the multi-word English, French and Lithuanian financial terms with the nominal base *risk/risque/rizika* into semantic categories according to the meanings of the modifiers of the base.

2. The frame-based analysis of the macro-context of the term *risk/risque/rizika* reveals new information about the terms which cannot be revealed in the micro-context analysis: it uncovers the actions and processes related to the concept of RISK.
3. The frame-based approach provides bases for the comparison of the linguistic means used to express the same conceptual structures in English, French and Lithuanian.

Previous linguistic works relevant to frame-based terminology research

Frame-based terminology takes its roots from Cognitive Semantics which approaches meaning from a new perspective combining linguistic and encyclopaedic information in the research of meaning of language structures. One of the theories which especially contributed to the investigation of the encyclopaedic nature of meaning was that of Frame Semantics developed by Charles Fillmore (1975, 1989).

Frame Semantics, as a new framework to approach lexical units by means of conceptual frames, gave impetus to linguistic scientific research in various fields. Atkins (1992) and Baker (2001, 2009) approached the English lexicon by applying Frame Semantics methodology for the lexicographic needs. Atkins (2003), Rundell (2003), and Sato (2003) discussed the contribution of the FrameNet project to practical lexicography. Boas (2005) described the practical application of the FrameNet for the machine translation. López and Valenzuala (1998) analysed the Risk frame and translation of lexical units representing frame elements. Nerlich and Clark (2000) overviewed the historical evolution of the concept 'frame'. As Frame Semantics focuses on real language usage, corpora have become the main workspace for data analysis.

In the past decades, two main schools of frame-based terminological research have stood out: the Canadian school led by Marie-Claude L'Homme and the Spanish school led by Pamela Faber. L'Homme and her colleagues' terminological research is based on the original principles of Frame Semantics and FrameNet adapted to investigation of specialised languages (L'Homme 2004, 2012). L'Homme (2015), and Zhicho (2015) emphasise the role of syntax in terminology, as typical terms occur in a given syntactic position and acquire a given semantic role. L'Homme (2016), Subirat (2016), Robichaud (2016) sought to combine general and specialised frames.

Frame Semantics also gave birth to *Frame-Based Terminology* elaborated by Pamela Faber (2007) and her colleagues (López Rodríguez, Arauz, Reimerik, Velasco, et al. (2007)). This theory combines certain premises from the Communicative Theory of Terminology, Sociocognitive Terminology and Frame Semantics (Cabré, 2003; Temmerman, 2000). *Frame-Based Terminology* focuses on a universal conceptual-cognitive organisation of a specialised domain, the multidimensional nature of terms and extraction of semantic and syntactic information using multilingual corpora. Faber (2009), Pilar (2009) and Prietoc (2009) describe the semantic relations in the Eco-Lexicon terminological knowledge base where a frame-based structure is used for the conceptual representation. Faber and Reimerink (2019) discuss the possibilities of applying frames for the legal translation. Cabezas-García and Faber (2019) highlight the importance of predicative frames for the understanding of terminological units.

Other researchers address frames from various points of view: Busse (2012) points out a useful distinction between conceptual frames and predicative frames. Martin (2006) discusses the difference between Fillmorian and Minskyan frames; he describes the methodology of frame-based lexicon and demonstrates how learner's dictionaries can profit from frame-based lexicons. Laukaitis (2008) applied FrameNet methodology for developing SUMO ontology. Bernotaitytė, Nemuraitė, Butkienė and Paradauskas (2013) applied FrameNet methodology for the creation of lexical ontology of Business vocabulary.

The Frame Semantic theory and the project FrameNet gave impetus to the development of new generation dictionaries. Frame-based conceptual organisation may be applied for terminology management of any field; it discloses conceptual relations in the field and enables a better understand the meanings of individual terms and their interrelations. In addition, new generation dictionaries are multilingual, i.e. they provide terminological denotations of the same concept in different languages and thus may be used as sources for contrastive terminological analyses. New generation dictionaries have been developed for the following areas: environment – EcoLexicon (Faber et al., 2016), DiCoEnviro (L'Homme et al., 2016); informatics – DiCoInfo (L'Homme et al., 2008, 2015), computer science (Ghazzawi et al., 2016); law – JuriDiCo (Pimentel et al., 2012), soccer ‑ Kicktionary (Schmidt et al., 2009), etc.

Methods

This research employed a number of methods for data extraction, analysis and generalisation of the received results. The extraction of the research material (terms and argument structures) from the compiled ad hoc corpora was carried out by applying corpus linguistics methodology: word frequency lists, concordance analysis, collocational analysis. The extracted research material underwent a granular analysis by using various methods. First, descriptive-analytical method for through investigation of the micro- and macro-contexts of the selected term was applied aiming to proceed to the frame-based semantic analysis of the conceptual relations between the concept RISK and other financial concepts. Second, contrastive qualitative and quantitative methods were used to reveal linguistic expression of the established conceptual relations in English, French and Lithuanian. Finally, the results of the research were generalised into a cognitive map of the concept RISK.

Principles of selection of the key term for the analysis

In order to select the main term for the analysis, corpus-driven investigation of the collected EU legislative documents was performed using the software *AntConc*. The tool *Word list* of the program provided the word frequency results in the English, French and Lithuanian corpora, which enabled the researcher to compare the word frequencies in the investigated languages and develop a trilingual list of 10 most frequent words.

The findings of this analysis revealed that the most frequent words in the corpora of all three investigated languages are *risk* and *credit*, while the word *exposures* takes the third position in the frequency lists. All three words, and, in particular, the words *risk* and *credit*

often appear together in the financial legislative documents. This could be explained by the tight semantic relationship between the words: that any money transaction implies danger, in other words, *credit* generates *risk*. The term *risk*, which is the most frequent in the corpora, was chosen as the object of the research of the given thesis.

The main findings of the research

The micro-context of the nominal term risk/risque/rizika

On the level of the micro-context, the linguistic analysis was focused on the closest context of the term *risk/risque/rizika,* i.e. its collocates. The micro-context of the term *risk/risque/rizika* or the words modifying the meaning of the term *risk/risque/rizika*, disclosed the multifaceted nature of the general concept RISK in the financial domain and its relations with specific concepts of various risk types.

The slot- filling mechanism, applied in the present study, reveals the number and nature of modifiers and their semantic relation with the nominal base *risk/risque/rizika*:

- *risk/risque/rizika* arises from **a harmful event** [Slot 1];
- it negatively affects **an asset** [Slot 2] or **a protagonist** [Slot 3];
- it is of a certain **intensity or extension** [Slot 4];
- it lasts for certain **time** [Slot 5]

Relying on this information, the most abstract frame **RISK_scenario** was taken from the project FrameNet and adapted for the semantic classification of the multi-word terms with the nominal base *risk/risque/rizika*. The frame was supplemented with one new element *Protagonist*, elements *Harmful_event* and *Situation* were fused into one element (*Harmful_ event*) and element *Degree* was split into two elements (*Intensity of risk* and *Extension of risk*). The adapted frame is composed of the following elements:

- Core elements: **Asset**, **Protagonist, Harmful_event.**
- Non-core elements: **Intensity, Extension, Time**.

The quantitative analysis disclosed that the terms denoting the concepts ascribed to the frame elements are distributed in the following way: *Harmful_event 22.8% (e.g., default risk – risque de défaut – įsipareigojimų neįvykdymo rizika), Protagonist 22.8% (e.g., risk of the borrower – risque de l'emprunteur – skolininko rizika), Intensity 21.4% (e.g., high risk – risque élévé – didelė rizika), Asset 20% (e.g., credit risk – risque de crédit – kredito rizika).* Other terms are distributed as follows: *Extension 8.5% (e.g., systemic risk (macroprudential risk) – risque systémique (macroprudentiel) – sisteminė (makroprudencinė rizika)), Time 4,2% (e.g., intraday credit risk – risque de crédit intrajournalier – dienos kredito rizika).* Another important parameter is the frequency of the usage of terms in the EU legislative documents. The most frequent terms denote risk related to *Asset* (freq.766); while terms denoting risk related to *Harmful_event* (freq.297), *Protagonist* (freq.284) and *Extension* (freq.270) are next most frequent. The group of terms with the element *Time* (freq.42) is the least frequent. The usage of the terms shows that in the EU legislative documents the most discussed risk-related concept is *Asset*, which is under the risk arising from a *Harmful_event*, and the *Protagonist* who undergoes the risk. The *Extension* of the risk is also

important, while the *Time* during which the risk occurs as well as the *Intensity* of the risk seem to be of secondary importance.

As for the formal structures of the multi-word terms with the nominal base *risk/risque/rizika*, the analysis revealed the diversity of linguistic expression of the universal conceptual models in the three languages. The structural analysis focused on the following aspects of formation of the terms: number of constituents of the terms, modification patterns and syntactic structures. Modification patterns were distinguished according to the position of modifiers in respect to the nominal base *risk/risque/rizika*: pre-modification (in which modifiers take the place before the base) and post-modification (in which modifiers take the place after the base). Meanwhile, syntactic structures were established according to position and word classes of the modifiers. The investigation revealed that the terms with the nominal base *risk/risque/rizika* have different modification patterns in the three languages. The pre-modification is dominant in the English and Lithuanian languages, while the post-modification is characteristic of the French language. No terms of the post-modification patterns were detected in Lithuanian, while English terms were of both types, though, the number of terms with post-modifiers is rather low (10 terms). The investigated English, French and Lithuanian material did not contain terms with both pre- and post-modifiers (modifier + *risk/risque/rizika* + modifier).

All investigated terms include one or several modifiers, which are nouns, adjectives, adverbs and adjectives or prepositional phrases taking different positions in the terminological units. The nature of modifiers depends on the language. The results of the analysis reveal that the dominant modifiers of the English and the Lithuanian terms are nouns and adjectives, while in the French terms the term *risque* is mostly modified by prepositional phrases or adjectives. Thus, the most typical patterns for the English and Lithuanian languages are **(Adv.)+Adj.+risk** or **N+risk** (*systemic risk - sisteminė rizika, concentration risk - koncentracijos rizika),* the number of terms for both languages varies between 20-24. Meanwhile, the French language is characterised by the patterns as **risk+Prep.+N+(N)** (*risque de crédit*) instantiated by 24 terms and **risk+Adj**. *(risque opérationnel)* by 18 terms. The pattern **risk+Prep.+N+(N)** is also present in English, but it is illustrated only by 7 terms. Thus, this pattern, in contrast to French, is not very typical for English. The analysis reveals that syntactically English and Lithuanian terms more often overlap than English and French ones.

The terms also differ in the number of their constituents. The present study proved two main tendencies. First, the EU term developers respect the main requirement of language economy (brevity of terms): two-word terms are prevalent in the three languages. Second, only a few English (6) and French (8) terms have more than 4 words, while in Lithuanian terms including 4 and more words constitute a significant part of the selected data (15 of 70).

