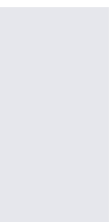


**A qualitative-quantitative analysis
of the clarity of insurance contracts:
results and suggestions**



June 2023







IVASS
ISTITUTO PER LA VIGILANZA
SULLE ASSICURAZIONI



Foreword

The issue of simplicity and clarity in insurance contracts has long been the subject of research and initiatives, including by IVASS, designed to give effect to a desire of all market participants, beginning with policyholders: knowing exactly what they are purchasing.


Despite some progress, the language that still tends to dominate in insurance contracts (but not only insurance) is “legalese”, which naturally meets the need for certainty and the technical culture of those who write those contracts by issuing the underlying covers, but not of those who purchase them, who frequently lack the cognitive tools to fully understand their value.

If incomprehension is a source of reluctance, it cannot be ruled out that the very low penetration of non-life insurance in Italy (1.9% premium/GDP ratio in 2021 compared to 4.9% of the OECD average) is also a reflection of the difficulties in understanding the peculiar language with which the numerous types of coverage are presented to the inexperienced and confused consumer.

In the same way that insurance education on the demand side can facilitate a process of linguistic approximation between the two parties to the market, there is no doubt that efforts must also be made on the supply side (insurance companies) to draw up contracts that are as close as possible to a language spoken by everyone involved.

IVASS has been trying for some time now to encourage market participants, such as undertakings, intermediaries and consumer associations, to develop guidelines to improve the wording of contracts. It did so in 2016 by assisting with the organisation of a special Technical Round Table and in 2018 by advocating for the adoption and dissemination of its results. It did so by issuing Regulation No. 41/2018, securing substantial simplification. Moreover, it did so again in 2022 by commissioning LPC Research to conduct a specific study that stems from the dissatisfaction with the results attained and proceeds to pursue new and possibly more effective approaches.

The work of LPC Research, presented in these pages, is an analysis (with a proposed remedy) of the state of the language of insurance contracts (more specifically, of a large sample of contracts) intending to extract its peculiarities, both those



that represent the appreciable effort to help the consumer be aware of the choice he or she is about to make, and those that highlight, contrary to best practice, unnecessary or redundant or, at times, even contradictory language.

As will become apparent, the work is innovative and groundbreaking, with numerous aspects that could be further developed. However, it already enables us to assist insurance companies in conducting a “guided review” of their contracts in order to improve their readability.

In particular, it is not without significance that a specific legal text has been chosen as an ideal benchmark: the Italian Constitution, which has withstood the scrutiny of more than seven decades of national life, having been drafted in the days of the birth of the Republic and the product of a felicitous political and social climate that infected the pen of the Legislator in a way that has perhaps never been repeated again.

Once we have collected all of the comments and suggestions that the stakeholders wish to put forward, we hope to assist companies in a systematic “revision campaign” of non-life contracts that builds on the results illustrated here and enables the entire insurance system to take a significant step forward in its ability to draft contracts that, if not perfect, are at least much clearer. We have no doubt that businesses will also benefit.

Riccardo Cesari
IVASS Board Member

A qualitative-quantitative analysis of the clarity of insurance contracts: results and suggestions

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1 Introduction

1.1 The importance of being clear

The ability to understand and express oneself are key to being able to navigate through the complexity of the modern world, to be actors and not spectators in democratic life.

Even those who provide a service as important as insurance have, as far as they are concerned, a social responsibility in this regard. To this end, it is useful to use tools that promote clarity, including in language.


Clarity and simplicity mean the search for tools capable of reaching the general public from a fully inclusive perspective. It is not belittling or trivialising. Far from it: it should be understood as greater effectiveness and greater precision of the contractual conditions of insurance policies and of the entire communication system between insurance companies and customers. Writing in a clear and simple manner means that the reader finds all the necessary information, understands it and knows how to use it, which is a fundamental aim of any ethical communication.

There is no shortage of virtuous examples in the present and in our nation's history: just think of that extraordinary model of clarity and eloquent simplicity that is our Constitution, which, not for nothing, was chosen as the benchmark for this study.

The convergence of academic research, the identification of good business practices and the initiatives of state institutions can produce important results. We believe this study is a necessary and useful step in the direction of making the insurance world more accessible for all citizens.

1.2 The project

As part of its policyholder protection activities, IVASS has in many fora reiterated the need for greater clarity in the language of insurance policies in order to facilitate understanding of the rights and obligations arising from the contract.



The reference insurance regulations (Article 166 of the Private Insurance Code) lays down that the contract and any other document delivered by the undertaking to the policyholder must be drawn up in a clear and exhaustive manner and that the clauses laying down forfeitures, voidness, limitations of covers or costs to be borne by the policyholder or insured party shall be shown in highlighted characters.

Moreover, Article 4 of IVASS Regulation 41/2018, lays down the criteria for drafting and communicating information to customers, requiring, among other things, that pre-contractual and contractual documents:

- be written in a clear and succinct language and style that communicate in a way that facilitates the understanding of the information contained therein;
- be presented and laid out in a way that is clear and easy to read;
- use characters of a readable size;
- ensure consistency of the information contained in each part.

In 2018, IVASS solicited and then incorporated the insurance Guidelines “Clear and simple contracts” of 6 February 2018 – drafted by a working group of companies and intermediaries – which also had the objective of making contracts easier to read and understand. IVASS Regulation 41/2018 then reiterated the need for contractual clarity and consistency between contractual and pre-contractual information.

Many companies have revised their contracts based on those Guidelines.

The goal of simplification has not yet been fully achieved; this consideration is supported by the assessment of some policyholders’ complaints, which point to the lack of clear communication by companies to customers who are not very literate in both insurance and legal issues.

IVASS has therefore assessed the need for an analysis on the level of clarity of contractual texts, to be carried out on a sample of insurance contracts. The aim is to verify the above hypothesis using a scientific-quantitative approach and to highlight which elements of complexity can be overcome in the process of simplification and revision of contracts that companies have already begun to undertake.

Therefore, Research was commissioned to conduct qualitative/quantitative research on the level of clarity of a large sample of contracts in order to offer:

- an assessment of the compliance of insurance contracts with the criteria of clarity and simplicity, structural consistency and updating;
- quantitative indicators and a descriptive analysis providing adequate support to stimulate the sector to a further effort in terms of simplification and revision of contracts.

To this end, a quantitative evaluation was identified, one, however, that is supported by a qualitative analysis. Quantitative evaluations are in fact aimed to offer the initial representation of a possible lexical-linguistic criticality, but on their own they may, as will be seen in the chapter on quantitative analysis (Chapter 2), lead to conclusions that are not fully adequate. It is therefore necessary for the overall assessment to be supported by a careful qualitative reading and analysis that detects the reasons for the trends in quantitative elements. The analysis also includes an assessment of regulatory compliance as well as the contents of a contract so as to indicate the need to upgrade the guarantees with respect to the social context (for example clauses referring to traditional families and *de facto* excluding children of separated or single-parent families). There are also a number of clauses that contain inconsistent elements within a contract or that are not compliant with the guidelines of the Consumer Code.

1.3 The sample and the qualitative-quantitative analysis

The sample in this first analysis is made up of 30 accident contracts (either stand-alone or hybrid contracts) from 30 insurance companies, accounting on the whole for about 80 percent in terms of premium income for this line of business.¹ In the sample, there are contracts with only one main guarantee (accident), others with two (accident and sickness) and others with more than two (accident, sickness and assistance).

Quantitative and qualitative analyses were conducted on the selected contracts.

Quantitative analysis

The analysis focused on the wording of some contract clauses, particularly those governing

- permanent disability and death due to accident;
- limits and exclusions;
- the clause concerning the declarations provided by policyholders on the circumstances related to the risk to be insured.

Qualitative analysis

The qualitative analysis looked at the entire contract in order to assess the elements of structure, customer orientation and graphics.

1 It should be noted that two companies included in the sample distribute accident policies that are limited to the reimbursement of medical expenses in case of accident and therefore not fully comparable with the rest of the sample.

A language-specific qualitative analysis was also carried out, covering only the contractual clauses examined for the quantitative analysis.

Pre-contractual documents, DIP (Documento Informativo Precontrattuale – Pre-contractual Information Document) and DIPA (Documento Informativo Precontrattuale Aggiuntivo – Additional Pre-contractual Information Document),² were considered in order to assess their consistency with the contractual documentation.

For each of the 30 contracts, the company prepared a detail sheet with evidence of the quantitative and qualitative analysis performed.

1.4 Methodology and indices

Tools and qualitative indicators

Quantitative analyses of the selected policies have been carried out using the algorithm of a *tool* for analysing and evaluating the readability of texts in Italian; contracts were specifically processed to allow the correct application of the algorithm to the texts.

This analysis made it possible to obtain information on numerous syntactic-lexical characteristics of complex texts in Italian. The information obtained ranges from the simple calculation of the average length of the periods and words making up the speech to the depth of the syntactic tree and the length of the dependency relations of the periods.³

More specifically, the following quantitative indicators were derived:

Gulpease Index (G1)

It indicates the degree of readability of a text, on a scale between 0 and 100, where 100 indicates the highest readability and 0 the lowest readability the index

2 DIP comes from a European regulation and follows a standard format dictated by the same Regulation; It contains significant information for understanding the contract such as, for example, the limits and duration of the insurance coverage, the contractual obligations of the client and those of the company, the procedure and timing to withdraw from the contract or terminate it. DIPA is set forth in the Code of Private Insurance and in IVASS Regulation No. 41/2018; it contains more detailed information to enable the customer to have a deeper understanding of the insurance product and make a more informed choice. This document indicates, for example, additional or optional guarantees, contract exclusions and limitations, how to file complaints, the law applicable to the contract, dispute resolution procedures, and costs to be borne by the policyholder.

3 F. Dell'Orletta, S. Montemagni, G. Venturi, *READ-IT: assessing readability of Italian texts with a view to text simplification*, in N. Alm (by), *Proceedings of the Second Workshop on Speech and Language Processing for Assistive Technologies, Edinburgh, UK, 30th July 2011 (SLPAT 2011)*, Association for Computational Linguistics, Stroudsburg, PA, USA, 2011, pp. 73-83.

represents the summary of the evaluation of individual parameters that can capture the syntactic and linguistic complexity of a text.⁴

The parameters for evaluating a text according to the Gulpease are as follows:

- index of **less than 80**: text difficult to read for persons with primary school education;
- index of **less than 60**: text difficult to read for persons with secondary school education;
- index of **less than 40**: text difficult to read for people with higher education.

Average length of periods (G2)

It indicates the number of words that on average make up the periods.

→ *This data contributes to defining the degree of syntactic complexity. The higher the value, the more difficult it is to understand.*

Average length of words (G3)

It indicates the number of characters (consonants and vowels) that on average make up individual words.

→ *The figure helps to define the degree of cognitive burden given by word length. The higher the value, the more difficult it is to understand.*

Percentage of words not belonging to the basic vocabulary (G4)

It indicates the words that cannot be found in the basic Italian vocabulary, identified by Tullio de Mauro⁵ and taken up again in more recent times.⁶ It includes 7,000 words of very frequent use in the language of a native Italian speaker.

