

THESAURUS MODELLING OF FINANCIAL TERMINOLOGY IN GERMAN¹**Svitlana Kiyko**

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Summary

This study presents a systematic approach to thesaurus modelling of the terminological system of the subject area 'Finance' in the German language, drawing on terminological vocabulary extracted from the headlines and subheadings of the *Frankfurter Allgemeine Zeitung* (2020–2025). From a corpus of 5,000 lexical units, 3,200 unique finance-related terms were identified and subjected to comprehensive structural-semantic analysis.

A hierarchical network model proved most effective for structuring the finance term field. Applying this method, the subject area 'Finance' was divided into 15 thematic fields, including *Financial Market, Financial Instruments, Capital, Banks, Stock Exchanges, Trade, Budget and Fiscal Policy, Investments, European and International Funds, Money, Services, Social Benefits, Economic Sciences and Research, the European Community, and Miscellaneous Terms*. Each field was further subdivided into micro-fields of the first, second, third, and up to the seventh order, producing a detailed hierarchical classification of financial terminology.

The research resulted in the development of a codified alphabetical list of German finance terms, which constitutes the basis for a structured thesaurus of the subject area 'Finance'. This thesaurus enables users to navigate the terminological system by establishing semantic relationships between terms and facilitates professional communication, lexicographic work, and foreign language instruction in specialized domains. The findings contribute to a broader understanding of the principles of terminology organization and offer a replicable methodological framework for the thesaurus modelling of other specialized subject areas.

Key words: financial terminology, hierarchical structure, semantic analysis, domain-specific thesaurus, lexicographic systematization.

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1. Introduction

Modern linguistics is characterized by a heightened interest in the systematic study of language and speech, particularly at the lexical level. The systemic relationships of terminological vocabulary in specialized texts are most evident. The in-depth study of specialized terminology, terminological definitions, the examination of problems and principles of thesaurus compilation in various subject areas, as well as the functional characteristics of terminological vocabulary in texts, are acquiring exceptional relevance in contemporary linguistics.

The growing interest in the study of terms dates to the 1960s–70s (L. Herzog, N. Levadna, O. Ponomariv, Y. Shevelov, W. Stein, E. Wüster, and others). The works of these linguists

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provide definitions of the key concepts of modern terminology, such as the structure and classification of terms, the relationship between terminology and language, and the principles of term formation and standardization. Contemporary scholars (M.T. Cabré, P. Drewer, J. Hennig, L. Hoffmann, F. Mayer, T. Kiyak, S. Kiyko, U. Reinke, Th. Roelcke, K.-D. Schmitz, S.E. Wright, and others) have considerably expanded the range of terminological problems under study, describing the relationship between terms and common language, the ways in which terminology is replenished, and the issues of monosemy and polysemy of the term, etc.

As T. Roelcke notes, the rapid growth of scientific and technical knowledge in our time is reflected in the fact that more than 90% of new words appearing in modern languages consist of specialized vocabulary (Roelcke, 2010: 58–59). Consequently, the growth in the number of terms from various sciences greatly exceeds the number of common words in the language, while an increasing number of terms are penetrating everyday speech. In view of this, the study of specialized vocabulary problems is becoming increasingly important for understanding linguistic processes in general. The flow of linguistic and specialized information to be processed is so large that automation of this process is indispensable. Under these conditions, there is a need to systematize terminology by constructing lexico-semantic terminological systems of subject areas.

Thus, the relevance of the topic is determined by the need for a systematic study of German terms in the subject area of 'Finance'. The central and most important terminological task is the ordering of terminology, which consists of a series of stages: inventorying the terms of the chosen field of knowledge, systematizing the concepts of that field, analyzing the terminology to identify its shortcomings, characteristics and trends of development, normalization proper (i.e., ordering the meaning and form of terms), and finally, the codification of terms. The importance of describing the lexico-semantic terminological system of the subject area 'Finance' and creating a codified list of terms belonging to it lies in the fact that the study of lexico-semantic terminological systems, their interrelationships and their connection with the literary language, serves to reveal the general trends of language development as a whole and of specialized language (terminology) in particular, and helps to solve practical tasks in the field of lexicography and German language teaching.