In all two-word terms, the modifier modifies directly the nominal base *risk/risque/rizika*, while in the terms with more constituents, modification may be of one or several levels, e.g., in the English term *gold price risk*, the nominal base *risk* is directly modified by the noun *price* which is in turn modified by another noun *gold*; in the French term *risque de taux d'intérêt* the nominal base *risque* is directly modified by the noun *taux* which is in

turn modified by another noun *intérêt* with the relational preposition *de*; in the Lithuanian term *dienos ir vienos nakties likvidumo rizika* the nominal base *rizika* is modified directly by the constituents *dienos, nakties* and *likvidumo,* while the nominal constituent *nakties* is in turn modified by the numeral *vienos.*

The findings of the formal structure analysis contribute to contrastive multilingual studies of term formation patterns. They disclose term formation trends in English, French and Lithuanian and provide terminological information, which might be useful for term developers, translators and terminology managers. Syntactic patterns, established in the research, may be used for the development of automatic linguistic methods of term extraction without pre-chosen keywords.

The macro-context of the nominal base risk/risque/rizika

On the level of the macro-context, the SWT/MWTs *risk/risque/rizika* were approached from the perspective of their position in predicative structures in the texts, such approach revealed the relations of the SWT/MWTs *risk/risque/rizika* with other terms in the domain. The investigation focused on the verbs attaching the terms with the nominal base *risk/risque/rizika* and configuring argument structures, which represent frames that include the concept RISK. These argument structures are considered to be macro-context of the investigated terms. In this part of the thesis, the semantics of the annotated verbs extracted from the corpora is analysed, as well as the predicative frames (also called macro-frames in the paper) evoked by the verbs are established and their semantic, syntactic and lexical analysis is carried out.

During the annotation, 47 English verbs, 54 French verbs and 25 Lithuanian verbs were detected in the extracted sentences. These verbs were classified into four semantic categories: EXISTENCE, EXPERIENCE, PERCEPTION, and ACTION. The attribution of the annotated verbs to the appropriate semantic categories was based on the definitions of the verbs in *Cambridge Dictionary* of the English language, in the French dictionary *Dictionnaire Larousse* and the dictionary of the Lithuanian language *Lietuvių kalbos žodynas*.

The annotated verbs designate the stages that risk passes from the beginning when it arises until the moment when professionals take measures to manage it. The frames evoked by the verbs were grouped into two broad categories that reflect specialised knowledge representation related to the term *risk/risque/rizika*:

- The frames representing the first stage of the cognitive perception of risk (CAUSE_RISK, EXPERIENCE_RISK). This stage encompasses situations in which something or somebody causes risk which in turn affects something or somebody; consequently, the affected entity experiences risk. These frames are activated by the verbs belonging to the semantic categories of EXISTENCE and EXPERIENCE.
- The frames representing the second stage of the cognitive perception of risk (PERCEIVE and ASSESS_RISK, CHANGE and CONTROL_RISK). This stage encompasses situations in which specialists identify risk, assess its importance and apply measures to reduce it and take control on it. These frames are activated by the verbs belonging to the semantic categories PERCEPTION and ACTION.

All frames manipulate with four main elements that refer to participants of the situations represented by the frames. In the sentences, these elements serve as semantic roles of the arguments of the investigated arguments structures and contain the following conceptual information (definitions of the semantic roles are based on the ones in the FrameNet project):

- **Cause** refers to an animate or inanimate entity, a force, or event that produces an Effect.
- **Effect** indicates the process or state that the Cause initiates. In the investigated material, **Effect** refers to the concept of RISK.
- **Agent** is an animate or inanimate entity that perceives, assesses, changes and/or controls Effect.
- **Experiencer** is an animate or inanimate entity that experiences **Effect**.
- **Means** refers to an action or financial tool that produces change in **Effect**.

All annotated argument structures were ascribed to appropriate frames. The analysis of three dimensions has been performed: presentation of the frame (frame elements and their interrelations), syntactic expression of the frame (the analysis of the argument structures and their semantico-syntactic models) and lexical expression of the frame (analysis of the lexical items denoting the participants of the frame).

As English, French and Lithuanian differ in their morphological structure (analytic and synthetic), the words, performing the same syntactic functions, differ grammatically in these languages. In Lithuanian, syntactic functions of the arguments of the verbs are expressed by different case endings of nouns and prepositional phrases, while in English and French, they are expressed by strict word order and prepositional phrases. The argument performing the semantic role of Effect (RISK) usually takes object or subject position, rarely complement position in the three languages. However, the syntactic analysis proved a great variety of semantico-syntactic structures, the majority of which overlap in the three languages:

a) Cause/Agent (Sbj.)+V+Effect **RISK** (Obj.);
b) Cause (Sbj.)+V+Effect **RISK** (Obj.)+Experiencer (Compl.);
c) Effect **RISK** (Sbj.) +V+Cause (Obj./Compl.)
d) Agent (Sbj.) + V+Amount (Obj.)+ Effect **RISK**(Obj./Compl.);
e) Experiencer(Sbj.) +V+ Effect **RISK** (Obj.);
f) Effect **RISK** (Sbj.)+V+[Means (Compl.)]+Agent(implicit) ;
g) Agent (Sbj.)+V+[Means (Obj./Compl.)]+ Effect **RISK** (Obj./Compl.).

The semantic categories designating the participants of financial domain overlap in the three languages and denotes: individuals and organisations taking part in the financial system, financial tools, actions, processes or valuable papers. The predicative frames are tightly connected to each other. They establish the relationships between the concepts: the entities cause risk, the same entities may bear risk and the same entities, with the exception of valuable papers, participate in risk management. It creates the picture of mirror reflection of the frames.

Peculiarities of the usage of linguistic means in the parallel corpus

As the research material is a parallel corpus of three languages, i.e. original texts (English or French) and their translations into Lithuanian, equivalence issues were inevitably encountered. These issues are related to the nature of the specific legislative language of the EU.

In the micro-context all 70 English terms with the nominal base *risk/risque/rizika* found equivalents in French and Lithuanian languages. They are considered as equivalents, because the meaning of each component of multi-word term coincide through the three languages, e.g., *credit risque – risque de crédit – kredito rizika ; systemic risk – risque systémique – sisteminė rizika.* However, there are 5 terms of 70 where Lithuanian translators needed to add more components in order to provide an exact translation. The French terms coincide componentionally, e.g. *transfer risk – risque de non-transfert – lėšų pervedimo rizika ; currency risk – risque de change – valiutos kurso rizika ; undue risk – risque excessif – pernelyg didelė rizika.*

Meanwhile, on the macro-context level, translators handle the semantic equivalence using more varied techniques which entails various transformations in syntactic structures in the target language (shift from nominal constructions to verbal ones, from passive to active or vice versa, verb omission, syntactic transformation of argument structures, etc.). However, these differences are only typical for the Lithuanian translation. It might be explained by different typological structures of the investigated languages (Lithuanian is a synthetic language, while English and French are analytic).

The cognitive map of the concept RISK

The findings of the research disclose two important stages of cognition of the concept RISK: first, when risk arises and starts affecting an entity; second, once risk is detected, it must be evaluated and managed. The twofold analysis leads to the creation of the cognitive map of the concept RISK which demonstrates the relations between the macro-frames (expressed by the macro-context of the term *risk/risque/rizika*) and the micro-frame (expressed by the micro-context of the term *risk/risque//rizika*).

The visual representation of the concept RISK provides the model of the perception of the concept RISK and interdependency between participants of risk-related situations in the financial field.

Conclusions

The findings of the research lead to the following conclusions:
1. The research proves that the methodological principles of Frame Semantics and the FrameNet project, developed for the general language, can be applied for the frame-based analysis of the financial terms with the nominal base *risk/risque/rizika*.
2. The analysis of the micro-context of the term *risk/risque/rizika* substantiates the following conclusions:

1) The collocational methodology is an effective means for the analysis of the lexical and grammatical environment of the selected keyword, as well as multilingual extraction of multi-word terms from corpora. The methodology is based on the assumption that complex terms are made of existing simple terms.

2) The frame-based analysis of multi-word terms with a selected nominal base allows for the classification of the terms into semantic categories according to the meanings of the modifiers of the base. The frame **RISK_scenario**, distinguished by Frame-Net researchers, proved to be a suitable conceptual-cognitive model for the semantic classification of the terms of the financial domain. The frame **RISK_scenario**, adapted for the financial field, provides a background of experiences that are necessary to interpret the concept RISK and its relations to other concepts – *Assets, Protagonist, Harmful_event, Intensity/Extension of risk, Time*. Thus, the frame **RISK_scenario** is a coherent structure of related concepts; the knowledge of all of them is indispensable to get the complete knowledge of the term *risk/risque/rizika* and classify the multi-word terms that include this base into semantic categories.

3) Most of the extracted multi-word terms denote *Harmful_event, Protagonist, Extension* of risk, and loss of *Assets*. The findings confirm that in the financial domain the focus is directed towards the *Asset* and the *Harmful_event* which causes the risk on the *Asset* as well as to the *Extension* of the risk affecting the *Asset* or the *Protagonist* who performs the exchange. It is crucial to know which *Harmful_event* can affect the *Asset* if the risk occurs and how many entities undergo the negative outcome; the *Intensity* and *Time* during which the risk lasts are of secondary importance.

4) The contrastive analysis of the linguistic expression of the established semantic categories of the multi-word terms discloses the diversity of the linguistic means used to form terminology in English, French and Lithuanian. The following term formation tendencies in the investigated languages have been observed:

- the prevailing term type according to the number of constituents in the investigated languages is two-word terms: they constitute the biggest number of the extracted terms in English, French and Lithuanian; that shows that the EU term developers respect the main requirement of language economy (brevity of terms);

- the pre-nominal modification of the term base is characteristic of both English and Lithuanian languages: most English and all Lithuanian investigated multi-word terms are formed using this formation pattern, on the contrary, in French only the post-nominal modification of the term base is used;

- the dominant modifiers of terms in the three languages are nouns and adjectives.

- Nominal modifiers are attached to the base in different ways in the investigated languages: in English and Lithuanian they are mostly attached directly (though in English prepositional attachment is very usual) (*credit risk, kredito rizika*), while in French they are always attached with the help of the preposition de (*risque de crédit*).

3. The analysis of the macro-context of the term *risk/risque/rizika* leads to the following conclusions:

1) The verbs of the term-embedding collocations V+RISK, RISK+V evoke predicative frames which configure the general meaning of the verbs and create specific semantic

spaces for the arguments of the verbs. The types of the frames depend on the semantics of the verbs.

2) Four frames were generated by the annotated verbs: CAUSE_RISK, EXPERIENCE_ RISK, PERCIEVE and ASSESS_RISK, CHANGE and CONTROL_RISK. All of them are based on the frames developed by the FrameNet project and adapted to the financial field. The frames capture the stages of existence of risk: risk is caused by something or somebody, something or somebody experiences it, consequently, risk is identified, assessed and proceeds to some changes and control.

3) The contrastive analysis of the syntactic expression of the frames revealed that the majority of the semantico-syntactic models overlap in the investigated languages. However, some models, specific to two or one of the languages, were detected, e.g. EN/FR Cause (Sbj.) + V + Effect **RISK**(Compl.); EN/LT Experiencer (Sbj.) + V + Effect **RISK**(Obj.) + Cause (Compl.); FR/LT Effect **RISK**(Sbj.) + V + Experiencer (Compl.) + Cause (Compl.). The big number of overlapping models might be explained by the fact that the investigated corpora are parallel texts and the translators sought to ensure the highest degree of equivalence of the source and target texts both on the semantic and syntactic levels.

4) The analysis of the lexical expression of the predicative frames in the investigated languages revealed that the elements Cause, Agent and Experiencer are represented by the same semantic categories: individuals, institutions, financial tools, (unsuccessful) actions and processes. That reveals interdependency of the participants of the risk-related situations: they depend on each other and the role, which they acquire, is determined by a situation, i.e. in some situations they cause risk, in other situations they experience risk or become risk assessors/controllers.