→ *This data helps to define the 'modernity' of the language used and its usability by citizens. The higher the value, the more difficult it is to understand.*

Average number of propositions per period (G5)

It indicates the amount of propositions that make up a period (both subordinate and main clauses).

4 See P. Lucisano, M. E. Piemontese, *GULPEASE: una formula per la predizione della difficoltà dei testi in lingua italiana*, "Scuola e città", XXXIX, 3, 1988, pp. 110-124.

5 T. De Mauro, *Guida all'uso delle parole. Come parlare e scrivere semplice e preciso. Uno stile italiano per capire e farsi capire*, 1st ed., Roma, Editori Riuniti, 1980, pp. 149-183. This is the third release in the historic series *Libri di base*.

6 *Grande dizionario italiano dell'uso, ideato e diretto da T. De Mauro*, 8 volumes, 2nd ed., Utet, Torino, 2007.

→ This data contributes to defining the degree of syntactic complexity. The higher the figure, the more difficult it is to understand.

Percentage of main clauses and subordinate clauses (G6)

The data are given in two successive rows and indicate in percentages the amount of subordinate and main clauses that are present on average in periods.

→ This data contributes to defining the degree of syntactic complexity. The greater the number of subordinate clauses, the greater the difficulty of comprehension. On the contrary, the greater the number of main clauses, the lower the syntactic difficulty.

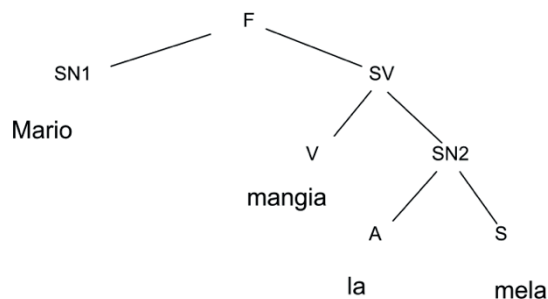
Syntactic tree depth (average of maximum heights) (G8)

Indicates the maximum distance between a 'leaf' (represented by words in the text without dependencies) and the 'root' of the tree (represented as the number of arcs, i.e. dependency relationships, crossed in the leaf-root path).

→ The figure indicates the average value of maximum tree heights and thus contributes to defining the degree of syntactic complexity. The higher the figure, the more difficult it is to understand.

For example:

John eats an apple



F (sentence) is the root

SN1 (nominal syntagma⁷) *John*

SV (verbal syntagma) is made up of V (verb), *eats* and SN2 (nominal syntagma) (*an apple*), which in turn is composed of A (article) *an* and S noun *apple*.

F is the root

7 A syntagma is a set of words that forms a unit within the sentence.

SV, SN1, SN2 are branches

John, eats, an, apple are leaves.

The maximum distance is that between *apple* (leaf without dependencies) and the root (F). The distance is calculated in "arcs", that is, how many dependency relationships are crossed. The figure is calculated for all the sentences, from which the average values of these maxima are obtained.

Length of dependency relationships (average) (G9)

It indicates the distance in words between the head and the dependent, i.e. The dependency relations (excluding punctuation links).

→ *The data represents a factor of complexity. The higher the value, the more difficult it is to understand.*⁸

If we take the previous sentence, the head is *John* and the dependent is *apple*. The length of the dependency relationship is 1. The figure is projected onto the averages of all propositions.

To have a benchmark, the indices were compared with the Italian Constitution, on which there is a study⁹ conducted with the quantitative instrument that has also been used for our research. Moreover, as is well known, our fundamental Charter constitutes a universally recognised model of simplicity, clarity and effectiveness, at least in its first part, which was not subject to subsequent amendments.

Operational stages of the analysis

The analysis of each contract was carried out in separate steps for each of the clauses examined:

1. Quantitative analysis of clauses related to the individual guarantees of each contract
2. Calculation of the above indicators for each company;
3. Qualitative analysis of the same clauses in light of the results obtained;
4. Qualitative analysis of the individual contract;

8 The contiguity of semantically or syntactically 'close' elements makes it easier to understand word relationships.

9 D. Brunato, G. Venturi, *Le tecnologie linguistico-computazionali nella misura della leggibilità dei testi giuridici*, "Informatica e diritto", XXIII, 1, 2014, pp. 111-142.

5. Complete representation of the qualitative/quantitative evaluation of the clauses for each indicator and comparison with the parameter of the Constitution;
6. Aggregation of the quantitative values of individual clauses of all the contracts analysed in order to identify:
 - The weighted average value and the comparison with the parameter of the Constitution;
 - The standard deviation, the range and variation coefficient for evaluating the concentration or dispersion of values of each individual contract compared to the average.

2. Results of the quantitative analysis

Thanks to the joint work of universities, research institutes and private companies, as early as the 1970s text analysis tools were developed in Italy to make it possible to quantify certain fundamental parameters of comprehension in an objective manner.

More recently, a tool has been developed in our country that provides a series of values which are then summarised in the Gulpease Index.¹⁰ The specific indicators used are varied and concern the syntactic, grammatical and lexical aspects.

As already mentioned in section 1.4, a revision of the texts according to a specially written code and subsequent processing produced a series of indicators; among these, the Gulpease index in particular made it possible to obtain the information contained in the chapters referring to the quantitative analysis.

These data were compared with those of the Italian Constitution, a very important benchmark, not only for its contents, but also for its nature of legal text.

10 See footnote 4.

2.1 General Gulpease Index (of all the clauses examined)¹¹

The Gulpease index indicates the synthesis of an evaluation of individual parameters that measure lexical and syntactic aspects; the indicator is, therefore, able to capture the complexity of a text on these profiles.

The data show a picture with minor deviations: they range from a contract with a minimum Gulpease value of 39.539 to one with a maximum of 48.420, with an average of 44.329.

To understand the meaning of this data, two elements must be considered:

- As illustrated above, the parameters for evaluating a text according to the Gulpease index are:
 - index of less than 80: text difficult to read for persons with primary school education;
 - index of less than 60: text difficult to read for persons with secondary school education;
 - index of less than 40: text difficult to read for people with higher education.
- the Constitution, chosen as the benchmark, has a Gulpease index of 54.9.

The first conclusion that can be reached is that the texts considered have a level of difficulty that, on average:

- completely excludes citizens with primary and secondary school education;
- also puts higher educated citizens at a disadvantage.

To give further value to said data, it should also be mentioned that:¹²

- in 2021, 37.9% of the Italian population between 25 and 64 years of age had a low level of education (maximum secondary school);
- only one 18-year-old out of 20 (5%) have sufficient language skills to understand a complex text.

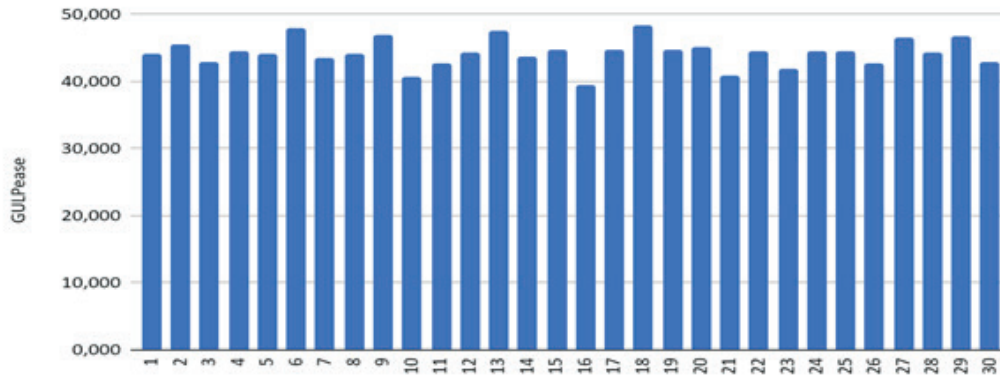
Graph 1 collects the Gulpease index values emerging from the analysis of some contract guarantees of the different Companies included in the sample. Here, as well as in subsequent graphs, the contract of each Company is indicated by a number in the abscissa.

11 As mentioned before, the analysis also covered two contracts which have different objects. Their data therefore must be considered in absolute terms and cannot be considered in relation to each other.

12 Source: ISTAT <https://www.istat.it/it/files/2022/04/2.pdf>

Graph 1

Gulpease of the clauses of each company



If we look at the variations from the average, the range is from +9.23% to -10.80%, with an overall fluctuation therefore close to 20%.

This is not a particularly significant fluctuation, indicating an overall scenario that is basically rather homogeneous. Therefore, if the overall figure for policies provides interesting and consistent data, in the detail of individual policies the index in itself does not always capture all specificities and indeed in some cases can be misleading, because it is the sum of a set of indicators that may have values that impact the overall figure.

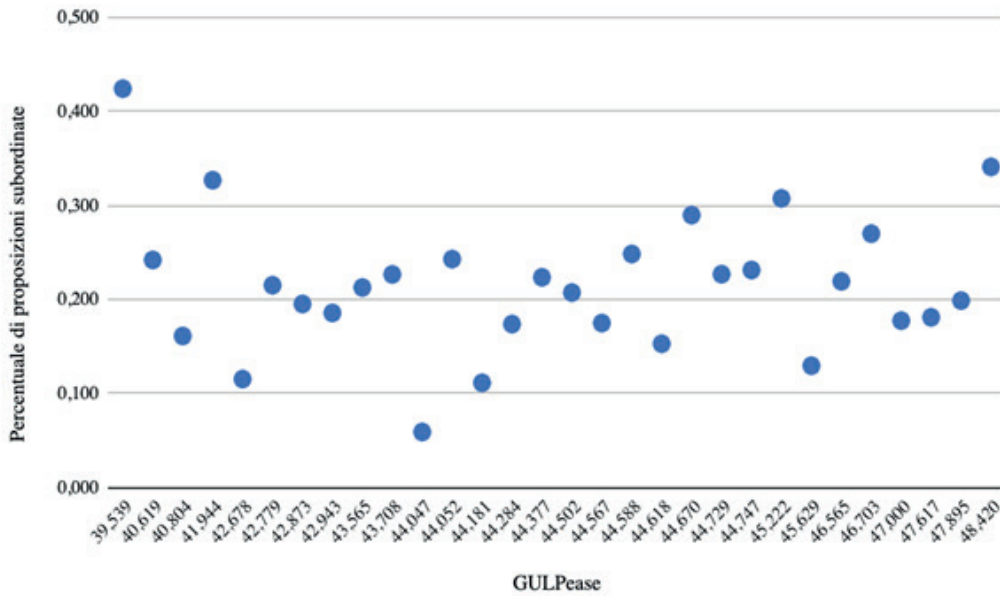
In fact, if we look at the highest Gulpease value (48.420), we can observe that the percentage of subordinate clauses has a deviation from the mean of +58.19%. Consequently, against the better Gulpease figure, it is noted that there is a negative figure for subordinates.

On the other hand, one of the contracts with the lowest Gulpease value (40.804) has one of the lowest percentages of subordinate clauses (16.09%, with a deviation from the average of -25.35%).