As the primary indicators of progress in any society, economics and finance are always intensively developing, constantly being updated, reflecting the progressive movement of society. The modern financial terminology system is in the process of formation and development, and the terminological flow that has entered the domestic language of the market carries a mass of new words. The 'conductors' of these new terms are, first and foremost, banks, currency and financial exchanges, customs and tax services, as well as terminological dictionaries and reference books.

The most comprehensive systematic study of German terminology in the subject area of 'Finance' is the analysis of the terminology system carried out by J.P. Krahn and H. Schmidt, which provides a detailed description of the construction of an economic terminology system (Krahn, Schmidt 2004). The work of the group of authors V. Tschizhakowski, O. Schtscherbinina, A. Popesku 'Bildung des terminologischen semantischen Systems im Fachgebiet „Wirtschaft“' is devoted to the formation of terminological semantic systems in the field of economics. The authors investigate how the terminology system in this subject area is created and structured, analyzing the processes of classification and definition of terms in an economic context. Special attention is paid to the specifics of economic terms and their interrelationships within this discipline (Tschizhakowski et al., 2002).

The **object** of our research is the terminology system of the subject area 'Finance' in the German language. The **subject** is the thesaurus modelling of the terminological system

of finance. The **aim** of the research is to develop theoretical positions and practical recommendations for the construction of a lexico-semantic terminological system of the subject area 'Finance' on the basis of German terminological vocabulary, taken from the headlines/subheadings of the German newspaper *Frankfurter Allgemeine Zeitung* (FAZ: <https://www.faz.net>), as well as to identify a codified alphabetical list of terms belonging to the developed lexico-semantic terminological system of the subject area 'Finance', with the aim of compiling a thesaurus. To this end, the following **tasks** are addressed:

- (1) to analyze the headlines/subheadings of articles from the *Frankfurter Allgemeine Zeitung* and to examine the characteristics of definitions of scientific terms,
- (2) to set out the basic principles of thesaurus modelling of the German terminological system in the subject area of 'Finance',
- (3) to compile a codified alphabetical list of identified terms in the German language.

The **research material** consisted of terminological vocabulary taken from the 'Finance' section of the *Frankfurter Allgemeine Zeitung* for the years 2020–2025 (FAZ: <https://www.faz.net/aktuell/finanzen/>). For analysis, 150 articles from sections relating to economics and finance were selected. The total number of identified lexical units amounted to 5,000 terms, of which 3,200 are unique terms used in the context of finance.

The *Frankfurter Allgemeine Zeitung* is one of the largest supra-regional newspapers in Germany, the main content of which consists of political, economic, and cultural reports. Both single-word terms and term combinations consisting of two or more components were selected for analysis, totalling 3,200 units. For the analysis and comparison of definitions, not only the individual terms selected from the headlines/subheadings of the articles were used, but also the article materials themselves. For the definition of the main terms, additional use was made of the academic explanatory dictionary “Duden Universalwörterbuch” (*Duden 2023*), the six-volume economic lexicon published by Gabler (*Gabler-Wirtschaftslexikon, 2014*), and the academic economics reference guide “Duden Wirtschaft von A bis Z” (*Duden Wirtschaft von A bis Z, 2007*).

To address the tasks set out in the article, within a general inductive-deductive approach to the material under study, several methods of synchronic analysis were employed. The traditional descriptive-classificatory method is combined with definitional analysis, based on which the semantic structure of terms is studied. By means of morphemic and word-formation analysis techniques, as well as the method of lexical transformations, a structural-semantic analysis of complex terms is carried out. Other methods of modern linguistics are also employed in the study: immediate constituent analysis for establishing word-formation structure and identifying the models by which modern terms are formed, with the aim of singling out terminological fields; componential analysis in describing the characteristics of the semantic structure of German terms. The method of systemic-comparative analysis was applied in compiling the codified list and at the stage of analyzing the scope of concepts when comparing definitions with the aim of eliminating the polysemy of terms. Based on the results of applying quantitative methods, conclusions were drawn about the quantitative and percentage characteristics of the terms encountered in the codified alphabetical list.