4. The analysis of the peculiarities of the usage of the linguistic means in the parallel texts discloses the following tendencies: on the micro-context level, the semantic equivalence is achieved by identical or very similar linguistic means in all three languages: most risk-related concepts are denoted by term-forming multi-word phrases; moreover, the multi-word terms are identical in their lexical structure (the number of modifiers and their meanings), only in several cases the number of the modifiers is higher in one of the languages (Lithuanian). On the macro-context level, the linguistic means used to achieve the semantic equivalence in Lithuanian differ from the ones in English and French: in the Lithuanian subcorpus the same risk-related situations are often expressed by verbal constructions which correspond to the nominal constructions in English and French, by active form which corresponds to passive in English and French or vice versa, by verb omission or different argument structures, etc. This might be explained by different typological structures of the investigated languages.

5. The Frame Semantics methodology applied for the micro- and macro-analysis and classification of the chosen group of the financial terms enabled the development of a cognitive map of the investigated financial domain representing the knowledge of the area and cognitive perception of the concept RISK. The analysis showed that verbs are culturally shared knowledge registered in lexicon; they are conceptual constants configuring the major conceptual parameters of the cognitive map of the specific field,

while the nouns occupy the slots, activated by the verbs, and form conceptual micro-environments.

6. The findings of the contrastive analysis of the multi-word terms and semantico-syntactic models of predicative argument structures provide terminological information which might be useful for various target groups: formal structure of multi-word terms reveals term formation patterns in the investigated languages, which might be important to translators and terminology managers and used for the development of automatic linguistic methods of term extraction. Meanwhile, semantico-syntactic models of the annotated argument structures might be used in human and machine translation. Moreover, the parallel corpus compiled for the purposes of the research, is available to the public in CLARIN repository and might be used for various research purposes.

List of publications on the topic of doctoral thesis

The main findings and conclusions of the dissertation have been published in four research articles and presented in the five international and national conferences and other scientific events. The research articles are published in scientific journals indexed in international scientific databases.

1. Smirnova, Oksana, Rackevičienė, Sigita. ES teisės aktų terminai lietuvių ir prancūzų kalbomis. Kalba ir kontekstai = Language in different contexts: mokslo darbai. Vilnius: Edukologija. ISSN 1822-5357. 2016, t. 7 (1), d.1, p. 78-92. [Communication & Mass Media Complete; Communication Source; MLA] [M.kr.: 04H]

2. Smirnova, Oksana, Rackevičienė, Sigita. The EU English terms including the word *market* and their French and Lithuanian equivalents. Darnioji daugiakalbystė : periodinis mokslo žurnalas = Sustainable multilingualism : biannual scientific journal, no. 11, Kaunas: ISSN 2332-2019. 2017, p. 179-195. [CEEOL, GOOGLE SCHOLAR, MLA] [M.kr.: 04H];

3. Smirnova, Oksana. Semantic analysis of the EU English financial terms including the word *Risk* and their equivalents in French and Lithuanian = Europos sąjungos anglų kalbos finansinių terminų su pagrindiniu dėmeniu *rizika* ir jų ekvivalentų prancūzų ir lietuvių kalbomis semantinė analizė // Kalba ir kontekstai = Language in different contexts: mokslo darbai. Vilnius: Edukologija. ISSN 1822-5357. 2018, t. 8 (1), p. 78-93. [Communication & Mass Media Complete; Communication Source; MLA] [M.kr.: 04H];

4. Smirnova, Oksana, Rackevičienė, Sigita. Corpus-driven analysis of multi-word terms including the word 'Risk' in English, French and Lithuanian. Terminologija, t. 25. ISSN 1392-267X. 2018, p.86-106. [CSA: Linguistics and Language Behavior Abstracts; CEEOL – Central and Eastern European Online Library; MLA] [M.kr.: 04H].

Presentations at conferences and other scientific events

05-06 May, 2016 presentation *ES teisės aktų terminai lietuvių ir prancūzų kalbomis* ('The EU legal acts terms in French and Lithuanian') at the VII-th international scientific conference *Lingvistiniai, didaktiniai ir sociokultūriniai kalbos funkcionavimo aspektai* ('Linguistic, Didactic and Sociocultural Aspects of Language'), Lithuanian University of Educational Sciences, Vilnius;

24 November, 2016 presentation *Daugiažodžiai terminai ir jų dėmenų junglumas ES teisės aktuose lietuvių ir prancūzų kalbomis* ('Valence of the EU multi-word terms of legal acts in French and Lithuanian') at doctoral conference *Filologijos tyrinėjimų laukas ir problemos* ('Field and problems of philological research'), Lithuanian University of Educational Sciences, Vilnius;

26-27 May, 2017 presentation *The EU English terms including the word market and their French and Lithuanian equivalents/ ES angliškų terminų, kurių pagrindinis dėmuo „rinka" analizė ir gretinimas su ekvivalentais prancūzų ir lietuvių kalbose* at the IV-th UKI and XI-th LKPA international scientific conference *Darnioji daugiakalbystė 2017* ('Sustainable Multilingualism 2017'), Vytautas Magnus University, Kaunas;

01-02 June, 2017 presentation *ES daugiažodžiai angliški terminai su pagrindiniu dėmeniu „rinka" ir jų lietuviški bei prancūziški atitikmenys/ The EU multi-word terms with the base market and their equivalents in French and Lithuanian* at the 2-th international scientific conference *Moksliniai, administraciniai ir edukaciniai terminologijos lygmenys* ('Scientific, administrative and educational levels of terminology'), Institute of Lithuanian language, Vilnius;

03-04 May, 2018 presentation *Semantic analysis of the EU English financial terms including the word risk and their equivalents in French and Lithuanian/ES anglų kalbos finansinių terminų su pagrindiniu dėmeniu rizika ir jų ekvivalentų prancūzų ir lietuvių kalbomis semantinė analizė* at the VIII-th international scientific conference *Lingvistiniai, didaktiniai ir sociokultūriniai kalbos funkcionavimo aspektai* ('Linguistic, Didactic and Sociocultural Aspects of Language'), Lithuanian University of Educational Sciences, Vilnius;

ABOUT THE AUTHOR

Oksana Smirnova graduated from Vilnius University and was awarded a BA degree (1999) and a MA degree (2001) in French Philology (humanities). In 2015-2019 she pursued her studies for PhD at Mykolas Romeris University. She completed a Joint Doctoral Study Programme with Lithuanian University of Educational Sciences (Vytautas Magnus University) in the field of Philological Sciences.

During her doctoral studies, upon getting a scholarship from Erasmus + programme, she went on a research visit to Charles University at the Institute of Formal and Applied Linguistics from 1st December, 2017 to 30 January, 2018.

Since she started working as a lecturer at Mykolas Romeris University in 2014, she got interested in contrastive research on terminology. Since 2014 Oksana Smirnova has taught French (A1-B2) as a second language to students of English for Specific Purposes and the Second Foreign Language and Translation and Editing courses. The teaching of French in English as well as great desire of personal and professional growth gave impetus to start comparative analysis of terminology in English, French and Lithuanian.

Oksana Smirnova

KONCEPTUALIŲJŲ FREIMŲ TAIKYMAS ES FINANSŲ SRITIES ANGLŲ, PRANCŪZŲ IR LIETUVIŲ KALBŲ TERMINŲ SU PAGRINDINIU DAIKTAVARDINIU DĖMENIU *RISK / RISQUE / RIZIKA* ANALIZEI

Vilnius, 2020

Daktaro disertacija rengta 2015-2019 metais, ginama Mykolo Romerio universitete pagal Mykolo Romerio universitetui su Vytauto Didžiojo universitetu Lietuvos Respublikos švietimo, mokslo ir sporto ministro 2019 m. vasario 22 d. įsakymu Nr.V-160 suteiktą doktorantūros teisę.

Mokslinė vadovė:
prof. dr. Sigita Rackevičienė (Mykolo Romerio universitetas, humanitariniai mokslai, filologija H 004).

Disertacija ginama Mykolo Romerio universiteto ir Vytauto Didžiojo universiteto filologijos mokslo krypties taryboje:

Pirmininkas:
prof. dr. Linas Selmistraitis (Mykolo Romerio universitetas, humanitariniai mokslai, filologija H 004).

Nariai:
dr. Loïc Boizou (Vytauto Didžiojo universitetas, humanitariniai mokslai, filologija H 004);
prof. dr. Violeta Janulevičienė (Mykolo Romerio universitetas, humanitariniai mokslai, filologija H 004);
doc. dr. Liudmila Mockienė (Mykolo Romerio universitetas, humanitariniai mokslai, filologija H 004);
doc. dr. Nadežda Stojković (Nišo universitetas, Serbija, humanitariniai mokslai, filologija H 004).

Disertacija bus ginama viešame filologijos mokslo krypties gynimo tarybos posėdyje 2020 m. rugsėjo 4 d. 11 val., Mykolo Romerio universitete, I-414 auditorijoje.
Adresas: Ateities g. 20, LT-08303 Vilnius, Lietuva.

Disertacijos santrauka išsiųsta 2020 m. rugpjūčio 4 d.

Daktaro disertaciją galima peržiūrėti Lietuvos nacionalinėje Martyno Mažvydo, Vytauto Didžiojo universiteto ir Mykolo Romerio universiteto bibliotekose.

Oksana Smirnova

KONCEPTUALIŲJŲ FREIMŲ TAIKYMAS ES FINANSŲ SRITIES ANGLŲ, PRANCŪZŲ IR LIETUVIŲ KALBŲ TERMINŲ SU PAGRINDINIU DAIKTAVARDINIU DĖMENIU *RISK / RISQUE / RIZIKA* ANALIZEI

Santrauka

Įvadas

Terminai yra teisėkūros dokumentų esminė ašis, nes jie nusako sąvokas, kurios sudaro specializuotos srities konceptualiąją struktūrą. ES daugiakalbėje visuomenėje labai svarbu, kad terminai būtų suprantami vienodai bet kurios ES narės kalba, nes tik taip gali būti užtikrintas vienodas ES teisės aktų įgyvendinimas. Kognityvinės lingvistikos metodikos taikymas teisėkūros dokumentų terminijos analizėje leidžia prasiskverbti pro kalbinius duomenis į sąvokinį lygmenį ir suteikia reikšmingos informacijos apie tai, kaip žmonės suvokia pasaulį. Freimų semantika, būdama viena iš kognityvinės lingvistikos atšakų, leidžia atskleisti semantinius ir sintaksinius modelius, reprezentuojančius konceptualiuosius freimus, ir paaiškina, kaip kalba įgalina išreikšti reikšmes. Freimais pagrįstų terminologijos tyrimų tikslas – išanalizavus terminų vartoseną specializuotame diskurse, išsiaiškinti, kaip konceptualizuojamos tam tikros srities specializuotos žinios. Šis tyrimas, skirtas freimais pagrįstai trijų kalbų (anglų, prancūzų ir lietuvių) terminų, nusakančių sąvoką RIZIKA, analizei, siekia atskleisti, kaip finansų srityje konceptualizuojamos specializuotos žinios apie rizikos situacijas.