This difference between the Gulpease index and subordinate clauses can also be visually verified with graph 2, which shows the trend of the two variables:

Graph 2

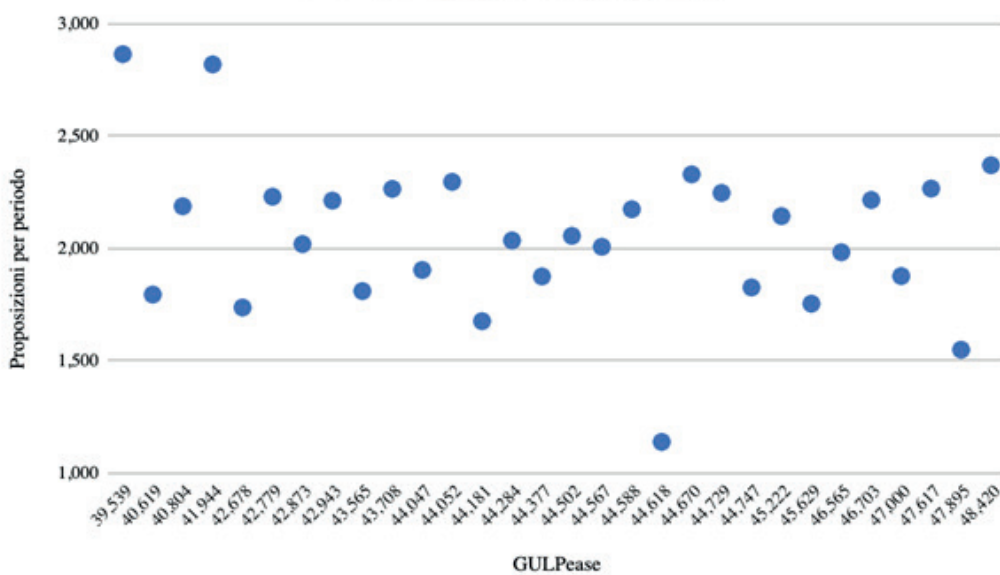
Gulpease e proposizioni subordinate



A similar figure emerges also for propositions per period, as can be seen in graph 3.

Graph 3

Gulpease e proposizioni per periodo



As we will see in detail, the comparison with the benchmark of the Constitution shows that all average figures for the insurance sector are worse, with only two exceptions: the depth of the syntactic tree and the words not belonging to the Basic Vocabulary, which are nonetheless easy to explain. The former by a very small margin (as we shall see later); the lexical aspect, as it is the one that is inevitably most affected by both the nature of the Charter and the time of its drafting.

However, the analysis also points in the direction of an increasing simplification, which takes into account the findings of our research.

2.2 Gulpease Index of the policyholder/insured person declaration clause on the risk to be insured

The clause concerning inexact or incomplete declarations made by the policyholder is the only article that allows a perfect overlap between the different insurance contracts, as it is present in all the texts.¹³

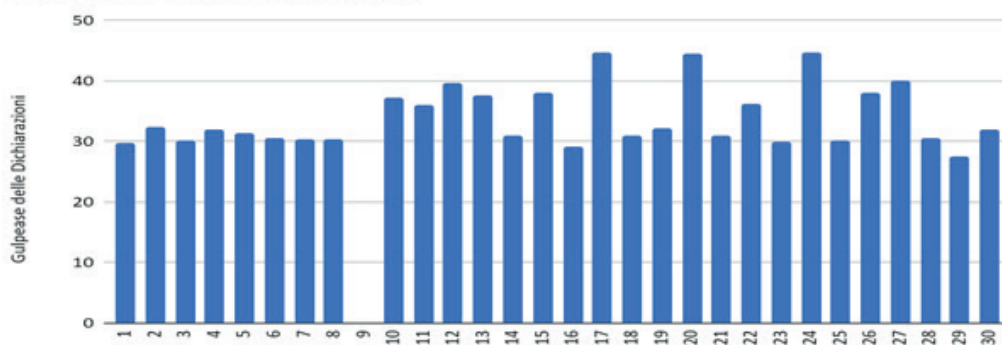
The most significant general figure concerns the average Gulpease index, which is 32, about 10 points lower than the general Gulpease index of all the clauses considered.

The extremes range from 27.5 to 44.7, therefore with a gap of 17 points; we recall that the maximum gap between the considered values of the overall Gulpease index is almost half, about 9 percentage points.

Graph 4 collects the values of the Gulpease index for the policyholder/insured person declaration clause of the companies included in the sample.

Grafico 4

Gulpease delle Dichiarazioni

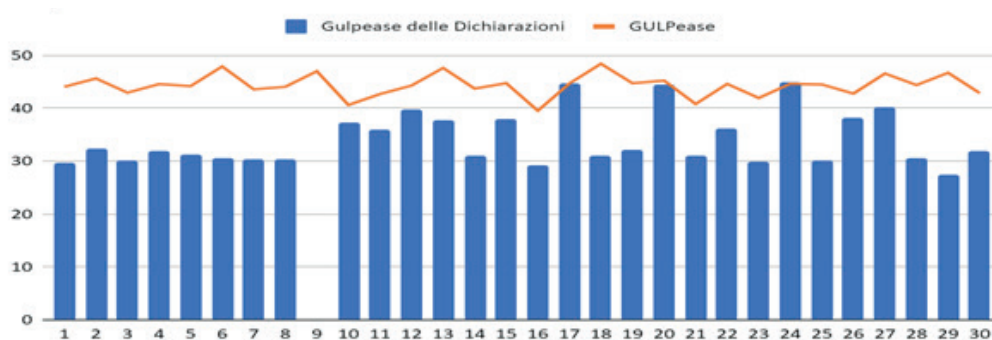


13 Except for one company, which does not mention this clause in its Conditions.

It can be seen that there is no close correlation between the two Gulpease values: while, for example, the value of the general index of a company is close to the highest value (44.047), that of the declaration clause is among the lowest (29.7); vice versa, the data of another undertaking are mutually consistent: 44.7 for the declaration clause, 44.67 for the overall Gulpease. Graph 5 shows this relation.

Grafico 5

Gulpease delle Dichiarazioni e Gulpease



2.3 Specific indicators

As was in part to be expected, the indicators that returned the most significant data concerned five phenomena: **a.** average length of periods G2; **b.** average number of propositions per period G5; **c.** percentage of subordinate clauses (and thus conversely of main clauses) G6; **d.** syntactic tree and dependency relations G8; **e.** words not belonging to the Basic Vocabulary G4.

a. average length of periods (G2)

First of all, the average figure is 24.365 words per period. It should be recalled that, according to the so-called Plain Language guidelines adopted or suggested in fact in all countries, the maximum parameter is 25.¹⁴ This average places the considered texts at the extreme edge, with inevitable and repeated upward overruns.

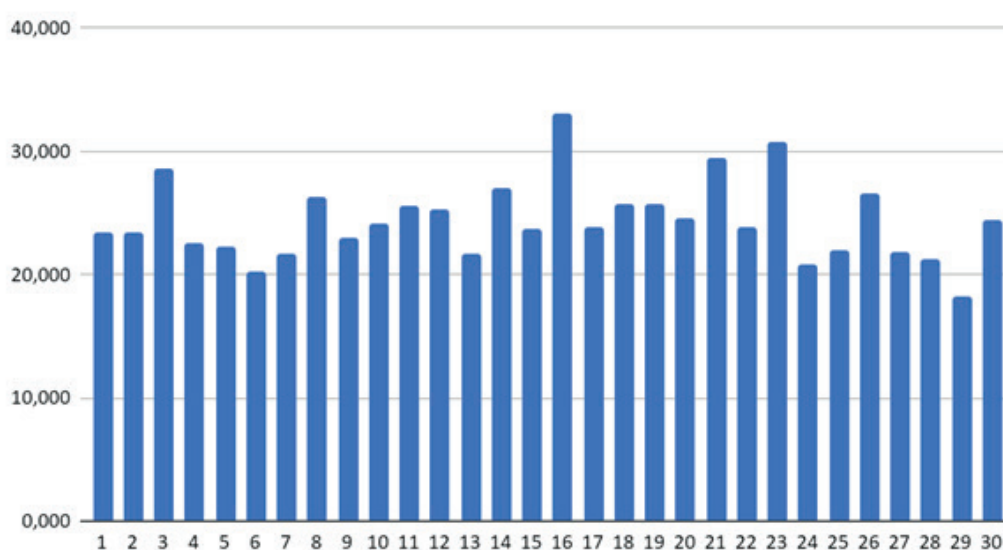
14 L. Carpanè, P. Contaldo, *Te l'assicuro. Più che un metodo per scrivere nelle assicurazioni*, Milano, Centopagine, 2021, pp. 31-35. Please note that the parameter is the same also for other languages.

→ This means that the insurance texts under consideration still need to be improved in view of a simplification of the syntactic structure, functional for greater comprehension by citizens-consumers.

If we look at the extremes, we see that they range from a low of 18.262 with a deviation from the mean of -25.05%, to a high of 33.029, with a deviation from the mean of +35.56%. The variability between the extremes is therefore very wide and reaches around 60%. Graph 6 shows the values for each contract analysed.

Grafico 6

Lunghezza media periodi (parole)

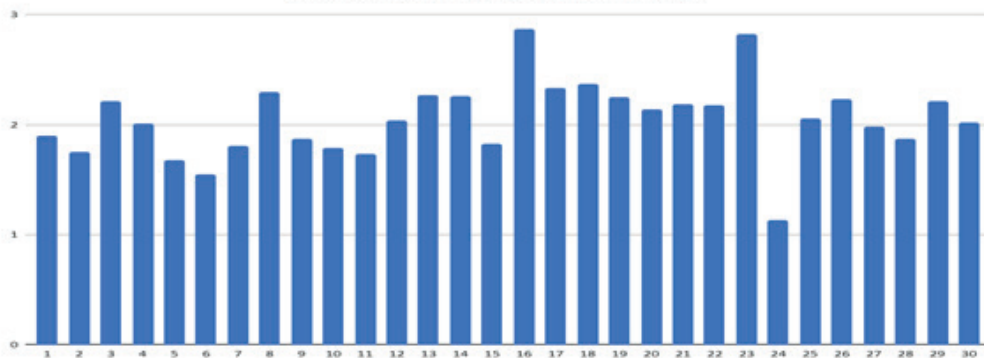


b. average number of propositions per period (G5)

There are no absolute benchmarks in this respect, although the guiding principle is always brevity. Consequently, the communicative result is generally better when the value of the benchmark is smaller. It is to be recalled that the value for the Constitution is 1.372, while the average value for the sector is 2.055. Graph 7 shows the values for each contract.