2. Term and Terminology System

A term is a nominative lexical unit (a word or phrase) of a specialized professional language, which is used for the precise naming of a specialized concept. In the linguistic literature there are many different definitions of a term that point to its specific properties and features of

use (*Kiyko, Shkolna 2019: 3–7*). However, all of them are based on the primary function of the term – to name the concepts of a particular field of knowledge precisely and unambiguously – which determines the role of the term in the development of science as a whole and its individual branches. As a unit of LSP, a term has certain semantic, formal, and pragmatic properties. Thus, the semantic characteristics of terms include their content precision in the nomination of a concept, the presence of a definition that reflects the result of scientific comprehension of the features of the object or phenomenon denoted by the term depending on the aims of the specialized field of knowledge, unambiguity within a particular field of knowledge, neutrality with respect to the concept system of a particular branch of knowledge, and relative context-dependence. The formal features of terms include conformity to language norms, high derivational and word-formation activity, brevity, and a nominative (nominal) character. Among the pragmatic features, one should mention first the use in specialized contexts of a particular field of knowledge, relevance, correspondence to the level of knowledge development concerning a particular concept, and reproducibility in speech.

As the basis for defining the term in our research, we adopted the definition of a term proposed by W. Fischer: A term is a word or phrase that has a clear and specialized meaning within a particular field of knowledge or activity. A term is characterized by precision and unambiguity, which allows it to be used for professional or scientific communication, in technical, legal, economic, and other fields (*Fischer 2010: 29*). This definition points to the specificity and professional character of term usage, and the ability to name specialized concepts. As the foundation for building any scientific theory, we consider the systematicity of the term: the principle of systematicity is the leading principle of the organization of terminological systems and their study. The system of terms is understood by us as a combination of its structure (the hierarchy of terms of a particular branch of knowledge), substance (the concepts of that branch), and functions (the nominations of the concepts of that branch of knowledge). Terms within the system occupy a certain place in relation to other members of it; their strict hierarchy forms the structure of the system. Between terms as elements of the terminology system there exist two types of relations: paradigmatic and syntagmatic (genus – species – subspecies; whole – part).

To understand the systematicity of terms it is necessary to distinguish between two concepts – the term field and the term system. The condition for transforming any word or phrase into a term is the inclusion of its concept (i.e., its designatum) into the term field, which represents an organized set of scientific-technical and specialized concepts and connections. Term fields function here as a systemic formation of the content plane. At the expression plane, the term field corresponds to a set of lexical units, as well as word-forming morphemes and formal syntactic devices that ensure syntagmatic connections between lexical units. This organized set of the expression plane is the term system. The combination of the term field (content plane) with the term system (expression plane) yields a two-sided semiotic formation that represents the lexico-semantic terminological system. The stability of the lexico-semantic terminological system is ensured by the systemic stability of the signified, i.e., the term field, whose elements and connections are determined by the system of concepts and connections of the corresponding branch of knowledge.

The initial concept in the semantic analysis of any linguistic object is the concept of the subject area, which serves as a reflection in the consciousness of a person or community of a particular segment of objective reality. There are no restrictions on the choice of subject area. This choice is made in accordance with the tasks of the linguistic research. A branch of knowledge may become a subject area, for example, the specialty of 'Finance', which was chosen for this research.

The systematicity of terminology implies the division of terms into subject areas, subject sub-areas, and micro-areas. Elementary concepts are located at the lowest level of the hierarchy. The term field is successively divided into sections and micro-fields, down to the identification of points, i.e., the meanings of individual terms and the connections that unite those meanings. The result is a level hierarchy of the term field, where the upper levels are assigned to areas and sub-areas, while the lower levels contain the points of the term field. The higher a certain level is (micro-area – sub-area – area), the more general the character of its features. Conversely, when moving from the upper levels to the lower ones, features acquire an increasingly individual character. At the same time, the features of a lower level inherit the semantic features of the preceding levels of the hierarchy. As a result, a field of features is formed within the term field, which serves as a working tool in the construction of that term field (*Kiyko, Pyntiuk 2020*).

In the construction of the term field, semantic features act as organizing elements around which areas, sub-areas, and micro-areas are grouped. To construct and analyze the lexico-semantic terminological system, it is necessary to correlate the constructed semantic model of the term field with the expression plane of the language. This task is accomplished by relating the sections, micro-fields, and points of the term field to the vocabulary of a particular language. This means that each fragment of the term field receives its linguistic label (code). Their complete list will be a codified alphabetical list. The labels may be organized into a network (a hierarchically structured thesaurus).