Tyrimo tikslas

Tyrimo tikslas – remiantis freimų semantikos metodika atlikti terminų, nusakančių sąvoką RIZIKA trikalbiame lygiagrečiajame finansų srities tekstyne, analizę, siekiant nustatyti, kokie freimai konceptualizuoja su rizika susijusias situacijas finansų srityje ir sugretinti kalbines priemones, vartojamas šioms situacijoms išreikšti anglų, prancūzų ir lietuvių kalbomis.

Tyrimo uždaviniai

Siekiant tyrimo tikslo, keliami šie uždaviniai:
1. atlikti kognityvinės lingvistikos (ypatingą dėmesį skiriant freimų semantikai), tekstynų lingvistikos ir gretinamosios lingvistikos principų bei jų taikymo terminologiniuose tyrimuose analizę;
2. sudaryti lygiagretųjį ES finansų srities teisėkūros dokumentų tekstyną, kurį sudaro trys sandai: dokumentai anglų kalba, dokumentai prancūzų kalba ir dokumentai lietuvių kalba;
3. remiantis freimų semantikos metodika, atlikti pasirinkto termino *risk / risque / rizika* mikrokonteksto analizę:

- nustatyti tipiškiausius pasirinkto termino priklausomuosius dėmenis ir atrinkti daugiažodžius terminus su daiktavardiniu dėmeniu *risk / risque / rizika*;
- išanalizuoti priklausomųjų dėmenų semantiką ir suklasifikuoti daugiažodžius terminus pagal „RISK_scenario" freimo elementus;
- išanalizuoti ir sugretinti daugiažodžių terminų su daiktavardiniu dėmeniu *risk / risque / rizika* struktūrinius modelius anglų, prancūzų ir lietuvių kalbomis;

4. remiantis freimų semantikos metodika, atlikti termino *risk / risque / rizika* makrokonteksto analizę:
- anotuoti predikatines argumentų struktūras su terminu *risk / risque / rizika*;
- išanalizuoti anotuotų veiksmažodžių semantiką;
- nustatyti ir išanalizuoti anotuotų veiksmažodžių aktyvuojamus freimus;
- sugretinti semantines-sintaksines argumentų struktūras ir jų leksinę raišką anglų, prancūzų ir lietuvių kalbomis;

5. aptarti kalbinių priemonių, vartojamų išreikšti tapačias su rizika susijusias sąvokas ir jų ryšius, ypatybes lygiagrečiojo tekstyno sanduose anglų, prancūzų ir lietuvių kalbomis;

6. sukurti sąvokos RIZIKA kognityvinį žemėlapį remiantis termino su daiktavardiniu dėmeniu *risk / risque / rizika* mikro- ir makrokontekstų tyrimo rezultatais.

Duomenų šaltiniai ir tyrimo objektas

Tyrimo tikslams buvo sudarytas paralelinis ES finansų srities teisėkūros dokumentų tekstynas, jį sudaro anglų, prancūzų ir lietuvių kalbų sandai. Teisėkūros dokumentai buvo surinkti iš Europos Sąjungos oficialiojo leidinio (the Official Journal of the European Union), kuris yra atvirai prieinamas internete EUR-Lex'o duomenų bazėje. Buvo atrinkti 154 ES finansų srities teisėkūros dokumentai, išleisti 2013–2018 m. Dokumentai buvo konvertuoti į paprastojo teksto formatą ir sulygiuoti, kad būtų įmanoma surinkti duomenis analizei. Tekstyno dydis siekia beveik 3 000 000. Sandų dydžiai: EN – 1 006 485 žodžiai, FR – 1 181 647 žodžiai, LT – 803 845 žodžiai.

Mikroteksto analizei atrinkti 203 finansų srities daugiažodžiai terminai su daiktavardiniu dėmeniu *risk/risque/rizika* (70 angliškų terminų ir jų atitikmenų prancūzų ir lietuvių kalbomis). Makroteksto analizei surinkta ir anotuota 4314 angliškų sakinių su 45 veiksmažodžiais, 4360 prancūziškų sakinių su 54 veiksmažodžiais, 2075 lietuviški sakiniai su 25 veiksmažodžiais, sudarančiais predikatinių argumentų struktūras su terminu *risk / risque / rizika*.

Tyrimo mokslinis naujumas ir vertė

Tyrimo mokslinį naujumą ir vertę atspindi šie tyrimo aspektai:

1. Freimų semantikos taikymas terminų analizei. Tai yra pirmasis mokslinis darbas, kuriame freimų semantikos metodika taikoma gretinamajai anglų, prancūzų ir lietuvių kalbų terminų analizei. Anglų ir prancūzų kalbų terminija jau kelis dešimtmečius tiriama taikant freimų semantikos metodiką, tačiau tai yra pirmasis bandymas pritaikyti šią metodiką lietuvių kalbos terminų analizei.

2. Tekstynų lingvistikos metodų taikymas trikalbių terminologinių duomenų analizei. Tekstynų lingvistika siūlo naujas kalbų analizės galimybes, leidžia dirbti su dideliu duomenų kiekiu, atskleisti tikrąją terminų vartoseną ir tam tikros specializuotos srities žinių konceptualizavimo mechanizmus bei jų kalbinės raiškos ypatumus kiekvienoje kalboje.
3. Tyrimo objektas – finansų srities terminija. Tai yra pirmasis darbas, kuriame atliekama detali finansų srities termino *risk / risque / rizika* mikro- ir makrokontekstų analizė trimis kalbomis ir sudarytas kognityvinis finansų srities sąvokos RIZIKA žemėlapis.

Daktaro disertacija suteikia naujų įžvalgų nustatant žinių struktūras, kuriuo grindžiami specializuoti tekstai, išryškina svarbius terminų reikšmių niuansus ir sąvokų tarpusavio ryšius.

Tyrimo aktualumas ir praktinis tyrimo rezultatų pritaikymas

Tyrimo aktualumas yra daugialypis. Šiuolaikinių technologijų pažanga ir nuolat didėjantis profesinio bendravimo įvairiomis užsienio kalbomis poreikis daro įtaką dabartinei terminijos raidai. Pagrindinis terminų vertimo uždavinys yra perteikti sąvokų prasmę kuo aiškiau ir tiksliau. Vertimo kokybė priklauso nuo vertėjo sugebėjimo tinkamai išsifruoti kalbinių vienetų reikšmes ir jais aktyvuojamas žinių struktūras. Siekiant teisingai nustatyti termino vietą visoje tam tikros specializuotos srities terminų sistemoje, svarbu suvokti ne tik termino reikšmę, bet ir visą konceptualiąją tam tikros srities struktūrą. Šis tyrimas prisideda prie dalykinės komunikacijos plėtojimo šiais aspektais:
1. Pateikiama specializuotos srities sąvokos kognityvinės struktūros kūrimo metodika, atskleidžianti tam tikros srities sąvokų tarpusavio ryšius. Kognityvinės struktūros suvokimas leidžia tiksliai apibūdinti terminų reikšmes.
2. Disertacijoje nustatyti būdingiausi daugiažodžių angliškų, prancūziškų ir lietuviškų terminų su daiktavardiniu dėmeniu *risk / risque / rizika* darybos modeliai teikia naudingos informacijos terminų kūrėjams ir vertėjams, taip pat natūraliųjų kalbų apdorojimo specialistams, plėtojantiems automatines terminų atpažinimo programas.
3. Tyrimas taip pat atskleidžia būdingiausias predikatines argumentų struktūras su daiktavardiniu dėmeniu *risk / risque / rizika*, kurios yra svarbios verčiant specializuotus (finansinius) tekstus. Informacija apie tipiškas predikatines struktūras, į kurias įeina terminai, palengvina vertimo procesą, nes leidžia suformuluoti nuoseklias teksto dalis. Šis darbas yra pirmasis bandymas susisteminti anglų, prancūzų ir lietuvių kalbos veiksmažodžių ir termino *risk / risque / rizika* ryšius ir pateikti jų sisteminį aprašymą. Semantiniai-sintaksiniai modeliai taip pat gali būti naudojami mašininio vertimo programose.
4. Tyrimui sukurtas trikalbis lygiagretusis tekstynas yra prieinamas visuomenei CLARIN saugykloje ir gali būti naudojamas įvairiems tyrimų tikslams.
5. Tyrimo rezultatai gali būti naudojami naujų tipų žodynams kurti. Tokiuose žodynuose vartotojams suteikiama prieiga prie gausios terminologinės informacijos, surinktos iš specializuotų tekstynų. Juose galima susipažinti su tam tikros srities terminų junglumo su kitais leksikos vienetais ypatybėmis, kontekstų, kuriuose pavartoti terminai, sintaksinio ir semantinio anotavimo rezultatais, būdingiausiomis argumentų struktūromis su tam tikrais terminais ir kt.

Apibendrinant, galima teigti, kad šio tyrimo rezultatai gali būti naudingi terminijos tyrėjams, praktikams, dėstytojams, vartotojams ir kitiems tarptautinės specializuotos komunikacijos dalyviams, kuriems aktuali kalbos ir žinių sąsaja.

Daktaro darbo struktūra

Darbą sudaro įvadas, teorinė ir metodinė dalys, empirinis tyrimas ir išvados.

Įvadas skirtas tyrimo tikslui, uždaviniams, duomenų šaltiniams ir tyrimo medžiagos atrankai aptarti. Taip pat aprašomas tyrimo originalumas ir aktualumas, pristatomi metodai ir ginamosios tezės bei publikacijų šia tema sąrašas.

Pirmoje dalyje pateikiamas teorinis tyrimo pagrindas, t. y. tyrimų aktualių lingvistikos teorijų (kognityvinės lingvistikos, freimų semantikos, tekstynų lingvistikos ir gretinamosios lingvistikos) principai bei jų taikymas terminologijos tyrimuose. Antra dalis skirta tekstynų sudarymo principams, pagrindinio tiriamojo termino atrankai bei atrinkto termino analizės metodikos pristatymui. Trečioje dalyje pateikiama empirinė surinktų duomenų analizė: termino *risk / risque / rizika* mikro- ir makrokonteksto analizė. Ketvirtojoje dalyje aptariamos kalbinių priemonių, vartojamų lygiagrečiuosiuose tekstuose, ypatybės. Penkta dalis supažindina su baigiamaisiais darbo rezultatais – sąvokos RIZIKA kognityviniu žemėlapiu. Darbas baigiamas tyrimo išvadomis.

Ginamosios tezės

1. Freimas „RISK_ scenario" įgalina klasifikuoti daugiažodžius terminus su daiktavardiniu dėmeniu *risk / risque / rizika* į semantines kategorijas pagal termino priklausomųjų dėmenų reikšmes.
2. Freimų semantika pagrįsta termino *risk / risque / rizika* makrokonteksto analizė atskleidžia naujos terminologinės informacijos, kurios neatskleidžia termino *risk / risque / rizika* mikrokonteksto analizė: ji parodo, kokie procesai ir veiksmai yra susiję su RIZIKOS sąvoka.
3. Freimų semantika pagrįstas tyrimas sudaro sąlygas sugretinti kalbines priemones, vartojamas toms pačioms sąvokinėms struktūroms išreikšti, trijose kalbose.

Ankstesni terminologijos tyrimai taikant freimų semantikos metodiką

Freimais pagrįsta terminologija kildinama iš kognityvinės semantikos, kurioje žodžio reikšmė nagrinėjama derinant lingvistinę ir enciklopedinę informaciją. Viena iš teorijų, itin prisidėjusių prie enciklopedinės žodžių reikšmės tyrimų plėtojimo, yra Charlesʼo Fillmoreʼo (1975, 1989) freimų semantika.