Grafico 7

Numero medio di proposizioni per periodo

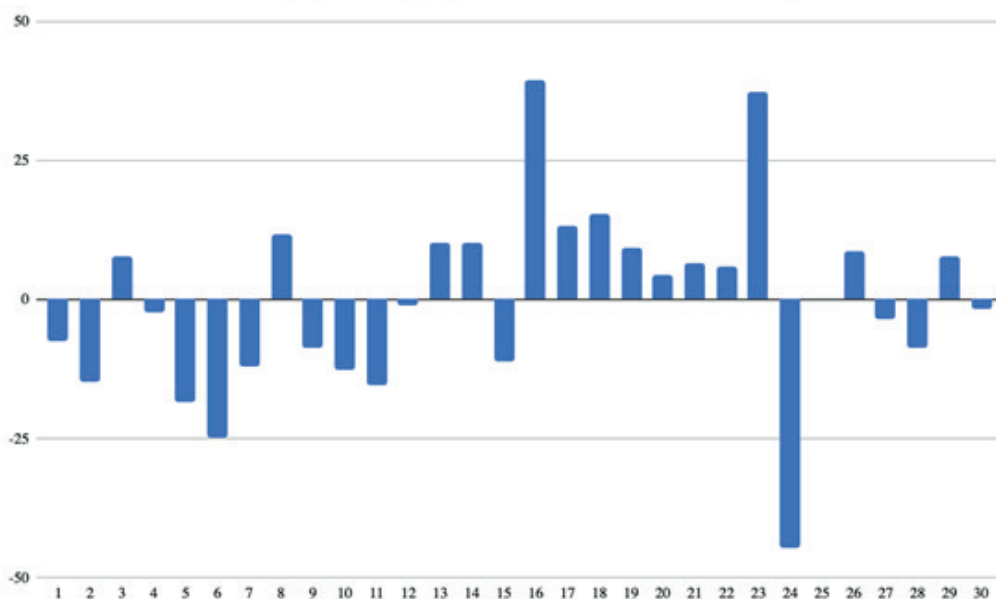


Also in this case, we find considerable variations: a range from a minimum of 1.548 (-44.69% compared to the average) to a maximum of 2.865 (+39.44% compared to the average), with a differential between extremes of more than 80%.

The general deviations can be read in graph 8.

Grafico 8

Numero medio di proposizioni per periodo (deviazioni dalla media) in percentuale



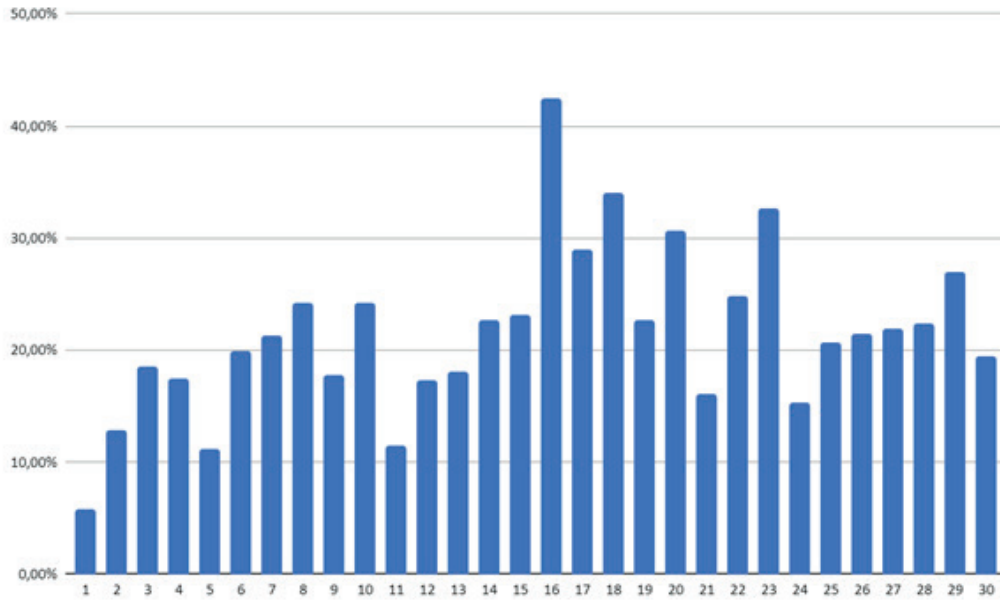
c. percentage of subordinates (G6)

As already stated in section 1.4, this data contributes to defining the degree of syntactic complexity of the text. The greater the number of subordinate clauses, the greater the difficulty of comprehension.

No benchmark can be given on this element either, as it is subject to several variables. The average figure is 21.54%. Graph 9 shows the values for each contract examined.

Grafico 9

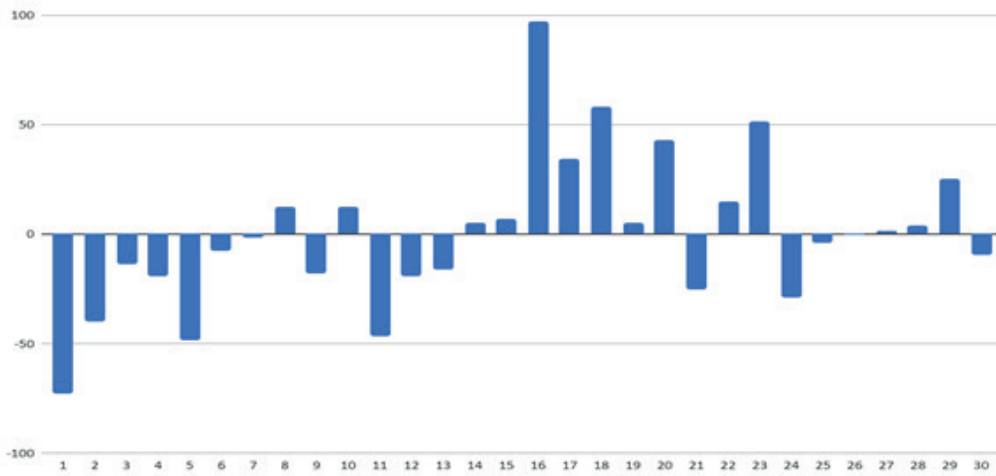
Percentuale di Subordinate



It is significant that it is precisely on this syntactic aspect that the greatest differences are to be found: a range from a maximum of 42.41% (+96.82% over the average figure) to a minimum of 5.87%, a figure that is, however, affected by the peculiarity of the structure of the specific policy. If we exclude the latter, the lowest figure is 11.10% (-48.47% over the average). The differential between the extremes is therefore about 140% (see graph 10). As repeatedly pointed out, we also have confirmation here that it is precisely on the syntactic aspect that the greatest differences and criticalities are to be found.

Grafico 10

Subordinate (deviazioni dalla media)



d. syntactic tree and dependency relations (G8 and G9)

These two indicators help us to understand the degree of complexity in the organisation of the text (see para. 1.4). For both results, there are rather small margins of fluctuation, which is evidence of a roughly similar trend. Before analysing them, it is interesting to observe the correlations with the overall Gulpease index in graphs 11 and 12.

Grafico 11

Gulpease e profondità dell'albero sintattico

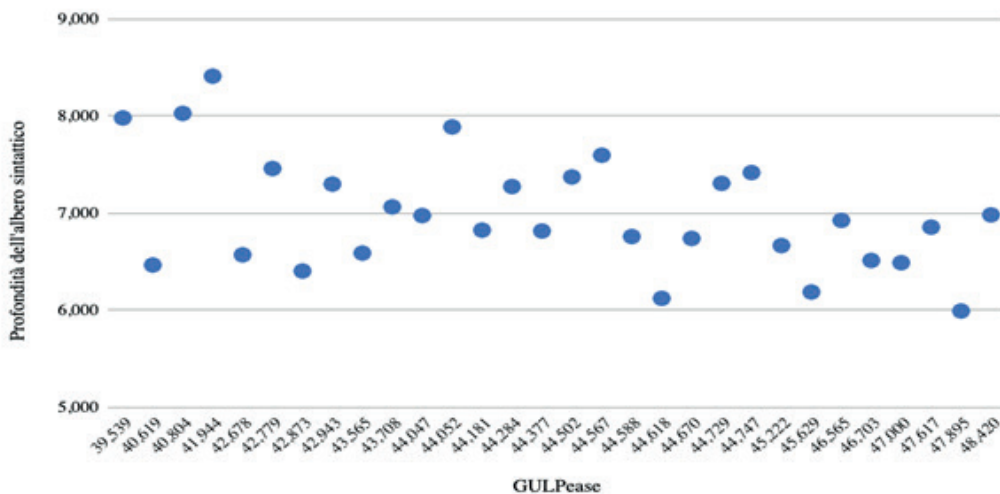
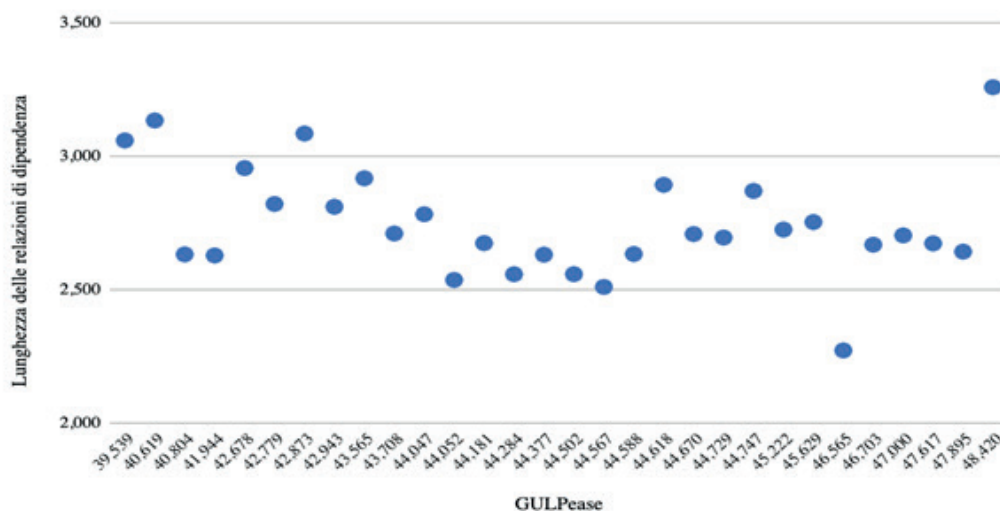


Grafico 12

Gulpease e lunghezza delle relazioni di dipendenza



In graphs 11 and 12, we have sorted the Gulpease values by increasing value of the index. This makes it possible to see that, with the exception of a few cases, there is a weak negative correlation between the Gulpease index and these two syntactic indicators.

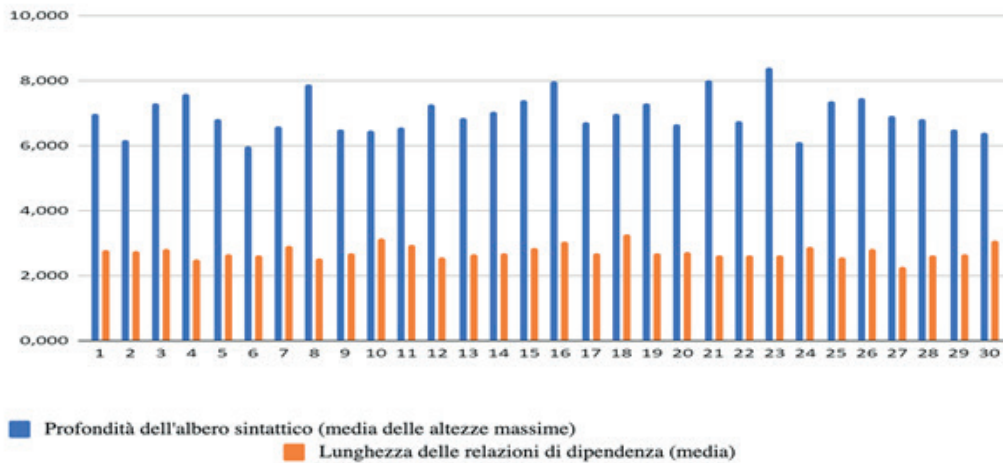
As we will see further in the qualitative part (Chapter 3), the latter show that complexity is given by the 'distances' between the main clause and the conclusion, but also that the overall index is affected by other factors that combine with these.