3. Theoretical Foundations of Thesaurus Modelling of the Terminology System

The main task that arises while modelling the content plane of a subject area consists in identifying and describing its structure while simultaneously indicating the main types of relations between the sections, micro-fields, and points of the term field. The most suitable method for modelling the term field of the subject area 'Finance' chosen by us appears to be the thesaurus-network method, which allows the creation of a field in which the classification of terms is oriented according to specialized branches and hierarchically organized. By the term 'network' we understand a model of the commonality of linguistic objects constituting a particular set, between the elements of which relations of various orders may be established. A hierarchical network is characterized by the following features:

- (1) the upper level is represented by a node with the most general semantics – the root,
- (2) other nodes are also types of the network (single-root nodes),
- (3) a node from which no branches extend is called a terminal or final node,
- (4) within the network there is always a binary connection (or several binary connections) between terms. These connections are transitive, non-reflexive, and asymmetric (*Goltschalck 1974: 17*).

Along this network, where the relations of 'species – subspecies' and 'whole – part' obtain between objects, one can move downward. By means of this formal procedure, the division of the term field into sections and areas, micro-fields and micro-areas of various orders is carried out (see Table 1).

The term field, presented in the form of a network, is a universal model of the content level for the terminology system. The national-linguistic differences of each terminology system reside at the expression level, i.e., in the very structure of the terminological system. Thus, the term field is a unified set of terms of a particular professional sphere with a multilevel structural organization. The object of the term field is languages for special purposes, i.e., professional

Table 1

Structural scheme of the terminology system

Level	Content plane	Expression plane
1	Term field	Terminology system
2	Section of the term field system	Section of the terminology
3	Micro-field of the 1st order (MF-1)	Micro-section of the 1st order (MF-1)
4	Micro-field of the 2nd order (MF-2)	Micro-section of the 2nd order (MF-2)
(n+1)	Micro-field of the (n-1)th order	Micro-area of the (n-1)th order
(n+2)	Point of the term field	Form of the term

languages. The differential features of the term field are conceptuality, integrity, systematicity, dynamism, evolutionarity, orderliness, stability, continuity, complementarity, mutual conditionality, completeness, and fuzzy boundaries.

4. Methodology for Constructing the Term Field in the “Finance” Domain

The process of constructing a term field encompasses several stages: collection of material, identification of fields and micro-fields, systematization and unification of the collected material, and its codification. Let us consider the most optimal techniques and specific transformations necessary for the identification of terminological vocabulary and for its classification at the first and second stages, as well as for the practical use of the constructed term field.

As an information source for obtaining the necessary terminology in the relevant subject area of 'Finance' and for creating its term field, the German newspaper *Frankfurter Allgemeine Zeitung*, 'Finance' section, was used, since the content of the articles published there reflects the everyday reality of the financial life of modern Germany. In accordance with the methodology described above, terms and term combinations in the headlines and subheadings of articles were studied, since they allow the author or reader to predict the content of an article and to orientate themselves in the perception of its content (*Kiyko 2016: 247*). By means of headlines, in approximately 80% of cases it is possible to adequately determine the professional-thematic content of a scientific-technical document.

These properties of headline and subheadline terms were used in the creation of the term field. The meaning of a term allows one to concentrate on searching for concepts that participate in the definition of subdivisions of the term field. The semantic nature of each term manifests itself through its semantic features, which should be regarded as constituent elements of the corresponding concept that distinguish the meaning of one group of terms from the meanings of another group.

The semantic features of terms necessary for terminological work are reflected, as a rule, in their definitions. A definition is a clarifying explanation of expressions, a detailed explanation of the content and use of concepts, and as precise and complete an explanation of the meaning of concepts as possible by means of other concepts. Any definition includes two main constituent parts: the definition of the concept based on semantic features and the necessary additional information that specifies those features. A critical analysis of the information contained in the definitions allowed us to divide the specialized sphere of 'Finance' into 15 fields (Felder) and thereby create the upper level of its term field (see Table 2).