Freimų semantika, kaip nauja lingvistikos koncepcija, leidžianti leksinius vienetus tirti taikant konceptualiuosius freimus, davė impulsą atsirasti daugybei lingvistinių tyrimų įvairiose srityse. Atkins (1992) ir Baker (2001, 2009) taikė freimų semantikos metodiką anglų kalbos leksikai tirti leksikografijos tikslams. Atkins (2003), Rundell (2003), Sato (2003) savo darbuose aptarė „FrameNet" projekto indėlį į praktinę leksikografiją. Boasas (2005)

aprašė praktinį „FrameNet" pritaikymą mašininiam vertimui. López ir Valenzuala (1998) išanalizavo Risk freimą bei leksinių vienetų, priskirtų šio freimo elementams, vertimus. Nerlich ir Clark (2000) apžvelgė istorinį sąvokos „frame" vystymąsi. Kadangi freimų semantika remiasi realia kalbos vartosena, tekstynai tampa pagrindiniu duomenų šaltiniu.

Pastaruoju metu išryškėjo dvi didelės freimų semantika pagrįstų terminologijos tyrimų mokyklos: viena Europos žemyne (Ispanijoje) su Pammela Faber priešakyje, kita už vandenyno, Kanadoje, jai vadovauja Marie-Claude L'Homme.

Ispanijos freimais pagrįstos terminologijos (*Frame-Based Terminology*) mokyklos pradininkais laikomi Pamela Faber (2007) ir jos kolegos (López Rodríguez, Arauz, Reimerik, Velasco ir kt. (2007)). Ši teorija jungia tam tikrus komunikacinės terminologijos, sociokognityvinės terminologijos ir freimų semantikos principus (Cabré, 2003; Temmerman, 2000). Jų freimais pagrįsta terminologija sutelkia dėmesį į universalų konceptualiųjų ‒ kognityvinių specializuotos srities struktūrų organizavimą, į daugialypį terminų pobūdį ir semantinės bei sintaksinės informacijos išgavimą taikant daugiakalbius tekstynus. Freimais paremtos terminologijos tikslas yra sukurti universalią koncepcinę ‒ kognityvinę specializuotos srities struktūrą, pagrįstą daugiakalbių tekstynų duomenimis. Faber (2009), Pilar (2009) ir Prietoc (2009) aprašė semantinius ryšius „Eco-Lexicon" terminologinių žinių bazėje, kur sąvokoms vaizduoti naudojama freimais paremta struktūra. Faber ir Reimerink (2019) aptarė freimų taikymo galimybes teisiniam vertimui. Cabezas-García ir Faber (2019) pabrėžia predikatinių freimų svarbą terminologinių vienetų supratimui.

L'Homme ir jos kolegų terminologijos tyrimai remiasi freimų semantikos ir „FrameNet" projekto principais, jie taiko juos specializuotų sričių kalbai tirti (L'Homme 2004, 2012). Savo darbuose L'Homme (2004, 2012) aprašė galimybes taikyti freimų semantikos principus terminų analizei. L'Homme (2015) ir Zhicho (2015) pabrėžia sintaksės vaidmenį terminologijoje, teigdami, kad terminai sakinyje atsiranda tam tikroje sintaksinėje pozicijoje, įgauna tam tikrą semantinį vaidmenį. L'Homme (2016), Subirat (2016), Robichaud (2016) siekė sujungti bendrosios ir specializuotos kalbos freimus.

Kiti mokslininkai nagrinėja freimus įvairiais aspektais: Busse (2012) atskiria sąvokinį freimą nuo predikatinio freimo. Martin (2006) aptaria Fillmore'o ir Minsky'o freimų suvokimo skirtumus; taip pat jis aprašo, kaip freimai gali būti pritaikyti pedagoginiams tikslams. Laukaitis (2008) rėmėsi „FrameNet" projekto metodika SUMO ontologijai sukurti. Bernotaitytė Nemuraitė, Butkienė ir Paradauskas (2013) pritaikė „FrameNet" metodiką leksinėms ontologijoms verslo žodynui kurti.

Freimų semantikos teorija ir „FrameNet" projektas davė impulsą naujo tipo žodynams atsirasti. Freimų metodika gali būti taikoma bet kurios srities terminams tvarkyti ir sisteminti; ji atskleidžia tam tikros srities konceptualiuosius ryšius ir leidžia geriau suprasti terminų reikšmes ir jų tarpusavio ryšius. Be to, naujo tipo žodynai yra daugiakalbiai, t. y. jie pateikia tam tikros sąvokos terminologinius pavadinimus įvairiomis kalbomis, todėl gali būti naudojami terminų vertimui bei kaip gretinamosios terminologinės analizės šaltiniai. Jau yra sukurti šių sričių naujo tipo žodynai: aplinkosaugos ‒ „EcoLexicon" (Fraber et al., 2016), „DiCoEnviro" (L'Homme et al., 2016); informatikos ‒ „DiCoInfo" (L'Homme et al., 2008, 2015), teisės ‒ „JuriDiCo" (Pimentel et al., 2012), futbolo ‒ Kicktionary (Schmidt et al., 2009) ir kt.

Metodai

Tyrime buvo taikomi įvairūs duomenų išgavimo, analizės ir sisteminimo bei rezultatų apibendrinimo metodai. Tyrimo medžiagos (terminų ir predikatinių argumentų struktūrų) išgavimas iš tyrimo tikslams sudaryto lygiagrečiojo tekstyno atliktas naudojant tekstynų lingvistikos metodus: žodžių dažnio sąrašus, konkordanso analizę, kolokacinę analizę.

Išgauta tyrimo medžiaga detaliai išanalizuota taikant įvairius metodus. Pirmiausia, taikant aprašomąjį-analitinį metodą, buvo ištirti atrinkto termino mikro- ir makrokontekstai; gauti rezultatai įgalino atlikti freimais pagrįstą sąvokinių ryšių analizę bei nustatyti sąvokos RIZIKA ir kitų finansų srities sąvokų ryšį freimuose. Antra, taikant gretinamuosius kokybinius ir kiekybinius metodus, buvo ištirta sąvokinių struktūrų raiška anglų, prancūzų ir lietuvių kalbomis. Galiausiai tyrimo rezultatai apibendrinti ir pristatyti sąvokos RIZIKA kognityvinio žemėlapio pavidalu.

Tiriamojo termino atrankos principai

Siekiant nustatyti ES finansų srities teisėkūros dokumentų tekstynuose dažniausiai vartojamą terminą, buvo naudojama programa „AntConc". Šios programos įrankis *Word list* pateikė žodžių dažnio rezultatus, leidžiančius palyginti žodžių dažnius tiriamose kalbose ir sudaryti trikalbį 10-ies dažniausiai vartojamų žodžių sąrašą.

Analizės rezultatai atskleidė, kad visų trijų tirtų kalbų tekstynuose dažniausiai vartojami žodžiai yra *rizika* (risk) ir *kreditas* (credit), o žodis *pozicija* (exposure) užima trečiąją vietą dažnumo sąrašuose. Visi trys žodžiai, ypač *rizika* ir *kreditas*, dažnai vartojami kartu finansų srities teisėkūros dokumentuose. Tai galima paaiškinti glaudžiu semantiniu žodžių ryšiu: bet kokia pinigų operacija finansų sektoriuje siejama su pavojumi netekti pinigų, taigi ir kiekvienas kreditas sukelia riziką. Disertacijos tyrimo objektu buvo pasirinktas terminas *rizika*, kaip dažniausiai vartojamas terminas tekstynuose.

Tyrimo rezultatai

Daiktavardinio termino *risk / risque / rizika* mikrokontekstas

Mikrokonteksto lygmenyje kalbinė analizė buvo sutelkta į artimiausią termino *risk / risque / rizika*, kontekstą, t. y. į jo kolokatus. Termino *risk / risque / rizika* mikrokontekstas atskleidė bendrosios sąvokos RIZIKA daugialypiškumą finansų srityje ir jos ryšį su specifinėmis įvairių rizikos rūšių sąvokomis. Šiame tyrime pritaikytas pagrindinio žodžių junginio dėmens atveriamų pozicijų užpildymo mechanizmas (*slot-filling mechanism*) atskleidė priklausomųjų dėmenų skaičių ir pobūdį bei jų semantinį ryšį su daiktavardiniu dėmeniu *risk / risque / rizika*:
- RIZIKA kyla dėl pavojingo įvykio (*Harmful_event*) [1 pozicija];
- RIZIKA neigiamai veikia turtą (*Asset*) [2 pozicija] arba gyvą / negyvą objektą (*Protagonist*) [3 pozicija];

- RIZIKA yra tam tikro intensyvumo (*Intensity*) ar išplitimo (*Extension*) masto [4 pozicija];
- RIZIKA trunka tam tikrą laiką (*Time*) [5 pozicija].

Atsižvelgiant į gautus rezultatus, buvo parinktas abstrakčiausias „FrameNet" projekto freimas **„Risk_scenario"** ir pritaikytas semantinei daugiažodžių terminų su daiktavardiniu dėmeniu *risk / risque / rizika* klasifikacijai. Originalus „Risk_ scenario" buvo iš dalies pakeistas: atsirado naujas elementas *Protagonist* (gyvas / negyvas objektas, patiriantis riziką), du elementai *Harmful_event* ir *Situation* sujungti į vieną elementą *Harmful_event*, o elementas *Degree of risk* buvo padalytas į du elementus: į rizikos intensyvumą (*Intensity of risk*) ir rizikos išplitimą (*Extension of risk*). Adaptuotą „**RISK_scenario**" freimą sudaro šie elementai:

- **Pagrindiniai elementai**: turtas, riziką patiriantis gyvas / negyvas objektas, pavojingas įvykis.
- **Šalutiniai elementai:** rizikos intensyvumas, rizikos išplitimas, rizikos trukmė.

Visi šie freimo elementai panaudoti daugiažodžių terminų su pagrindiniu dėmeniu *risk / risque / rizika* semantinei klasifikacijai, t.y. terminai suskirstyti į semantines kategorijas pagal tai, kokį elementą nusako jų priklausomieji dėmenys.

Kiekybinė terminų, priklausančių skirtingoms semantinėms kategorijoms, analizė rodo tokį terminų pasiskirstymą: pavojingas įvykis 22,8 proc. (pvz., *default risk – risque de défaut – įsipareigojimų neįvykdymo rizika*), gyvas/negyvas objektas 22,8 proc. (pvz., *risk of the borrower – risque de l'emprunteur – skolininko rizika*), intensyvumas 21,4 proc. (pvz., *high risk – risque élévé – didelė rizika*), turtas 20 proc. (pvz., *credit risk – risque de crédit – kredito rizika*), išplitimas 8,5 proc. (pvz., *systemic risk (macroprudential risk) – risque systémique (macroprudentiel) – sisteminė (makroprudencinė rizika)*), laikas/trukmė 4,2 proc. (pvz., *intraday credit risk – risque de crédit intrajournalier – dienos kredito rizika*). Kitas svarbus parametras yra terminų vartojimo ES teisėkūros dokumentuose dažnis. Dažniausiai vartojami terminai nusako su turtu susijusią riziką (dažnis – 766). Terminai, nusakantys riziką, susijusią su pavojingu įvykiu (dažnis – 297), gyvu/negyvu objektu (dažnis – 284), bei rizikos išplitimą (dažnis – 270) yra antroje vietoje. Terminai, nusakantys rizikos intensyvumą (dažnis - 152) ir rizikos trukmę (dažnis – 42), vartojami rečiau.