Moreover, on the subject of syntactic complexity, these indices need to be complemented by a qualitative assessment that gives a measure of which propositions and logical articulations are employed.

We have reproduced the two indicators G8 and G9 in the same graph. 13.

Grafico 13

Comparison: depth of the syntactic tree and length of the dependency relations



The data show how syntactic complexity is greater in some contracts, less so in others. Furthermore, it is noted that there is a weak negative correlation between the two indicators.

e. words not belonging to the basic vocabulary (G4)

This data helps to define the 'non-modernity' of the language used and its usability by citizens. As the value of the parameter increases, the text becomes more difficult to understand (see para. 1.4).

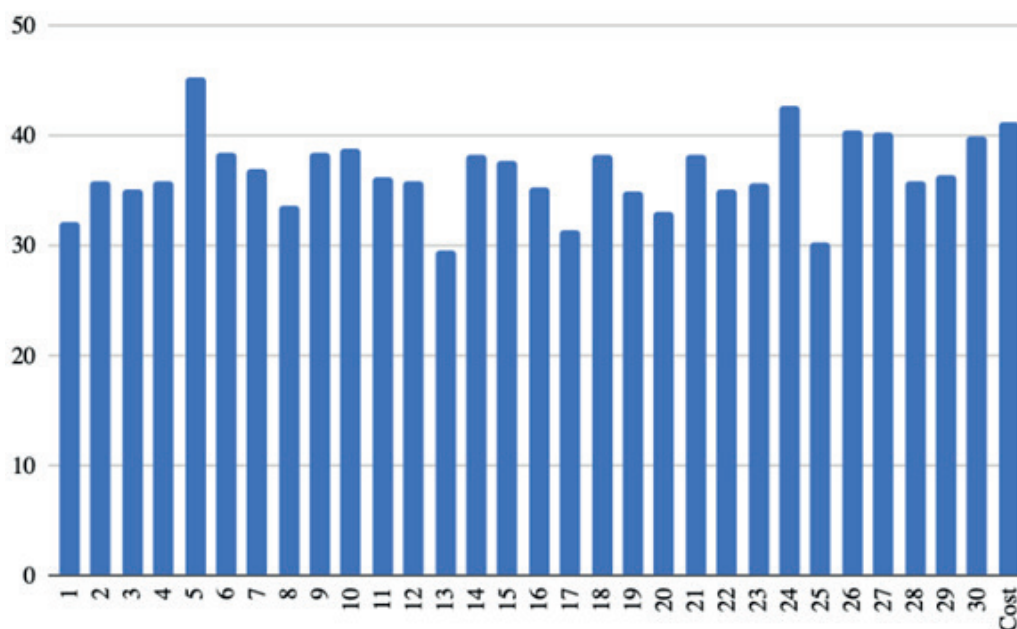
The sector average is 36.51%, which is lower than the figure for the Constitution (41.19%), however with the observations we have already made above (paragraph 2.1). This quantitative data should be complemented by what is reported below in the qualitative analysis.

The extreme value is 45.34%, a figure which exceeds the industry average of 24.17%, but which is also above the benchmark of the Constitution; similar values are found for only three other undertakings, the only ones exceeding 40% with values of 42.62%, 40.39% and 40.20%, respectively.

At the other extreme are two companies with values near to 30%, respectively 29.61% and 30.29%.

Grafico 14

Parole non appartenenti al vocabolario di base



2.4 Overall evaluation of quantitative data

In table 1 below, we summarise the overall data comparing the industry average with the Constitution. For each indicator, the standard deviation, range and coefficient of variation were also calculated.¹⁵

15 The coefficient of variation represents the dispersion around the mean and is independent of the unit of measurement. It allows the variability of different indicators to be compared.

16 D. Brunato, G. Venturi, *Le tecnologie linguistico-computazionali nella misura della leggibilità dei testi giuridici*, "Informatica e diritto", XXIII, 1, 2014, pp. 111-142.

Indicators	Average* of the sector	Benchmark: Italian Constitution ¹⁶	Standard deviation	Range	Variation Coefficient
G1 Gulpease	44,329	54,9	2,087	8,8808	0,0471
G2 Average length of periods (words)	24,365	15,6**	3,194	14,7670	0,1311
G3 Average length of words (characters)	5,676	5,5	0,125	0,6250	0,0220
G4 Words not belonging to the basic vocabulary (%)	36,514	41,19	3,435	15,73	0,0941
G5 Average number of propositions per period	2,055	1,372	0,344	1,7290	0,1676
G6 Percentage of subordinate clauses	21,546	13,9	7,411	36,54	0,3440
G7 Main clauses (average per period in %)	78,383	86,1	8,158	40,66	0,1041
G8 Syntactic tree depth (average of maximum heights)	6,998	7,118	0,594	2,4230	0,0849
G9 Length of dependency relationships (average)	2,748	2,544	0,206	0,9880	0,0750

* Weighted average.

** The value is calculated in tokens. If it were calculated in words it would return a slightly lower figure, so the comparison would be worse for the sector.

In summary, given all the available data, we can come to these conclusions:

- the relevant element is syntax, i.e. the organisation of the period: the parameters defining the syntactic theme – number of words per period G2, number of propositions per period G5 and percentage of subordinate sentences G6 – are those that deviate more significantly from the Constitution. It appears, however, that on these issues some companies have already moved to some extent towards simplification;
- these three data can also be partly associated with the depth of the syntactic tree G8 and the length of the dependency relations G9. The variations from one Company to another, by the very nature of the data, have small values, however they still indicate an interesting aspect;
- another critical element is the lexicon: the quantitative data, as mentioned above (G4, para. 2.3, point e) reveals a relevant aspect, that is, a considerable presence of unfamiliar words; however it is the lexical aspect that needs a qualitative analysis more than other aspects, as we will see below in paragraph 3.3;

- the low dispersion from the mean of lexical indicators (particularly average word length G3), indicates that all contracts continue to use an overly complex lexicon.

As we have seen, the Gulpease index is a good synthetic evaluation tool; however, it must be integrated with the other elements to obtain a general scenario, which touches the constituent elements of the textual system.

To be transformed from an analysis tool to a direction indicator, these quantitative data also need qualitative data, outlined briefly here, which must however be read on a case-by-case basis.

Attached to this report, as additional analytical evidence, is the *“Statistical Appendix: Multivariate Analysis of Quantitative Indicators.”*

3 Results of the qualitative analysis

3.1 Structure, graphics and customer orientation

3.1.1 Structure

The analysis of the structure of contracts has taken into account the different features of the types of policies that have been the subject of the survey.

In the sample, there are contracts with only one main guarantee (accident), others with two (accident and sickness) and others with more than two (accident, sickness and assistance). The main guarantee is, in turn, accompanied by a series of secondary guarantees; among them, some are operating at all times, others only upon the purchase of the main guarantee and other secondary guarantees. The structural articulation of the policies must, therefore, be functional to the number of main guarantees and the composition and number of secondary guarantees.

As a result, it is impossible to identify a best practice that assigns the same structure to all types of contracts.

a. The structure of the individual guarantee:

the syntactic-lexical revision of the text sections containing the guarantees is still modest. Exclusions are presented under bulleted lists, so they often have a more immediate formulation, whereas the presentation of guarantees is structurally

more complex, both in terms of syntax and for the greater use of the 'bureaucratic' language. A limited number of companies include in the articles of the contract a description that initially proposes the benefit of coverage and then the other elements.

With regard to the degree to which the guarantee structure has been revised based on the insurance Guidelines "Clear and simple contracts" of 6 February 2018, the analysis has also made it possible to distinguish different behaviours:

- some companies have maintained the previous structure, with the adoption of some modest graphic intervention;
- others have changed the structure of the texts, by dividing the guarantees into headings according to a mere subdivision of content without evidence of a syntactic/lexical revision of such guarantees;
- other undertakings have a structure aligned with the pre-contractual documents, with a subdivision of the text into thematic sections (*what/who is insured; what is not insured, etc.*), which are in turn divided into subsections: for example, the '*what/who is insured*' section is subdivided into the subsections '*who can be insured, what damages can I insure against, how do I insure myself and how coverage operates*'. This approach facilitates the understanding of the contract, promotes homogeneity with DIP and DIPA and allows for an organised presentation of the contract terms; many contracts still present syntactic-lexical critical issues.

The assessment carried out shows that, based on the above Guidelines, companies worked on the reallocation of guarantees in the different sections, with attempts at structural reorganisation, with varying levels of achievement.

In the part dedicated to common standards, only a more limited number of companies have worked on the structure.

With regard to the assessment of the entire information set, the structure of the pre-contractual documents is almost uniform for all the companies, and there are differences only in the presentation of the guarantees, which in some cases is very descriptive, in others has a more concise structure by points. The latter solution is preferable because the documents are clearer and easier to read. It should be noted that some deviations between the contents of the pre-contractual documents and the contractual documents, do not promote clarity.

b. The glossary

The analysis showed that some terms in the contract are not contained in the glossary because they are in current use in the industry (i.e. the term *policy*). On the contrary, some terms in the glossary are not in the contract. This last element may confuse the customer and in any case gives an image of poor care of the document.

3.1.2 Graphics

On this aspect, too, the analysis does not reveal a structured and homogeneous intervention system.

In many cases, it seems as if a particular graphic design has been simply used (usually bold) for the elements the customer has to pay more attention to (such as limits and deductibles); in other cases, a graphic restyling has been carried out that takes into account graphic choices that may vary according to tools and objectives. In some contracts, icons taken from the pre-contractual documentation were included and others were created specifically for the contractual conditions.

In addition to icons, other graphic elements – useful for simplifying the text and make it more readable – are used but only by a limited number of companies.

The analysis also showed that the graphic choice of words in the glossary is rarely explained, or the elements to which the customer should pay attention; some DIP are too descriptive; thus, in order to maintain the number of pages required by the regulation (maximum 3), they are written with reduced fonts.

An important role in terms of graphics and structural and syntactic revision is played by the use of lists. The transformation of texts into bulleted lists should follow a logic of rationalising the text for the sake of greater comprehension and readability.