Table 2

Visual representation of the structure of the subject area 'Finance'

F01. Finanzmarkt F02. Finanzinstrumente F03. Kapital F04. Banken F05. Börsen F06. Handel F07. Haushalt und Fiskalpolitik F08. Investitionen	F09. Europäische und internationale Fonds F10. Geld F11. Dienstleistungen F12. Sozialleistungen F13. Wirtschaftswissenschaften und Forschung F14. Europäische Gemeinschaft (EU) F15. Sonstige Termini
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Thus, the subject area of 'Finance' consists of 15 fields:

- F1. Financial Market
- F2. Financial Instruments
- F3. Capital
- F4. Banks
- F5. Stock Exchanges
- F6. Trade
- F7. Budget and Fiscal Policy
- F8. Investments
- F9. European and International Funds
- F10. Money and Monetary Affairs
- F11. Services
- F12. Social Benefits
- F13. Economic Sciences and Research
- F14. European Community
- F15. Miscellaneous Terms

The proposed division of the term field 'Finance' was the result of a complex analysis involving two stages: 1) initial familiarization with the material to be researched; 2) categorization of the material.

At the first stage of the work, we familiarized ourselves with the specialized material explaining the content of the concept 'Finance'. This concept encompasses many terms that define the general content of the concept of finance and simultaneously the total content of the subject area 'Finance'. The terms of this subject area are subject to classification according to their semantic significance within the corresponding term field and according to the corresponding connections between them. Understanding these connections with the relevant terminological material allowed us to develop a logical classification of the terms of the subject area 'Finance'.

5. Practical Implementation and Classification of Terms

Below we provide an example that explains the course of our reasoning (see excerpt from the article published by journalist-reviewer N. Kuls on the website of the *Frankfurter Allgemeine Zeitung* in the 'Finance' section on 15.02.2019: <https://www.faz.net/aktuell/finanzen/finanzmarkt/die-groesste-bankenfusion-in-amerika-seit-der-finanzkrise-16039530.html>):

Die größte Bankenfusion in Amerika seit der Finanzkrise

Die angekündigte Fusion zweier Regionalbanken aus den Südstaaten beflügelt die Aktienkurse von potenziellen Übernahmekandidaten / Wall Street wettet

In den Vereinigten Staaten zeichnet sich nach regulatorischen Lockerungen eine neue Fusionswelle unter regionalen Banken ab. In der vergangenen Woche gab es mit der angekündigten Übernahme der in Atlanta (Georgia) beheimateten SunTrust Banks durch den Konkurrenten BB&T den ersten großen Paukenschlag auf dem Weg zu der seit geraumer Zeit erwarteten Konsolidierung. Die in Winston-Salem (North Carolina) ansässige BB&T zahlt 28 Milliarden Dollar im Rahmen eines Aktientausches für SunTrust. Damit schließen sich die beiden Südstaaten-Institute zur neuen Nummer sechs der Branche zusammen. Es ist die größte Bankenfusion seit der Finanzkrise <...>.

Translation: The largest bank merger in America since the financial crisis
The announced merger of two regional banks from the Southern United States is boosting the stock prices of potential takeover candidates / Wall Street is betting on it.

In the United States, following regulatory relaxations, a new wave of mergers among regional banks is emerging. Last week, the announcement of the acquisition of SunTrust Banks, based in Atlanta, Georgia, by its competitor BB&T, marked the first major milestone on the long-anticipated path to consolidation. BB&T, based in Winston-Salem, North Carolina, is paying \$28 billion in a stock exchange deal for SunTrust. The two Southern institutions will now combine to become the new number six in the industry. It is the largest bank merger since the financial crisis <...>.

In the excerpt from the article published under the headline 'Die größte Bankenfusion in Amerika seit der Finanzkrise' with two subheadings – Die angekündigte Fusion zweier Regionalbanken aus den Südstaaten beflügelt die Aktienkurse von potenziellen Übernahmekandidaten / Wall Street wettet – the terms present were underlined at the first stage. Next to each term, section numbers were placed in accordance with Table 2: «Die größte Bankenfusion (04) in Amerika seit der Finanzkrise (01) / Die angekündigte Fusion (02) zweier Regionalbanken (04) aus den Südstaaten beflügelt die Aktienkurse (05) von potenziellen Übernahmekandidaten (08) / Wall Street (01) wettet». The problematic term in this context proved to be Wall Street, whose meaning and place in our terminological system it was necessary to determine. The key word of this term combination is the word Street, borrowed from English, meaning 'street'. However, besides its direct meaning, this word designates a financial concept (a realia). In the German language, the term Wall Street has two meanings: a) a trading street in New York; b) a financial centre, a money market. This is also confirmed by the definition given in the explanatory dictionary Duden (*Duden 2023: 1708*): 'Wall Street – the financial centre (market) of America, the money market, or the short-term credit market'. The fact that Wall Street is a financial centre and a money market helps us to determine its place in the terminological system 'Financial Market' (01).