Tyrimo rezultatai parodė, kad finansų srityje pagrindinis dėmesys skiriamas turtui bei gyvam/negyvam objektui, kuris patenka į rizikingą situaciją, atsiradusią dėl pavojingo įvykio. Taip pat reikšmingas yra rizikos išplitimas, tačiau laikas, kiek trunka rizika ar rizikos intensyvumas, yra antraeilės svarbos.

Formaliosios daugiažodžių terminų su daiktavardiniu dėmeniu *risk / risque / rizika* sandaros analizė atskleidė universaliųjų koncepcinių modelių kalbinės raiškos įvairovę trijose kalbose. Formalios struktūros analizėje buvo nagrinėjami šie terminų darybos aspektai: terminų dėmenų skaičius, modifikavimo modeliai ir sintaksinės struktūros.

Modifikavimo modeliai buvo nustatyti pagal priklausomųjų dėmenų padėtį: prepozicinė modifikacija (kai priklausomieji dėmenys yra prieš daiktavardinį dėmenį *risk / risque / rizika*) ir postpozicinė modifikacija (kai priklausomieji dėmenys yra po daiktavardinio

dėmens *risk /risque / rizika*). Sintaksinės struktūros buvo nustatytos pagal priklausomųjų dėmenų poziciją ir jų kalbos dalis.

Tyrimas parodė, kad terminų modifikavimo modeliai skiriasi ištirtose kalbose. Prepozicinė modifikacija vyrauja anglų ir lietuvių kalbose, o postpozicinė modifikacija būdinga tik prancūzų kalbai. Postpozicinės modifikacijos modelių lietuvių kalboje visai neaptikta, o anglų kalboje terminų, sudarytų pagal šį modifikacijos modelį, aptikta mažai (8 terminai). Trijų kalbų tiriamojoje medžiagoje nebuvo aptikta terminų, kurie turėtų abu modifikacijos variantus (priklausomasis dėmuo + *risk/risque/rizika* + priklausomasis dėmuo).

Tyrimas nustatė, kad terminai papratai turi vieną ar kelis priklausomuosius dėmenis, kurie yra daiktavardžiai, būdvardžiai, prieveiksmiai ir būdvardiniai ar prielinksniniai junginiai, užimantys įvairias pozicijas daugiažodžiuose terminuose. Analizės rezultatai rodo, kad anglų ir lietuvių kalbose terminų *risk/rizika* priklausomieji dėmenys yra daiktavardžiai ir būdvardžiai, o prancūzų terminą *risque* dažniausiai tikslina prielinksniai junginiai ar būdvardžiai. Nustatyta, kad būdingiausi anglų ir lietuvių kalbų modeliai yra **(Adv.) + Adj.+ risk** ir **N + risk,** kiekvienoje kalboje šių modelių terminų skaičius svyruoja tarp 20–24 *(pvz., systemic risk − sisteminė rizika, concentration risk − koncentracijos rizika).* Prancūzų kalbai būdingi tokie modeliai, kaip **risk + Prep.+N(+N)** (šiam modeliui priskiriama 24 terminai, pvz., *risque de crédit*) ir **risk + Adj.** (priskiriama 18 terminų, pvz., *risque opérationnel*). Modelis **risk + Prep.+N(+N)** taip pat buvo aptiktas anglų kalboje, tačiau jam priskirti tik tik 7 terminai, taigi, šis modelis, priešingai nei prancūzų kalboje, anglų kalbai nėra labai būdingas. Sintaksiškai angliški ir lietuviški terminai dažniau sutampa nei prancūziški.

Terminai skiriasi dėmenų skaičiumi. Tyrimas atskleidė dvi pagrindines tendencijas. Pirma, ES terminų kūrėjai laikosi pagrindinio kalbos ekonomiškumo reikalavimo (terminų trumpumo): dvižodžiai terminai vyrauja visose trijose kalbose. Antra, tik 6 angliški terminai) ir 8 prancūziški terminai turi daugiau nei keturis žodžius, o lietuviški terminai, turintys 4 ir daugiau dėmenų, sudaro nemažą terminų dalį (15 iš 70).

Dvižodžiuose terminuose pagrindinis dėmuo *risk / risque / rizika* tiesiogiai prisijungia priklausomuosius dėmenis, t. y. modifikacija yra vienapakopė. Kai terminas yra daugiažodis, modifikacija gali būti vienos ar kelių pakopų, pvz., angliško termino *gold price risk* 'aukso kainos rizika' daiktavardinį dėmenį *risk* modifikuoja daiktavardis *price* 'kaina', kuris savo ruožtu yra modifikuojamas daiktavardžiu *gold* 'auksas'; prancūziško termino *risque de taux d'intérêt* daiktavardinį dėmenį *risque* modifikuoja daiktavardis *taux* 'procentas', kurį savo ruožtu modifikuoja kitas daiktavardis *intérêt* 'palūkanos' su prielinksniu *de*; lietuviško termino *dienos ir vienos nakties likvidumo rizika* daiktavardinį dėmenį *rizika* modifikuoja žodžiai *dienos, nakties ir likvidumo*, o dėmenį *nakties* savo ruožtu modifikuoja skaitvardis *vienas*.

Formaliosios struktūros analizės rezultatai prisideda prie gretinamųjų daugiažodžių terminų darybos modelių tyrimų. Tyrimas atskleidė terminų darybos tendencijas anglų, prancūzų ir lietuvių kalbose ir pateikė terminologinę informaciją, kuri gali būti naudinga terminų kūrėjams, tvarkytojams ir vertėjams. Tyrime nustatyti sintaksiniai modeliai gali būti naudojami kuriant automatines terminų atpažinimo programas.

Daiktavardinio termino *risk / risque / rizika* makrokontekstas

Makrokonteksto lygmenyje į vienažodžius terminus *risk / risque / rizika* (VŽT) ir daugiažodžius terminus su pagrindiniu dėmeniu *risk / risque / rizika* (DŽT) buvo žvelgiama iš jų pozicijos predikatinėse argumentų struktūrose. Toks požiūris atskleidė VŽT ir DŽT nusakomų sąvokų ryšį su kitomis finansų srities sąvokomis. Tyrimo metu dėmesys sutelktas į veiksmažodžius, prijungiančius terminus su daiktavardiniu dėmeniu *risk/risque/rizika*. Šie veiksmažodžiai formuoja argumentų struktūras, kurios aktyvuoja freimus, reprezentuojančius su rizika susijusias situacijas. Predikatinės argumentų struktūros laikomos termino *risk / risque / rizika* makrokontekstu. Tiriant išanalizuota iš tekstynų išrinktų veiksmažodžių semantika, nustatyti veiksmažodžių aktyvuojami predikatiniai freimai (darbe dar vadinami makrofreimais), atlikta predikatinių freimų semantinė, sintaksinė ir leksinė analizė.

Anotuojant sakinius, kuriuose pavartoti VŽT ir DŽT *risk / risque / rizika*, aptikti 47 angliški veiksmažodžiai, 54 prancūziški veiksmažodžiai ir 25 lietuviški veiksmažodžiai. Šie veiksmažodžiai buvo suskirstyti į keturias semantines kategorijas, nusakančias buvimą, patyrimą, pažinimą ir veiksmą (EXISTENCE, EXPERIENCE, PERCEPTION, ACTION). Anotuotų veiksmažodžių priskyrimas atitinkamoms semantinėms kategorijoms buvo pagrįstas veiksmažodžių apibrėžtimis, pateiktomis anglų kalbos žodyne „Cambridge Dictionary", prancūzų kalbos žodyne „Dictionnaire Larousse" bei „Lietuvių kalbos žodyne".

Veiksmažodžių aktyvuoti freimai buvo suskirstyti į dvi kategorijas, kurios atspindi specializuotas žinias, susijusias su terminu *risk / risque / rizika*, ir etapus, kurias pereina rizika nuo pat pradžių, kai ji atsiranda, iki to momento, kai specialistai imasi priemonių jai suvaldyti:

- Freimai, atskleidžiantys pirmąjį rizikos suvokimo etapą (CAUSE_RISK, EXPERIENCE_RISK). Šis etapas apima situacijas, kai tam tikras veiksnys (gyvas ar negyvas objektas, veiksmas) sukelia riziką, paveikia kitą objektą, paveiktas objektas patiria riziką. Šiuos freimus aktyvuoja veiksmažodžiai, priklausantys buvimo ir patyrimo semantinėms kategorijoms (EXISTENCE ir EXPERIENCE).
- Freimai, atskleidžiantys antrąjį rizikos suvokimo etapą (PERCEIVE and ASSESS_RISK, CHANGE and CONTROL_RISK). Šis etapas apima situacijas, kai specialistai nustato riziką, įvertina jos svarbą ir taiko priemones jai sumažinti ir kontroliuoti. Šiuos freimus aktyvuoja veiksmažodžiai, priklausantys pažinimo ir veiksmo semantinėms kategorijoms (PERCEPTION ir ACTION).

Tokia loginė grandinė atspindi specializuotų žinių, susijusių su terminu *risk / risque / rizika*, struktūrizavimą. Freimai buvo atrinkti iš „FrameNet" projekto ir pritaikyti finansų srities predikatinėms argumentų struktūroms tirti.

Visus freimus sudaro keturi pagrindiniai elementai, kurie reprezentuoja su rizika susijusių situacijų dalyvius. Sakiniuose šie elementai atlieka semantinius predikatinių argumentų struktūrų vaidmenis: Kauzatyvas (Cause), Efektas (Effect), Agentas (Agent), Instrumentas (Means) ir Eksperientas (Experiencer). Semantinių vaidmenų apibrėžimai grindžiami projekte „FrameNet" pateiktais apibrėžimais:

- **Kauzatyvo (Cause)** vaidmenį atlieka gyvas ar negyvas objektas, jėga ar įvykis, sukeliantis Efektą.

- **Efekto (Effect)** vaidmenį atlieka procesas arba būsena, kuriuos sukelia Kauzatyvas. Ištirtoje medžiagoje Efektą išreiškia terminai, nusakantys RIZIKOS sąvoką.
- **Agento (Agent)** vaidmenį atlieka gyvas arba negyvas objektas, nustatantis, įvertinantis, keičiantis ir/arba kontroliuojantis Efektą.
- **Eksperiento (Experiencer)** vaidmenį atlieka gyvas ar negyvas objektas, kuris patiria Efektą.
- **Instrumento (Means)** vaidmenį atlieka veiksmas ar finansinė priemonė, kuri keičia Efektą.

Suskirsčius anotuotas predikatines argumentų struktūras į atitinkamus freimus, buvo atlikta trijų lygmenų analizė: freimų aprašymas (freimų elementai ir jų tarpusavio ryšiai), sintaksinė freimų raiška (argumentų struktūrų analizė ir jų semantiniai-sintaksiniai modeliai), freimų leksinė raiška (leksinių vienetų, nusakančių freimo elementus, analizė).