The analysis highlighted that sometimes the choice of organising information into bulleted lists does not achieve the result of increased usability of the content, for example:

- guarantees are explained in bullet points, but explanations remain cumbersome;
- the lists have a repeated element at the beginning of each point which makes reading burdensome;
- graphics vary without logic: in a list indicating similar aspects sometimes letters are used, sometimes numbers. Bear in mind that letters or numbers are useful when in the text it is necessary to make reference to the content of the point (more specifically, numbers are useful when defining a process); if there are already letters in the cross-reference text, it is preferable to use numbers for a new list;
- there are typos: e.g., in the first bullet point the first letter of the word is capitalised, while the second and forth bullet point are in lower case, which is not conducive to clarity. If the company has used capital letters to highlight words in the glossary, these errors can be confusing for the

reader. Other typos refer to sentences that have been repeated twice or missing bullet points.

3.1.3 Customer orientation

a. Cases of poorly customer-oriented language or non-transparent language were noted:

- contract names with foreign words or adjectives (such as *total*) that may imply a higher level of coverage than actual coverage;
- names of individual guarantees or insurance plans that contain adjectives (such as *comprehensive*) leading to the consideration set out in the previous point;
- names of guarantees that do not emphasise the value of the guarantee but the adverse event, particularly death: well known and consolidated studies indicate insurance customers' instinctive aversion to topics related to death or serious health events;
- names of guarantees that are contrary to ESG indications (*key man insurance*)¹⁷ or are now outdated (*handicapped*)¹⁸;
- English titles for the guarantees, which may not be appreciated by some customer segments;
- use of different terms for the same word in the text, especially for technical or recurring terms. For example, in the same contract the word *form* is often replaced by the term *policy* or *policy sheet*, as synonyms. Another example is the restricted area which, in the DIPA file, is referred to as the *Internet area reserved for the policyholder (home insurance)*¹⁹ while in the other documents it is called with different names; (*customer area* in the DIP, *restricted area* in the DIPA, a specific name in the contract).

b. An example of poor customer orientation is precisely the clause describing the restricted area or home insurance. Most DIPA report exactly what is indicated

17 Item 5 of the UN 2030 Agenda aims to achieve gender equality and in particular equal opportunities for leadership at all levels of decision-making (5.5), while ensuring key men implies that only men can have a managerial position in a company.

18 The *International Classification of Functioning*, approved by the World Health Assembly in 2001, in which a deficit-based terminology (*handicap, disabled, dyslexic*, etc.), or one that equates the person with the disability (hence the criticism of *differently abled* as well), is abandoned altogether, and instead more descriptive terms of life contexts are adopted, which focus – in a multidimensional perspective – on a person's resources and abilities rather than on his or her failures.

19 Restricted area in the companies' websites, which can be accessed via the Internet and in a secure manner to consult the main information related to one's subscribed contracts and use instruction-giving functions.

in the standard pre-contractual documents (*for this contract the company has an internet area reserved for the policyholder (so-called home insurance) after signing the contract, you can consult this area and use it to electronically manage the contract*). The sentence *electronically manage the contract* is too general and might lead the customer, who is used to the instruction-giving area of the home banking, to believe that in this area too it is possible to perform operations. So the contract should explicitly state what functions are actually active in home insurance. In the contracts analysed, however, it is rarely made explicit what functions are active and how one operates in the restricted area (*home insurance*). Either in the foreword or in the conditions applicable to all guarantees, specific information of such an important aspect for the customer should be included.

The contract rarely contains an article on the restricted area, indicating that the service is free of charge, how to obtain the access codes and authenticate oneself, and the availability of this information on the site. A further element of customer support could be the presence of examples of functionality in a page at the beginning of the contract.

- c. Areas for improvement regard the conditions applicable to all guarantees: it is noted that articles of the civil code are frequently quoted without any explanation and the order of presentation of the conditions is rarely reviewed. This translates into the fact that often the beginning of the contracts is the article on declarations provided by the customer concerning the circumstances of the risk or sometimes the article on uninsurable persons, thus focusing right from the beginning on relevant circumstances in a negative way for the customer.
- d. On the other hand, some clauses, relating to guarantees with innovative content, have highlighted a positive element of attention to the customer and a focus on some changes in the social environment; below are some examples:
 - indemnity guarantee also for the insured who is a donor;
 - psychological support and job coaching;
 - guarantee called "Education Fund", which provides a fund for student and cohabiting children. Less positive is the fact that children of separated parents are not offered this opportunity;
 - guarantee that provides help with household chores extends to domestic help, babysitting, dog-sitting or help with shopping;
 - definition of family unit including persons living together and parties to civil unions;
 - indications in the *cover* page which, thanks to specific graphics, highlight the app dedicated to claims management and the customer service number;

- extension of the insurable age with the possibility of access to the product for people over the age of 80 at the company's discretion; this element must be taken into account in view of the ageing population;
- customer satisfaction check provided for in the contract;
- articulation of the presentation of the guarantee that highlights the benefit to the customer or emphasises a relevant aspect. Worthy of note is the title of the guarantee on the policyholder/insured person declarations on the circumstances of the risk, which is briefly reported as *declaration on insured risks*, emphasising the risk-taking process. This points to the need for a correct declaration for the purposes of the functionality of the coverage and thus to the benefit for the customer (transformation of customer perception from obligation to opportunity).

In conclusion, the assessment of customer orientation that emerges from the analysis of the contracts highlights limits that could easily be overcome.

There is evidence of efforts by some companies to include special guarantees. However, the perception is that this is more an adjustment to a marketing strategy than a design that pervades the entire contract; some openness can be seen towards the new social context, in particular, a family with separated parents or cohabiting partners, however still none for single-parent families.

Classic contact tools are updated, while other functionalities such as apps or the restricted area are not enhanced by adequate representation. Also lacking in the contracts of direct insurance companies is an incentive for the customer to be more proactive about his/her insurance position.

Graphical inaccuracies, typos and some inconsistencies between pre-contractual and contractual documentation denote less attention by companies to a tool that could instead play a decisive role in increasing customer confidence in the sector.

3.2 Syntax and grammar

In the course of the analysis, very relevant aspects were found in relation to clarity, some of which have already been highlighted in the quantitative analysis.

We can add further elements:

- in addition to the average data, with regard to the length of periods in particular, we have recorded many cases where this is far above the desirable values: in one case even 108 words per period;

- We should also consider that many short periods are short because they express a simple concept and not by a specific choice of the editors, which contributes to the general tendency to construct periods with a word count well beyond the benchmark of the Constitution, and in any case beyond the 25-word limit;²⁰
- an insurance text necessarily makes use of conditional formulas: in almost all cases, various formulas are used with the conjunctive, such as *should the policyholder wish to...*, instead of the simpler and equally correct and clear *if* followed by the indicative (*if the policyholder wishes*). Formulas with the conjunctive, albeit correct, are less direct and easy than those with the indicative. Furthermore, on this aspect, it is recalled that conditional sentences and *if* clauses use the indicative to express certain conditions, while the conjunctive serves to express possibility or impossibility of an action (past tense + compound conditional);
- implicit formulas with the participle and, albeit to a lesser degree, the gerund are often used. These are implicit forms of the verb that result in less clarity and carry with them a bureaucratic veneer. Compared to these forms, the explicit form is always preferable (for ex., the relative clause instead of the participle), with appropriate use of adverbs and conjunctions or explicit verbs as already recommended in 2011 for administrative acts.²¹ Examples:
gerund: ... *accident, as being intended to mean* (i.e.: → ...accident. By this is meant); *while excluding what is provided for* (i.e.: → is in any case excluded); *notwithstanding* (i.e.: → is applicable...)
participle: *The guarantees referred to in this section are not operating*;
- with regard to verb tenses, the future tense is used with some frequency as an alternative to the present tense, for reasons that can be ascribed to a misunderstood sense of time: it is indeed true that prescriptions inevitably fall in a future time with respect to the time of writing and reading, however by their nature they always have a timeless value, which in Italian is generally expressed by the present;
- long adverbs, especially in -ly, are frequently used: their length generally advises against their use, especially when they can be replaced by shorter ones. Often, the use of these adverbs is only an attempt to refer to a style that is considered higher - sometimes wrongly - (e.g: prior to instead of before; subsequently instead of after; solely instead of only, etc...).

20 See footnote 14.

21 Gruppo di lavoro promosso dall'Istituto di teoria e tecniche dell'informazione giuridica e dall'Accademia della Crusca (a cura di), *Guida alla redazione degli atti amministrativi. Regole e suggerimenti*, Firenze, ITTIG-CNR, 2011, p. 22. On this and similar issues, see also L. Carpanè, V. Morlacchi, *Che contratti! Progettare, scrivere e disegnare contratti chiari e semplici*, Torino, Giappichelli, 2022.

Syntactic organisation, which we have already examined before (para. 2.3, points a-d), deserves separate discussion.

Indeed, a close correlation emerges between those quantitative data and a syntactic analysis, aimed at reconstructing the logical flow (which propositions are met and with which conjunctions).

What we have observed is that in correspondence with longer structuring, there is also a sequence of subordinate and coordinate clauses the interpretation of which becomes more difficult, not least because of lexical choices (for example conjunctions) and morphological choices (verb modes and tenses).

3.3 Lexicon

Leaving aside whether the words belong to the basic vocabulary, reading and analysing the vocabulary used in the contracts confirms the perception that these texts belong to the bureaucratic language; on this aspect there are areas for improvement to make the terminology closer to customers.

It is worth noting that in the texts, it is actually possible to detect all the phenomena that contribute to this perception and on which it is easy to work to make contracts clearer:

- recourse to formulas exclusive to legal-bureaucratic language: *'subject to the right; without prejudice to the modalities of; it is hereby stipulated*, etc. These are expressions that have already been defined as *'spurious'* or *'collateral technicalities'* by Mortara Garavelli²²
- use of redundancies, traceable to the rhetorical figure of *amplificatio*: *the Policyholder shall in any case be entitled to; individuals who are aged 75 years or less at the time of subscription, i.e. who have not yet reached the age of 76 years, are insurable*;
- use of nominalisations: *upon full restitution; with the exclusion of; from termination thereof*;
- use of unnecessary or ambiguous conjunctions, such as *and/or*. We have pointed out the risks of using this form because it is ambiguous and thus *'can give rise to lengthy legal quibbles'*²³;

22 B. Mortara Garavelli, *Le parole e la giustizia. Divagazioni grammaticali e retoriche su testi giuridici italiani*, Torino, Einaudi, 2001.

23 So writes the Crusca in the language advice section of its website; later taken up in Accademia della Crusca, *Giusto, sbagliato, dipende. Le risposte ai tuoi dubbi sulla lingua italiana*, Milano, Mondadori, 2022, p. 74.

- use of words that do not correspond to the reality (not only the one perceived) of the insurance contract: *premium agreed; It is expressly understood that;*
- the use of the so-called *variatio sinonimica*: in some cases, to indicate the occurrence of accidents various verbal expressions are used (*due to, caused by, determined by, as a result of*), with the effect of creating doubts in the reader as to any differences. In some cases, the text even goes so far as to juxtapose words with similar meanings (*arising out and resulting from*);
- the use of a negative language: expressions such as *therefore the company does not pay any indemnity if the permanent disability is of no more than 3% of the total* have the power to generate unnecessary logical contortions.