Several problems are also created by the attribution of complex words to fields and micro-fields. As is known, complex word-terms are formed from two stems. The first determines the second, which is the bearer of the generic feature and expresses the basic meaning of the word. The first component, on the other hand, indicates the feature or property that specifies the meaning of the main component, such as Finanzmarkt 'financial market', where the basic meaning of the word belongs to the word Markt, and the meaning of Finanz(en) is determinative for the main word. The same applies to the words *Devisenmarkt* 'currency market', *Geldmittel* 'monetary funds', *Börsengang* 'stock exchange process', etc.

A characteristic feature of complex terms in the German language is the formation of groups united by a generic feature with a homogeneous first or second component, and such a group may comprise a considerable number of terms. For example, with a common first component, the following can be identified: *Finanzabteilung* 'finance department', *Finanzplan* 'financial plan', *Finanzkontrolle* 'financial control', *Finanzkraft* 'financial strength', *Finanzkrise* 'financial crisis', *Finanzmann* 'financial figure', *Finanzminister* 'Minister of Finance', *Finanzministerium* 'Ministry of Finance', *Finanzplanung* 'financial planning', *Finanzpolitik* 'financial policy', *Finanzspitze* 'head of finance', *Finanzverwaltung* 'financial administration', *Finanzwesen* 'financial system', *Finanzwirtschaft* 'financial economy' (42 terms in total), etc.

There is also a group with a common second component that names a market concept characterized by various features conveyed by the first component, such as: *Devisenmarkt* 'currency market', *Aktienmarkt* 'stock and securities market', *Fondsmarkt* 'funds market', *Kapitalmarkt* 'capital market', *Finanzmarkt* 'financial market', *Warenmarkt* 'commodity market' (36 terms in total).

Two-component terms conveying genus-species relations accounted for 68% of the total number of terms in the subject area of 'Finance'. In addition to two-component terms, a small number of three-component complex terms were also recorded. Although formally such composites consist of three components, in terms of term-forming structure they are two-component, since they also consist of a head word (which may itself be complex) and a defining word, such as: *Geldmarktkredit* 'money market credit', where the head word is *Kredit* 'credit' and the defining component is *Geldmarkt* 'money market'; *Geldmarktsatz* 'money market interest rate', where the head word is *Satz* 'interest rate' and the defining component is *Geldmarkt* 'money market', etc.

Another problem was the attribution of metaphorically used words to fields and micro-fields. Let us take, for example, the article entitled 'Bären regieren Europas Börsen nun „offiziell“' from 07.03.2022 (FAZ: <https://www.faz.net/aktuell/finanzen/finanzmarkt/nach-dem-jamaika-bruch-zucken-die-boersen-nur-kurz-15301280.html>), which deals with a 'bear market', when share prices fall by 20% or more from their recent peak. A *bear market* often arises during economic downturns and may indicate a decline in investor confidence, high levels of unemployment, inflation, or other economic difficulties. In this article, the noun *Bären* is mentioned several times, which in stock exchange jargon denotes a speculator who plays for a fall in prices, cf.: *Bär*, *m*, *-en*, *-en* 3. (Börsenjargon) jemand, dessen Aktivitäten an der Börse von erwartetem Fallen der Kurse geprägt sind. A deeper reading of the article allows one to understand that the 'bears' (i.e., negative market sentiment) officially dominate, so a further decline in market prices is to be expected. The author's choice of metaphorical vocabulary assumes that the recipient, being a specialist in the field of finance, possesses approximately the same professional competence as the author – that is, they share a common thesaurus.

The analyzed terms, as bearers of the necessary information, served at the first stage of the research work as starting points for conceptual reference points (concepts). At the second stage, the 15 sections of the term field of the subject area 'Finance' identified by us were divided into micro-fields of the first order. After the identification of micro-fields of the first order, depending on the significance of a particular concept, new micro-fields of the second, third, fourth, and sometimes even the fifth, sixth, and seventh orders were identified. We shall demonstrate the course of this process using the example of the 12th area of the subject area 'Finance' – 'Social Benefits' – which has recently undergone substantial changes, obviously conditioned by the reorientation of the German financial market toward the sharp increase in refugees and the associated growth in social expenditure.