Sintaksinė analizė atskleidė semantinių-sintaksinių modelių tipus, kurių dauguma sutampa visose trijose ištirtose kalbose. Semantinį Effecťo (RISK) vaidmenį atliekantys terminai paprastai užima veiksnio ar tiesioginio papildinio poziciją sakinyje, rečiau netiesioginio papildinio poziciją ištirtose kalbose:

a) Cause/Agent (Sbj.)+V+Effect **RISK** (Obj.);
b) Cause (Sbj.)+V+Effect **RISK** (Obj.)+Experiencer (Compl.);
c) Effect **RISK** (Sbj.) +V+ Cause (Obj./Compl.)
d) Agent (Sbj.) + V+Amount (Obj.)+ Effect **RISK**(Obj./Compl.);
e) Experiencer(Sbj.) +V+ Effect **RISK** (Obj.);
f) Effect **RISK** (Sbj.)+V+[Means (Compl.)]+Agent(implicit) ;
g) Agent (Sbj.)+V+[Means (Obj./Compl.)]+ Effect **RISK**(Obj./Compl.).

Kadangi anglų, prancūzų ir lietuvių kalbų morfologinės struktūros skiriasi (anglų ir prancūzų kalbos yra analitinės, o lietuvių kalba sintetinė), leksinių vienetų, atliekančių tas pačias sintaksines funkcijas, gramatinė raiška taip pat skiriasi. Lietuvių kalboje predikatinių struktūrų argumentų sintaksinės funkcijos išreiškiamos daiktavardžių galūnėmis ir prielinksniais, o anglų ir prancūzų kalbos – griežta žodžių tvarka ir prielinksniniais žodžių junginiais.

Freimų elementų leksinė raiška sutampa trijose kalbose ir nusako finansų sistemoje dalyvaujančius asmenis bei organizacijas, finansines priemones, veiksmus, procesus ar vertingus dokumentus. Šie rizikos situacijų dalyviai yra tampriai tarpusavyje susiję ir priklausomi vieni nuo kitų, jie gali atlikti skirtingus vaidmenis skirtingose situacijose: tie patys dalyviai vienoje situacijoje gali sukelti riziką, kitoje ją patirti, o dar kitoje dalyvauti rizikos valdymo procesuose. Taigi freimai tarsi veidrodis atspindi vienas kitą.

Kalbinių priemonių vartojimo ypatybės lygiagrečiajame tekstyne

Kadangi tyrimo medžiagą sudarė lygiagretusis trijų kalbų tekstynas, t. y. originalūs tekstai ir jų vertimai, neišvengiamai tyrimo metu teko susidurti su kalbinėmis priemonėmis, vartojamomis semantinio ekvivalentiškumo užtikrinimo, klausimais.

Mikrokonteksto analizė parodė, kad visi 70 angliškų terminų su daiktavardiniu dėmeniu *risk / risque / rizika* turėjo prancūzų ir lietuvių kalbų atitikmenis. Jie laikomi ekvivalentais, nes kiekvieno daugiažodžio termino dėmens reikšmė sutampa visose trijose kalbose, pvz., *credit risque – risque de crédit – kredito rizika; systemic risk – risque systémique – sisteminė rizika.* Aptikti 5 angliški terminai, kurių lietuviški atitikmenys turi daugiau dėmenų, o prancūziški atitikmenys tokį patį dėmenų skaičių kaip angliškieji, pvz., *transfer risk – risque de non-transfert – lėšų pervedimo rizika ; currency risk – risque de change – valiutos kurso rizika ; undue risk – risque excessif – pernelyg didelė rizika.* Tai rodo, kad tam tikrais atvejais lietuvių vertėjai siekia tiksliau nusakyti sąvoką ir dėl to pasirenka detalesnę modifikaciją.

Makrokonteksto analizė atskleidė, kad anglų ir prancūzų kalbų sintaksinės struktūros dažniausiai sutampa, tai galima paaiškinti šių kalbų tipologiniu panašumu. Tuo tarpu lietuvių kalbos dokumentuose semantinis ekvivalentiškumas įgyvendinamas įvairiomis sintaksinių struktūrų transformacijomis: perėjimu nuo daiktavardinių prie veiksmažodinių konstrukcijų, nuo pasyvios prie aktyvios formos ar atvirkščiai, veiksmažodžių praleidimu, sintaksinio-semantinio modelio transformacija ir kt.).

Sąvokos RIZIKA kognityvinis žemėlapis

Tyrimo rezultatai atskleidė du svarbius sąvokos RIZIKA pažinimo etapus: pirma, kai rizika atsiranda ir pradeda veikti gyvą / negyvą objektą / procesą; antra, kai rizika nustatoma, įvertinama, ir suvaldoma. Termino *risk / risque / rizika* kontekstų analizė leido sukurti kognityvinį sąvokos RIZIKA žemėlapį, kuris parodo ryšį tarp makrofreimų (išreikštų termino *risk / risque / rizika* makrokontekstu) ir mikrofreimų (išreikštų termino *risk / risque / rizika* mikrokontekstu). Sąvokos RIZIKA kognityvinis žemėlapis pristato šios sąvokos suvokimo procesą ir leidžia pamatyti rizikos situacijų dalyvių tarpusavio ryšius finansų srityje.

Išvados

1. Tyrimas parodė, kad freimų semantikos metodiniai principai, vėliau išplėtoti „FrameNet" projekte, gali būti taikomi finansų srities terminų su daiktavardiniu dėmeniu *risk/ risque/rizika* semantinei-sintaksinei analizei, suteikiančiai svarbios informacijos tiek apie šiais terminais nusakomas sąvokas ir jų ryšius su kitomis sąvokomis, tiek apie kalbines raiškos priemones, vartojamas šioms sąvokoms ir jų ryšiams išreikšti.
2. Termino *risk / risque / rizika* mikrokonteksto analizė leidžia daryti šias išvadas:
    1) Kolokacinis metodas yra veiksmingas būdas tirti leksinę atrinkto termino aplinką bei išgauti daugiažodžius terminus tekstynuose. Metodas remiasi prielaida, kad sudėtingesnės struktūros terminai sudaromi iš paprastesnės struktūros terminų.

2) Freimais paremta daugiažodžių terminų analizė su atrinktu daiktavardiniu dėmeniu leidžia klasifikuoti terminus į semantines kategorijas pagal priklausomųjų dėmenų reikšmę. Pasirinktas ir adaptuotas iš „FrameNet" projekto „RISK_scenario" freimas yra tinkamas finansų srities terminų semantinei klasifikacijai. „RISK_scenario" freimas yra nuosekli susijusių sąvokų struktūra, įgalinanti suvokti terminą *risk / risque / rizika* ir tinkamai suklasifikuoti daugiažodžius terminus su daiktavardiniu terminu *risk / risque / rizika* į semantines kategorijas.

3) Dauguma surinktų terminų su daiktavardiniu dėmeniu *risk / risque / rizika*, nusako dėl pavojingo įvykio kylančią riziką, turto praradimo riziką bei tam tikro išplitimo riziką. Šie terminai taip pat yra dažniausiai vartojami tekstynuose. Tyrimo rezultatai rodo, kad finansų srityje dėmesys sutelkiamas į turtą ar finansų srities dalyvius, kuriems gresia rizika dėl pavojingo įvykio. Svarbiausia – nustatyti pavojingą paveikį, o rizikos intensyvumas ir trukmė yra antraeilės reikšmės.

4) Gretinamoji daugiažodžių terminų analizė atskleidžia kalbinių priemonių, vartojamų terminų darybai anglų, prancūzų ir lietuvių kalbose, įvairovę. Pastebėtos šios terminų darybos tendencijos tiriamose kalbose:

- vyraujantis termino tipas pagal dėmenų skaičių visose trijose kalbose yra dvižodžiai terminai – jie sudaro didžiausią tyrimui surinktų angliškų, prancūziškų ir lietuviškų terminų dalį; tai rodo, kad ES terminų kūrėjai laikosi pagrindinio kalbos ekonomiškumo reikalavimo (terminų trumpumo);

- dauguma angliškų ir visi lietuviški daugiažodžiai terminai suformuoti taikant prepozicinės modifikacijos modelį, o visi prancūzų kalbos daugiažodžiai terminai sudaryti pagal postpozicinės modifikacijos modelį.

- daiktavardiniai priklausomieji dėmenys jungiami prie pagrindinio dėmens skirtingais būdais: anglų ir lietuvių kalbose jie dažniausiai jungiami tiesiogiai (*credit risk, kredito rizika*), o prancūzų kalboje jie jugiami su prielinksnio *de* pagalba (*risque de crédit*).

3. Makrokonteksto termino *risk / risque / rizika* analizė leidžia daryti šias išvadas:

1) Kolokacijų V + RIZIKA, RIZIKA + V veiksmažodžiai aktyvuoja predikatinius freimus, kurie konfigūruoja bendrąją veiksmažodžių reikšmę ir sukuria specifines semantines pozicijas veiksmažodžių argumentams. Predikatinių freimų analizė įgalina atskleisti, kokie veiksmai ir procesai yra susiję su RZIKOS sąvoka.

2) Finansų srities dokumentuose veiksmažodžiai, prisijungiantys terminus su daiktavardiniu dėmeniu *risk / risque / rizika*, aktyvuoja keturių tipų freimus: CAUSE_RISK, EXPERIENCE_RISK, PERCIEVE and ASSESS_RISK, CHANGE and CONTROL_ RISK. Freimai fiksuoja rizikos egzistavimo etapus: rizikos atsiradimas ir patyrimas; rizikos nustatymas ir įvertinimas; rizikos valdymas ir kontrolė.

3) Gretinamoji freimų sintaksinės raiškos analizė atskleidė, kad dauguma semantinių-sintaksinių modelių tiriamose kalbose sutampa. Tik keletas modelių yra būdingi vienai ar dviem kalboms: EN / FR Cause (Sbj.) + V + Effect **RISK** (Compl.); EN / LT Experiencer (Sbj.) + V + Effect **RISK** (Obj.) + Cause (Compl.); FR / LT Effect **RISK** (Sbj.) + V + Experiencer (Compl.) + Cause (Compl.). Didelis sutampančių modelių skaičius gali būti paaiškintas tuo, kad tiriamoji medžiaga buvo išgauta iš lygiagrečiojo

tekstyno, sudaryto iš ES originalių ir verstinių dokumentų, kuriuose siekiama užtikrinti aukščiausią tekstų lygiavertiškumą tiek semantiniu, tiek sintaksiniu lygmeniu.

4) Freimų leksinės raiškos analizė parodė, kad freimų elementai yra reiškiami tokios pačios semantikos leksikos vienetais visose trijose kalbose: finansų sistemoje dalyvaujančių asmenų bei organizacijų pavadinimais, finansinių priemonių, veiksmų, procesų ar vertingų dokumentų pavadinimais. Šie rizikos situacijų dalyviai yra tampriai tarpusavyje susiję ir priklausomi vieni nuo kitų, jie gali atlikti skirtingus vaidmenis skirtingose situacijose: tie patys dalyviai vienoje situacijoje gali sukelti riziką, kitoje ją patirti, o dar kitoje dalyvauti rizikos valdymo procesuose. Taigi freimai tarsi veidrodis atspindi vienas kitą.