3.4 Policyholder/insured person declaration clause on the risk to be insured

As we have seen above (para. 2.2), this clause offers data that presents a different and uneven scenario from the overall data.

Turning to a qualitative assessment three different types of attitude towards this clause can be found:

- passages taken word by word from the text of the code (it is the most frequent case);
- reiterating the terms of the code, with additional elements, which usually make the text even more complicated (it is used by some companies);
- rewriting for greater comprehensibility (it is the least frequent case).

This clause in some respects can be taken as a sample for a very important consideration about the relationship between contractual text and civil law rules. It had already been noted in *Simple and clear contracts*, p. 5, that: "these rules, in the majority of cases, are merely reproductive of legal rules, in particular the provisions of the Civil Code". This, as is widely recognised, is not a legal obligation: contracts must comply with the rules, not be a mere copy-paste of them.

Therefore, a general indication to suggest to companies is to think of the specific function of the contract as an act that brings the parties together²⁴. It is up to those who write the text to consistently 'translate' the rules into a 'pact' with their customers. It is therefore a question of taking on the role of faithful "translators" of the general norms to concretise and actualize them in the specific contractual relationship.

24 See L. Carpanè, V. Morlacchi, 2022, mentioned previously, pp. 40-43.

3.5 Overall evaluation of quantitative data

We finally underline that the overall picture that emerges from the analysis and which shows us how widespread are the habits, stylistic features, and forms of what some call the “insurese” (insurers language).

There is no doubt that in some cases in the texts analysed it is possible to see an attempt to write better (according to the guidelines of the research and good practices), but in the end the influence of bureaucratic language is not mitigated.

Although this research was carried out on a limited sample of clauses and a specific type of contracts, for this type of linguistic analysis, the partial nature of the samples does not invalidate the results at all, because the style of writing is a constant in every contract. Finally, we would like to point out that while the analysis was carried out on the clauses selected in agreement with IVASS, a general reading of the contracts was made, which did not reveal any significant variance.

4. Examination of some specific clauses

The examination was focused on the clauses relating to:

1. guarantees for permanent disability due to accident and death due to accident;
2. exclusions from the guarantees listed in point 1;
3. limits to the guarantees listed in point 1;
4. inexact or incomplete declarations.

4.1 Clauses relating to guarantees for permanent disability and death and to exclusions

The analysis examined all the clauses in the text of the contracts that regulate the cases of permanent disability and death.

More specifically, the contractual rules describing the following were examined:

- the object of the guarantees;
- territorial extension;
- temporal extension;
- guaranteed benefits;

and the relevant limitations, that is:

- the limits;
- the exclusions.

The evaluation took into account:

- the benchmarks set by special and regulatory provisions of the Codes;
- general criteria relating to clarity and usability of presentation methods;
- the logical consistency between guaranteed benefits, limits and exclusions.

4.1.1 The presentation of guarantees

Some critical issues are to be found in terms of the clarity of the presentation of contractual guarantees.

The sentences are still too long, complex and involuted.

The use of technical terms, often unnecessary or not accompanied by adequate explanation within the text or in the glossary, is universal.

Constant recourse to words of uncommon usage, often obsolete.

Sometimes the explanations are tautological and sometimes even more complicated than the term or concept they intend to explain.

All this inevitably has a significant impact on the clarity of the text, the contents of which often cannot be understood independently by the user.

4.1.2 Consistency between benefits, limits and exclusions

The criticisms highlighted with regard to language and syntax inevitably have repercussions on the understanding of the scope of the guarantees given.

However, also contributing to the difficulty of understanding is the structure of the contracts.

The most significant findings relating more specifically to the assessment of consistency between the parts of the contractual text are described below.

The choice that contractual documents should be set out in several documents, sometimes graphically and (in the case of paper) physically separate, appears to be suboptimal; in this way, it is impossible to be fully aware of the content of the

entire contract without having read all the documentation, which is often copious and sometimes marked by titles that can mislead even experts.

Also hindering the understanding of the scope of the guarantees is the manner in which, for various reasons, the presentation of exclusions relating to all guarantees is contemplated before the presentation of all guarantees has been completed. In this way, the text becomes incomprehensible, because it refers to aspects that are only stated later in the contract.

Sometimes, even the content of individual guarantees is not set out in a single article. Dividing it into multiple articles that are several pages apart is not conducive to comprehension, especially in case of readers who are unfamiliar with legal texts. The risk is that the policyholder will miss some of the guarantees to which he or she is entitled.

In general, greater accuracy is deemed appropriate.

Many inaccuracies in the exposition are found in the contractual texts, evidently resulting from the overlapping of different versions of the text that followed one another over time and were not adequately coordinated.

Here are some results:

- the same event is insured in some articles and excluded in others;
- the limitation period is one year instead of two;
- reference is made to father's authority, which has long since been abrogated.

In the clause, found in many contracts, which provides for an increase in the indemnity in the event of the simultaneous death of both parents with minor or seriously disabled children, it is often not indicated whether the parents must both be insured or not for the clause to be operative, nor whether this increase is due to the children in any case or only if they are indicated as beneficiaries; the logic, however, contrary to the text, would tend towards the latter hypothesis, also because it does not seem to be possible to speak of an increase in compensation in favour of those who are not recipients of any compensation, as is the case if the beneficiaries are persons other than children.

4.2 Policyholder/insured person declaration clause on the risk to be insured

The clause in question has been taken into consideration because of its typicality, which exposes it to the risk of becoming the repository for many of the critical issues found in insurance contracts.

The first remark concerns location: it is correct to place it in the part of the contract dedicated to the general conditions or common rules, while the choice to place it at the beginning of the contract, as is the case in almost all the contracts examined, risks being symptomatic of an uncooperative attitude towards the insured.

The second concerns the manner in which they are presented, in most cases extremely concise, and consisting of a mere affirmation of the principles laid down in the Civil Code.

Legal standards are recalled but not explained: some companies have made this attempt at simplification.

4.3 The contractual text

The analysis carried out on the entire contractual text, for clarity and usability profiles only, provides results that are no different from those observed for the individual clauses examined.

There are some areas for improvement with regard to the logical consistency between guaranteed benefits, limits and exclusions.

5 Conclusions and suggestions

As mentioned in the Foreword, this survey looked in detail at a sample of contractual texts of which part of the text was analysed. The results, in particular of the quantitative analysis, must therefore be considered in this context, while being aware that the sample chosen is statistically significant. It is worth emphasising that quantitative analysis alone cannot represent the effectiveness or criticality of the contractual documentation, so the results must be read in their entirety, as repeatedly stated in the report. It should be noted that careful evaluation of the content of the guarantees, including in terms of updating, regulatory compliance and value of the individual guarantee (some guarantees, which are the result of continuous amendments to the contract, have an excessively limited scope) is necessary in order to improve the quality of insurance contracts.

With regard to contract structure and customer orientation, there is no doubt that the industry has worked to make the documents more user-friendly. However, some elements, which we believe are useful for consultation, are still not present in all the contracts.

With regard to the linguistic aspects examined, the overall analysis clearly indicates the objective to be pursued: the use of clear and simple language. This can be

achieved if the processes, methods, objectives and content of simplification are conducted in a manner the effectiveness of which is widely recognised, as also suggested in recent publications.²⁵

At the same time, there is an increasing need to focus on the visual aspect, making use of all available graphical tools to make content and processes comprehensible.

For those who claim that it is not possible to simplify, here are a few suggestions and, in the appendix, we provide some practical examples of rewriting, which are possibly open to further editing but can be considered a first step. The *Statistical Appendix: Multivariate Analysis of Quantitative Indicators*, mentioned in para. 2.4, also follows.

5.1 Suggestions

- Generally speaking, the importance of consistency between contractual and pre-contractual documents is emphasised. Furthermore, the need for a presentation page, in which the operation of tools or other services provided by the company, in addition to the operation of the contract, possibly described in an overview table, is also highlighted.
- Linguistic revision cannot be separated from an appropriate structural revision leading to a presentation of information that takes into account the hierarchy of information through the use of bullet points instead of lengthy sentences, attention to the consistency of graphic choices, suitability of the content to the presentation method, and supports for better understanding.
- In language revision, it is important to use a positive way of presenting contract clauses: information must be conveyed with an emphasis not only on the obligations but also on the benefits for the customer, so as to convey the concept that the policyholder behaviour is fundamental to ensuring that the cover is appropriate to his or her needs.
- The linguistic aspect cannot be the only driver in the revision. It is useful to start with a careful reading of the contractual clauses in order to identify precisely the value of the guarantee, its scope within the contract and from the perspective of regulatory consistency, in particular with respect to the consumer code, and its appropriateness in relation to the changed socio-economic context. This will continue to enhance the relationship of trust between the insurance industry and consumers.

25 L. Carpanè, P. Contaldo, *Te l'assicuro. Più che un metodo per scrivere nelle assicurazioni*, Milano, Centopagine, 2021

- A final suggestion of a general nature, but one that should be the driving force behind the activity, we underline the importance of the adoption in strategic plans of a culture of customer-centricity and of simplification that is understood and shared at all company and distribution levels. If well conceived and widely shared, this attitude can lead to a major transformation of the entire insurance ecosystem.

Below are more detailed suggestions, broken down by topic.

5.1.1 Structure of the contract

The analysis makes it possible to identify certain elements that can contribute to defining a better contract structure:

1. the structure adopted for pre-contractual documents should, insofar as possible, be maintained in the contract in order to make the structure of the whole information set homogeneous.
2. The distinction between *contractual rules common* to all guarantees and *contractual rules* relating to individual guarantees, which is present in most of the documents analysed, has the advantage of making it clear to the customer which contractual rules always apply, regardless of the guarantees, and which rules are specific to individual guarantees.
3. The choice to maintain this distinction should be functional to the structure of the contract, and thus:
 - in simpler contracts, the rules could be indicated in the different sections in which the contract is described, as is the case in the DIP and in the DIPA;
 - in the more structured ones, it may be useful to have a section on *common rules*, with the features described below in the sub-section on customer orientation.
4. The articulation of guarantees:
 - in single-guarantee policies, if the number of 'secondary' guarantees, whether always valid or optional, is limited, the most effective structure is that which provides the *what is insured* section for all guarantees, followed by the *what is not insured* section
 - in more complex contracts, however, it is preferable for there to be a distinction between *what is insured* and *what is not insured* for each individual guarantee; this way, the customer has information on guarantees and on exclusions in the same context, and is able to have an immediate and complete perception of the contractual scope;

- dividing the contract into sections along the lines of pre-contract documents may be useful, with the inclusion of the sections: *contract from A to Z*, and *claims*.
5. The tools useful for consultation and clarity of the information contained in the document:
- the contract should open with an index identifying all the articles, not just the sections, so as to be functional for consultation. Excessively brief indices are still very common;
 - the glossary:
 - should be inserted at the beginning of the text, specifying that the definitions contain the meaning attributed to certain terms within the contract. This indication is important, because in everyday language some terms may have a meaning that does not coincide with the meaning that the company adopts for the guarantee, which may lead to misunderstandings.
 - should be exhaustive, simple and non-redundant,
 - should follow an alphabetical order;
 - support tools: a decisive element in understanding the articulation of the contract is the presentation.