As a rule, one begins by identifying the main semantic components of the content of the key concept 'Social Benefits'. To grasp the essence of this concept, it is worthwhile to study and analyze the definitions associated with it in detail. Thus, the Gabler Economic Lexicon (*Gabler Wirtschaftslexikon 2014*) explains that social benefits are expenditures on services, benefits in kind, and cash payments provided for by social legislation. The analysis of the semantic features of the given terms helped to orientate oneself in the field of knowledge 'Social Benefits' and to make the correct decisions regarding the hierarchy of terms and their subordination. As a result of the analysis, the 12th area 'Soziale Leistungen' (social benefits) was divided into ten micro-fields of the 1st order (MF-1): *allgemeine Leistungen* (general benefits), *Sonderleistungen* (special benefits), *beamtenrechtliches System* (civil servant entitlements), *Arbeitgeberleistungen* (employer benefits), *Entschädigungen* (compensations), *soziale Hilfe und Dienste* (social assistance and services), *Sozialleistungsarten* (types of social benefits), *Leistungsquellen* (funding sources), *Sozialpolitik* (social policy), *indirekte Leistungen* (indirect benefits). The specification of the names of the micro-fields of the 1st order helps to determine the micro-fields of the second order. For example, the term *allgemeine Leistungen* (general benefits) is deepened by designations of various types of expenditures (micro-field of the 2nd order): *Renteversicherung* (pension insurance), *Krankenversicherung* (health insurance), *Unfallversicherung* (accident insurance), *Arbeitsförderung* (promotion of employment), *Kindergeld* (child benefit payments), *Erziehungsgeld* (child-rearing allowance). The other sections of the term field 'Social Benefits' were processed in the same way to obtain the terminology and its codification. The most substantial changes were experienced by the micro-field of the 1st order 'Social Assistance and Services', which included the 2nd-order micro-fields *Sozialhilfe* (social assistance), *Jugendhilfe* (youth assistance), *Ausbildungsförderung* (promotion of education), *Wohngeld* (housing subsidy), *öffentlicher Gesundheitsdienst* (public health service), *Vermögensbildung* (wealth accumulation). As a result of the reform of unemployment assistance under the *Hartz 4 Act* (https://de.wikipedia.org/wiki/Arbeitslosengeld_II), social assistance was differentiated to cover temporary accommodation costs (*Unterkunft*), heating (*Heizung*), relocation costs (*Umszugskosten*), initial furnishing of an apartment with furniture and appliances (*Erstausstattung*), special nutrition (*gesundheitsbedingte kostenaufwändige Ernährung*), and expenditures for children's education (*Lernförderung für Kinder*). In turn, the latter micro-field of the 3rd order includes expenditures on lunches (*Mittagessen*), school excursions (*Klassenfahrten*), school supplies (*Schulbedarf*), tutoring (*Nachhilfe*), transport costs (*Fahrkosten*), and leisure activities (*Freizeit, Sport und Kultur*). The subdivision into micro-fields of various orders should be pursued to a reasonable limit – ideally to the terminal point of the term field, and in practice to the needs of the user, sometimes even to the 7th or 8th order. As a result of such division, we obtained a detailed hierarchical classification and codification of the term field of the subject area 'Finance'.

Each section of the term field of the subject area 'Finance' is a hierarchical network, the structure of which is dictated by the very way the human brain functions. By means of this hierarchical network, the user can obtain essential information relating to the content of the corresponding concept expressed by a specific term in the analyzed article. For example, upon encountering the term *tarifliche Leistungen* and finding it in the codified alphabetical list, one ascertains that it refers to the concept of 'tariff expenditures'.

If the analyzed headline term cannot reveal a direct connection with the concepts expressed in the scheme, i.e., cannot be directly attributed to one of them, one should be guided by semantic connection and understand it in a broader sense. For example, the term *steuerliche Unsicherheit* (tax uncertainty) should be attributed to section F7 'Budget and Fiscal Policy',

since the said uncertainty relates to the term 'tax' (*steuerliche*). Similarly, the term *das Geld*, depending on the thematic sub-area of its application, can be translated differently – as the financial concept 'money' or 'monetary funds'.