4. Analizuojant kalbinių priemonių vartojimo lygiagrečiajame tekstyne ypatumus, išryškėja šios tendencijos: mikrokonteksto lygmenyje semantinis ekvivalentiškumas įgyvendinamas visose trijose kalbose tapačiomis arba labai panašiomis kalbinėmis priemonėmis: dauguma su rizika susijusių sąvokų nusakomos daugiažodžiais terminais, kuriuos sudaro daiktavardiniai junginiai; taip pat visose trijose kalbose daugiažodžiai terminai savo leksine sandara (dėmenų skaičiumi ir jų reikšmėmis) yra tapatūs, retais atvejais dėmenų skaičius vienoje iš kalbų (lietuvių) yra didesnis. Makrokontekste lietuvių kalba išsiskiria, joje semantinis ekvivalentiškumas dažnai įgyvendinamas pasirenkant kitokias sintaksines priemones nei anglų ir prancūzų kalbose: predikatines konstrukcijas, kurios atitinka daiktavardines konstrukcijas anglų ir prancūzų kalbose; aktyvą, kuris atitinka pasyvą, ir atvirkščiai; veiksmažodžių praleidimą; kitokio tipo sintaksinius-semantinius modelius ir kt. Tai galima paaiškinti skirtinga tiriamųjų kalbų struktūra.

5. Freimų semantikos metodika, pritaikyta pasirinktos finansų terminų grupės mikro- ir makrokontekstų analizei bei klasifikacijai, leido sudaryti šios srities kognityvinį žemėlapį, atspindintį finansų srities žinias apie sąvoką RIZIKA ir jos suvokimo procesą. Analizė parodė, kad veiksmažodžiai yra konceptualiosios konstantos, konfigūruojančios kognityvinio žemėlapio pagrindinius konceptualiuosius parametrus, o daiktavardžiai užpildo pozicijas, kurias aktyvuoja veiksmažodžiai, ir formuoja konceptualiąją mikroaplinką.

6. Daugiažodžių terminų ir predikatinių argumentų struktūrų semantinių-sintaksinių modelių gretinamosios analizės rezultatai pateikia terminologinę informaciją, kuri gali būti naudinga įvairioms tikslinėms grupėms. Tyrimu nustatyti daugiažodžių terminų darybos modeliai gali būti svarbūs vertėjams ir terminijos tvarkytojams bei naudojami kuriant automatinius terminų atpažinimo metodus. O anotuotų argumentų struktūrų semantiniai-sintaksiniai modeliai gali būti naudingi vertėjams bei mašininio vertimo technologijų kūrėjams. Be to, tyrimo tikslams sudarytas lygiagretusis tekstynas yra prieinamas visuomenei CLARIN saugykloje ir gali būti naudojamas įvairiems tyrimų tikslams.

Publikacijų disertacijos tema sąrašas

Pagrindiniai disertacijos rezultatai ir išvados paskelbti keturiuose moksliniuose straipsniuose ir pristatyti penkiose tarptautinėse ir nacionalinėse konferencijose bei kituose moksliniuose renginiuose. Straipsniai publikuoti moksliniuose žurnaluose, indeksuotuose tarptautinėse mokslo duomenų bazėse.

1. Smirnova, Oksana, Rackevičienė, Sigita. ES teisės aktų terminai lietuvių ir prancūzų kalbomis. Kalba ir kontekstai = Language in different contexts: mokslo darbai. Vilnius: Edukologija. ISSN 1822-5357. 2016, t. 7 (1), d.1, p. 78-92. [Communication & Mass Media Complete; Communication Source; MLA] [M.kr.: 04H]

2. Smirnova, Oksana, Rackevičienė, Sigita. The EU English terms including the word *market* and their French and Lithuanian equivalents. Darnioji daugiakalbystė : periodinis mokslo žurnalas = Sustainable multilingualism : biannual scientific journal, no. 11, Kaunas: ISSN 2332-2019. 2017, p. 179-195. [CEEOL, GOOGLE SCHOLAR, MLA] [M.kr.: 04H];

3. Smirnova, Oksana. Semantic analysis of the EU English financial terms including the word *Risk* and their equivalents in French and Lithuanian = Europos sąjungos anglų kalbos finansinių terminų su pagrindiniu dėmeniu *rizika* ir jų ekvivalentų prancūzų ir lietuvių kalbomis semantinė analizė // Kalba ir kontekstai = Language in different contexts: mokslo darbai. Vilnius: Edukologija. ISSN 1822-5357. 2018, t. 8 (1), p. 78-93. [Communication & Mass Media Complete; Communication Source; MLA] [M.kr.: 04H];

4. Smirnova, Oksana, Rackevičienė, Sigita. Corpus-driven analysis of multi-word terms including the word 'Risk' in English, French and Lithuanian. Terminologija, t. 25. ISSN 1392-267X. 2018, p.86-106. [CSA: Linguistics and Language Behavior Abstracts; CEEOL – Central and Eastern European Online Library; MLA] [M.kr.: 04H].

Pranešimai tarptautinėse konferencijose ir kituose mokslo renginiuose

2016 m. gegužės 5-6 d. pranešimas tema „*ES teisės aktų terminai lietuvių ir prancūzų kalbomis*" VII-oje tarptautinėje mokslinėje konferencijoje „*Lingvistiniai, didaktiniai ir sociokultūriniai kalbos funkcionavimo aspektai*", Lietuvos edukologijos universitetas, Vilnius;

2016 m. lapkričio 24 d. pranešimas tema „*Daugiažodžiai terminai ir jų dėmenų junglumas ES teisės aktuose lietuvių ir prancūzų kalbomis*" tarptautinėje doktorantų konferencijoje „*Filologijos tyrinėjimų laukas ir problemos*", Lietuvos edukologijos universitetas, Vilnius;

2017 m. gegužės 26-27 d. pranešimas tema "*The EU English terms including the word market and their French and Lithuanian equivalents*"/ „*ES angliškų terminų, kurių pagrindinis dėmuo „rinka" analizė ir gretinimas su ekvivalentais prancūzų ir lietuvių kalbose*" IV-oje tarptautinėje UKI ir XI-oje LKPA mokslinėje konferencijoje „*Darnioji daugiakalbystė 2017*", Vytauto Didžiojo Universitetas, Kaunas;

2017 m. birželio 1-2 d. pranešimas tema „*ES daugiažodžiai angliški terminai su pagrindiniu*

dėmeniu „rinka" ir jų lietuviški bei prancūziški atitikmenys"/"The EU multi-word terms with the base market and their equivalents in French and Lithuanian" 2-ojoje tarptautinėje mokslinėje konferencijoje „*Moksliniai, administraciniai ir edukaciniai terminologijos lygmenys*", Lietuvių kalbos institutas, Vilnius;

2018 m. gegužės 3–4 d. pranešimas tema *"Semantic analysis of the EU English financial terms including the word risk and their equivalents in French and Lithuanian"/„ES anglų kalbos finansinių terminų su pagrindiniu dėmeniu rizika ir jų ekvivalentų prancūzų ir Lietuvių kalbomis semantinė analizė"* VIII-oje tarptautinėje mokslinėje konferencijoje „*Lingvistiniai, didaktiniai ir sociokultūriniai kalbos funkcionavimo aspektai*", Lietuvos edukologijos universitetas, Vilnius;

TRUMPOS ŽINIOS APIE AUTORĘ

Oksana Smirnova 1999 m. baigė prancūzų filologijos bakalauro studijas Vilniaus Universitete, 2001 m. – prancūzų filologijos magistro studijas tame pačiame universitete ir įgijo humanitarinių mokslų magistro laipsnį. 2015-2019 m. Mykolo Romerio universitete studijavo doktorantūroje pagal jungtinės Lietuvos edukologijos universiteto (Vytauto Didžiojo universiteto) ir Mykolo Romerio universiteto filologijos krypties doktorantūros programą. Doktorantūros studijų metu, gavusi Erasmus + stipendiją, dalyvavo mokslinėje stažuotėje Prahos Karlo Universiteto Taikomosios lingvistikos institute (2017 12 01 – 2018 01 30).

2014 m. pradėjusi dirbti lektore Mykolo Romerio universitete, susidomėjo dalykinės kalbos moksliniais tyrimais. Nuo 2014 m. dėsto prancūzų kalbą (A1-B2) kaip antrąją užsienio kalbą dalykinės ir kitos užsienio kalbos bei vertimo ir redagavimo programų studentams. Prancūzų kalbos dėstymas anglų kalba bei nuolatinis asmeninio bei profesinio augimo siekis paskatino pradėti gretinamąsias anglų, prancūzų ir lietuvių terminologijos studijas doktorantūroje.

*Freimų semantika leidžia atskleisti semantinius ir sintaksinius modelius, reprezentuojančius konceptualiuosius freimus, ir paaiškina, kaip kalba įgalina išreikšti reikšmes. Tyrimo tikslas – remiantis freimų semantikos metodika atlikti terminų, nusakančių sąvoką RIZIKA trikalbiame lygiagrečiajame finansų srities tekstyne, analizę ir sugretinti kalbines priemones, vartojamas su rizika susijusioms situacijoms išreikšti anglų, prancūzų ir lietuvių kalbomis. Tyrimo objektas – finansų srities daugiažodžiai terminai su daiktavardiniu dėmeniu **risk / risque / rizika**. Iki šiol nėra darbų, skirtų kelių kalbų ES finansų srities terminų analizei taikant konceptualiuosius freimus, šiuo tyrimu siekiama užpildyti šią spragą. Darbas yra reikšmingas dviem pagrindiniais aspektais. Pirma, tai yra pirmasis mokslinis darbas, kuriame freimų semantikos metodika taikoma gretinamajai anglų, prancūzų ir lietuvių kalbų terminų analizei. Anglų ir prancūzų kalbų terminija jau kelis dešimtmečius tiriama taikant freimų semantikos metodiką, tačiau tai yra pirmasis bandymas pritaikyti šią metodiką lietuvių kalbos terminų analizei. Antra, tekstynų lingvistikos metodai atskleidė tikrąją terminų vartoseną ir tam tikros specializuotos srities žinių konceptualizavimo mechanizmus bei jų kalbinės raiškos ypatumus kiekvienoje kalboje. Taigi tyrimo rezultatai gali būti naudingi terminijos tyrėjams, praktikams, dėstytojams, vartotojams ir kitiems tarptautinės specializuotos komunikacijos dalyviams, kuriems aktuali kalbos ir žinių sąsaja.*

*Frame Semantics allows for the revelation of semantic and syntactic patterns representing conceptual frames and explains how language functions to make meaning possible. The aim of the research is to carry out a frame-based analysis of the terms designating the concept RISK in an ad hoc trilingual parallel corpus of financial documents, and contrast the linguistic means used to express risk-related situations in English, French and Lithuanian. The object of the research is multi-word terms with the nominal base **risk/risque/rizika**. There are no works on terms from EU financial field applying Frame Semantics methodology in several languages so far. The given research attempts to fill this gap. Therefore, it is significant in two major aspects. First, this is the first scientific work in which Frame Semantics methodology is applied for the contrastive analysis of the English, French and Lithuanian terminology. While the English and French terminology has been investigated using frame-based approach for several decades, it is the first attempt to apply this methodology for the Lithuanian terminological data of the financial field. Second, Corpus Linguistics methodology disclosed the real use of terms and revealed the perception of the universal conceptualisation of a domain in question and peculiarities of its linguistic expression in different languages. Thus, the findings of this research might be applied by terminology researchers, practitioners, trainers, users and other participants of the international specialised communication whose interests and work concern the links between language and knowledge.*