It is worth emphasizing that the acquisition of knowledge of this kind will be decisive for the correct interpretation of the content expressed by the term under analysis. The meaning of the latter will be determined by its position in the hierarchical network of the corresponding section of the term field. As a result, a foundation is laid for the acquisition of professional skills – that is, mastery of the minimum economic knowledge that a teacher of a specialized language or a highly qualified translator must possess.

6. Conclusions

The term field compiled by us consists of 15 sections, which in turn are divided into micro-fields of various orders, and is intended to be used for the purpose of acquiring the necessary information and organizing teaching or translation activities. Each section of the term field of the subject area 'Finance' is a hierarchical network, the structure of which is dictated by the very way the human brain functions. By means of this hierarchical network, the user can obtain essential information relating to the content of the corresponding concept expressed by a specific term in the analyzed article. The acquisition of knowledge of this kind will be decisive for the correct interpretation of the content expressed by the analyzed term. The meaning of the latter will be determined by its position in the hierarchical network of the corresponding section of the term field. As a result, a foundation is laid for the acquisition of professional skills – that is, mastery of the minimum economic knowledge that a teacher of a specialized language or a highly qualified translator must possess.

The process of constructing the term field comprised several stages: collection of material, identification of fields and micro-fields, systematization and unification of the collected material, and its codification. The article examined the most optimal techniques and specific transformations necessary for the identification of terminological vocabulary and for its classification at the first and second stages, as well as for the practical use of the constructed term field.

A critical analysis of the information contained in the definitions allowed us to divide the term field 'Finance' into 15 sections: *Finanzmarkt* (financial market), *Finanzinstrumente* (financial instruments), *Kapital* (capital), *Banken* (banks), *Börsen* (stock exchanges), *Handel* (trade), *Haushalt und Fiskalpolitik* (budget and fiscal policy), *Investitionen* (investments), *Europäische und Internationale Fonds* (European and international funds), *Geld* (monetary affairs), *Dienstleistungen* (services), *Sozialleistungen* (social benefits), *Wirtschaftswissenschaften und Forschung* (economic sciences and research), *Europäische Gemeinschaft* (European Community), *sonstige Termini* (miscellaneous terms), and thereby to create the upper level of its term field.

At the second stage, the 15 sections of the term field of the subject area 'Finance' were divided into micro-fields of the first order. Depending on the significance of a particular concept, new micro-fields of the second, third, fourth, and sometimes even the fifth, sixth, and seventh orders were identified. It was established that, in comparison with the content of the various micro-fields, the section 'Social Benefits' underwent the most substantial changes, which is evidently conditioned by the reorientation of the German financial market toward the sharp increase in refugees and the associated growth in social expenditure. Thus, the micro-field of the 1st order 'Social Assistance and Services', which had included the 2nd-order micro-fields

Sozialhilfe (social assistance), *Jugendhilfe* (youth assistance), *Ausbildungsfrderung* (promotion of education), *Wohngeld* (housing subsidy), *öffentlicher Gesundheitsdienst* (public health service), *Vermögensbildung* (wealth accumulation), was – as a result of the reform of unemployment assistance under the Hartz 4 Act – supplemented with terms for social assistance for temporary accommodation costs (*Unterkunft*), heating (*Heizung*), relocation costs (*Umzugskosten*), initial furnishing of an apartment with furniture and appliances (*Erstausstattung*), special nutrition (*gesundheitsbedingte kostenaufwändige Ernährung*), and expenditures for children's education (*Lernförderung für Kinder*). In turn, the 3rd-order micro-fields became more differentiated; in particular, terms appeared for designating expenditures on lunches (*Mittagessen*), school excursions (*Klassenfahrten*), school supplies (*Schulbedarf*), tutoring (*Nachhilfe*), transport costs (*Fahrkosten*), and leisure activities (*Freizeit, Sport und Kultur*). As a result of such division, we obtained a detailed hierarchical classification and codification of the term field of the subject area 'Finance'. The position that a particular concept occupies in a specific section helps the user to clarify for themselves the interaction and interrelationship with all other concepts that form the hierarchical network – that is, it helps to deepen and specify knowledge regarding the content of the term that a particular author used in generating a text. The transition from the term to a specific section is carried out by means of a codified alphabetical list, the compilation of which will constitute the next step of thesaurus modelling.

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