Since most contracts are composed of guarantees that are always valid, guarantees that are only valid if purchased, and others that are only valid if a specific guarantee is purchased, it is crucial that readers have a tool that, already at the pre-contractual stage, allows them to understand how contractual guarantees can be combined. Two elements are useful to achieve this:

- a presentation page containing macro indications of the operation of the contract, graphic choices, support tools, possible contacts or description of the operation of the restricted area (so-called *home insurance*);
 - a summary outline of the structure of the contract, so that the potential customer can assess the optimal composition of the guarantees to be purchased, favouring the customer who should decide at a later stage to expand or modify this scope.
- Consultation boxes are another useful element to explain some complex concepts with the support of examples. Clarity and conciseness are decisive factors, especially when it comes to quantitative examples. A numerical example should show the steps with a concise descriptive content; the descriptive explanation can be included as an introductory or concluding element, otherwise the quantitative logical steps lose their effectiveness. It is for example useful to have notes referring to explanatory boxes to explain certain parts of the contract.

- Tables too play a significant role in understanding insurance mechanisms. A relevant element is their positioning within the contract. An excessive number of tables inserted in the guarantee greatly reduces comprehension because it interrupts the reading. It is therefore appropriate that tables, if they are numerous or particularly extensive, be included as annexes at the end of the contract or at the end of a section. A table explaining how the mechanism operates using the data in the table can also be provided if necessary. Summary tables of limits at the end of each section are very useful and popular.

5.1.2 Graphics

Good graphics contribute to better readability.

It would be appropriate to:

- take into account, when making graphic choices, the rendering in black and white or reading on video, in fact:
 - underlined and bold characters replicated over very long periods attract the customer's attention, but strain the eyesight;
 - colours such as light blue or light green are scarcely visible;
 - light grey as a background is lost in the print;
- avoid two-column presentation because it does not facilitate reading and comprehensibility;
- make the graphic choices explicit to the potential subscriber: the graphic choice of words in the glossary is rarely indicated, or the elements to which the customer should pay attention;
- differentiate graphic modes: e.g. bold for limitations, underlined characters for opportunities;
- assess the font size according to the document (contractual conditions, DIP, DIPA, tables, boxes with examples). Some DIP are too descriptive; thus, in order to maintain the number of pages indicated by the Authority (maximum 3), they are written in such small font size that they are almost illegible;
- provide line spacing that does not compromise readability, particularly in the glossary;
- avoid excessive use of italics because it makes readability more difficult;
- take into account the importance of graphics, not just the font, also:
 - in the boxes needed to make certain complex profiles explicit;
 - in tables, where the presence of lines that surround columns and rows

and summarised information favour clarity and readability.

Some studies on graphics and their correlation with neuroscience offer interesting insights into operational choices.

The graphic legibility of a text can be defined as the ease with which the eye runs across the lines of the text. It is important that the path made up of words, themselves made up of numerous letters, is characterised by harmony that is also built by belonging to a single graphic style, i.e. a font. Linear fonts (some examples of clear fonts are Arial, Verdana, Tahoma; Arial in particular is easily readable both on paper and on video) are more readable by people with dyslexia, facilitate reading (as does the choice of a font size of 12 to 14 points); moreover, they are more familiar.

With reference to the font size, we recall the Authority's guidance on the need for a print font with an average eye of at least 1.2 mm.²⁶

5.1.3 Customer orientation

In order to improve customer confidence in the insurance company, it is essential to use a language that promotes clarity, especially with regard to certain elements:

- in the name of the contract, avoid foreign names or adjectives (such as *total*) that may imply a higher level of coverage than actual coverage;
- avoid names of individual guarantees or insurance plans (such as *comprehensive*) leading to the consideration set out in the previous point;
- as regards guarantees, prefer names that emphasise the value of the guarantee and not the adverse event, particularly death;
- verify that the names or headings of the guarantees are consistent with ESG (Environmental, Social, Governance) indications ("key man insurance")²⁷ and are not outdated ("handicapped person")²⁸;
- verify that guarantees and their description are conducive to inclusion, e.g., without gender discrimination;
- use a single name especially for technical or recurring terms, avoiding synonyms;

26 IVASS Regulation 41/2018, art. 12, para. 6.

27 See footnote 17.

28 See footnote 18.

- avoid legal references if unnecessary and provide in any case an explanation in the most consistent manner

From the point of view of customer orientation, it is important that, when applying the approach that provides for a section dedicated to the rules common to all guarantees, this section is not placed at the beginning of the contractual text; if it is considered preferable to place it at the beginning, at least the order of the conditions and the manner in which they are presented should be modified.

5.1.4 Syntax and grammar

To promote clarity, as highlighted in the quantitative analysis, it is appropriate to:

- limit the length of periods;
- Favour, when possible, the use of the indicative instead of the subjunctive;
- limit the use of implicit formulas with the **participle** and **gerund**. The explicit form is always preferable, with appropriate use of adverbs and conjunctions or explicit verbs as already recommended in 2011 for administrative acts;²⁹
- regarding **verb tenses**, use the present tense rather than the future tense;
- avoid the use of long adverbs, especially in -ly; in particular when they can be replaced by shorter ones. (e.g: *prior to* instead of *before*; *subsequently* instead of *after*; *solely* instead of *only*, etc...).

5.1.5 Lexicon

It is appropriate to avoid:

- the recourse to formulas of the legal-bureaucratic language;
- redundancies: (for ex.: *with no professional character; the Policyholder shall in any case be entitled to; individuals who are aged 75 years or less at the time of subscription, i.e. who have not yet reached the age of 76 years, are insurable*;
- nominalisations: *upon full restitution; with the exclusion of; from termination thereof*;
- The use of unnecessary or ambiguous conjunctions, such as and/or;

29 Gruppo di lavoro promosso dall'Istituto di teoria e tecniche dell'informazione giuridica e dall'Accademia della Crusca (a cura di), *Guida alla redazione degli atti amministrativi. Regole e suggerimenti*, Firenze, ITTIG-CNR, 2011, p. 22. On this and similar issues, see also L. Carpanè, V. Morlacchi, *Che contratti! Progettare, scrivere e disegnare contratti chiari e semplici*, Torino, Giappichelli, 2022.

- The use of words that do not correspond to the reality (not only the one perceived) of the insurance contract: *premium agreed; It is expressly understood that;*
- The use of unnecessary synonyms: (i.e. accidents *due to / caused by / determined by / resulting from*, etc...).

5.1.6 Policyholder/insured person declaration clause on the risk to be insured

The indication goes in the direction of setting out in the clause not only the legal obligation and the negative consequences resulting from non-compliance with it, but also the reasons underlying such obligation and the need to comply with it, by also resorting to examples, provided they are in positive terms.

A few companies have made this attempt; there are, however, few positive results, while for the others, exposition remains to be improved (see Appendix).

Appendix 1 – Practical examples of rewriting

1. Risk aggravation clause

Before:

The Policyholder shall notify the Company in writing of any Risk aggravation. (Gulpease 60)

Risk Aggravations not known to the Company or not accepted by it may entail the total or partial loss of the right to Indemnification, as well as the termination of the Insurance in accordance with Article 1898 of the Italian Civil Code, except as stipulated later in the section "Activities other than those declared" in the chapter "In the event of a Claim: Accident/ Permanent disability due to sickness". (Gulpease 43)

Afterwards:

The Insured Party must immediately notify <name of company> in writing if, during the term of the contract, the situation considered at the time the contract came into force changes in such a way as to increase the likelihood of the adverse event occurring ("Risk aggravation"). (Gulpease 52)

If the Insured Party fails to comply with this obligation, provided for under Article 1898 of the Italian Civil Code, it may lose all or part of its right to compensation. (Gulpease 63)

2. Clause on declarations concerning the circumstances of the risk

Before:

Inexact or incomplete declarations on the part of the Policyholder regarding circumstances affecting the assessment of the Risk may result in the total or partial loss of the right to Indemnification as well as the termination of the Insurance in accordance with Articles 1892 "Inexact or incomplete declarations with malice or gross negligence", 1893 "Inexact or incomplete declarations without malice or gross negligence", and 1894 "Insurance on behalf of third parties" of the Italian Civil Code. (Gulpease 42)

Afterwards:

The Insured party/Policyholder must provide <company name> with accurate and complete information that may affect the Risk assessment. (Gulpease 54)

If it fails to do so due to wilful misconduct or gross negligence with respect to facts it knows or could normally know, the contract may be terminated and the right to Indemnification may be lost (Article 1892 of the Italian Civil Code). (Gulpease 68)

If it fails to do so, but without malice or gross negligence or with respect to facts that it did not know and could not verify, <company name> may withdraw from the contract (Article 1893 of the Italian Civil Code). (Gulpease 75)

In such cases <company name> may withhold:

- any premiums already collected,
- the premium for the current insurance period,
- in the event of wilful misconduct or gross negligence, the premium due for the first year. (Gulpease 77)

3. Uninsurable persons - Termination of guarantees

Before:

"Whereas the company would not have agreed to provide the Insurance had it been aware at the time the Policy was issued that the insured was suffering from alcoholism, drug addiction, AIDS seropositivity, Parkinson's disease, epilepsy, all dementias, Alzheimer's disease, organic-cerebral syndromes, schizophrenia, manic-depressive forms, paranoid states, it must be emphasised that, if the Insured Party is diagnosed with one or more of these illnesses during the term of the contract, the Insurance shall terminate on the annual expiration date following the date of diagnosis, regardless of the actual assessment of the Insured Party's state of health, without otherwise being able to oppose any collection of matured premiums, which will be returned to the Policyholder net of taxes. (Gulpease 26)

Afterwards:

<company name> does not insure persons suffering from alcoholism, drug addiction, AIDS seropositivity, Parkinson's disease, epilepsy, dementia, Alzheimer's disease, organic-cerebral syndromes, schizophrenia, manic depression or paranoid states. (Gulpease 29)

If the Insured Party is diagnosed with these conditions during the term of the contract:

- the guarantee ceases on the first annual expiry date after diagnosis,
- the collection of premiums does not mean that the guarantee is active,
- the concrete assessment of the Insured Party's state of health is irrelevant,
- premiums are returned to the Policyholder net of tax. (Gulpease 67).

Appendix 2 – Multivariate analysis of quantitative indicators

Below we examine the indicators presented in the Report (Tab. A1), excluding the seventh, which is a simple transformation of the sixth: $G7=100\%-G6$.

Tab. A1 List of quantitative indicators

GULPease G1
Lunghezza media periodi (n.parole) G2
Lunghezza media delle parole (n.caratteri) G3
Parole non appartenenti al vocabolario di base % G4
Numero medio proposizioni per periodo (princ e sub) G5
Percentuale di subordinate % G6
Proposizioni principali (media per periodo in %) G7
Profondità dell'albero sintattico (media delle altezze massime) G8
Lunghezza delle relazioni di dipendenza (media) G9

A1 Univariate and bivariate statistics

Le statistiche univariate sono in Tab. A2 mentre le correlazioni sono riportate in Tab. A3.

Tab. A2 Univariate statistics

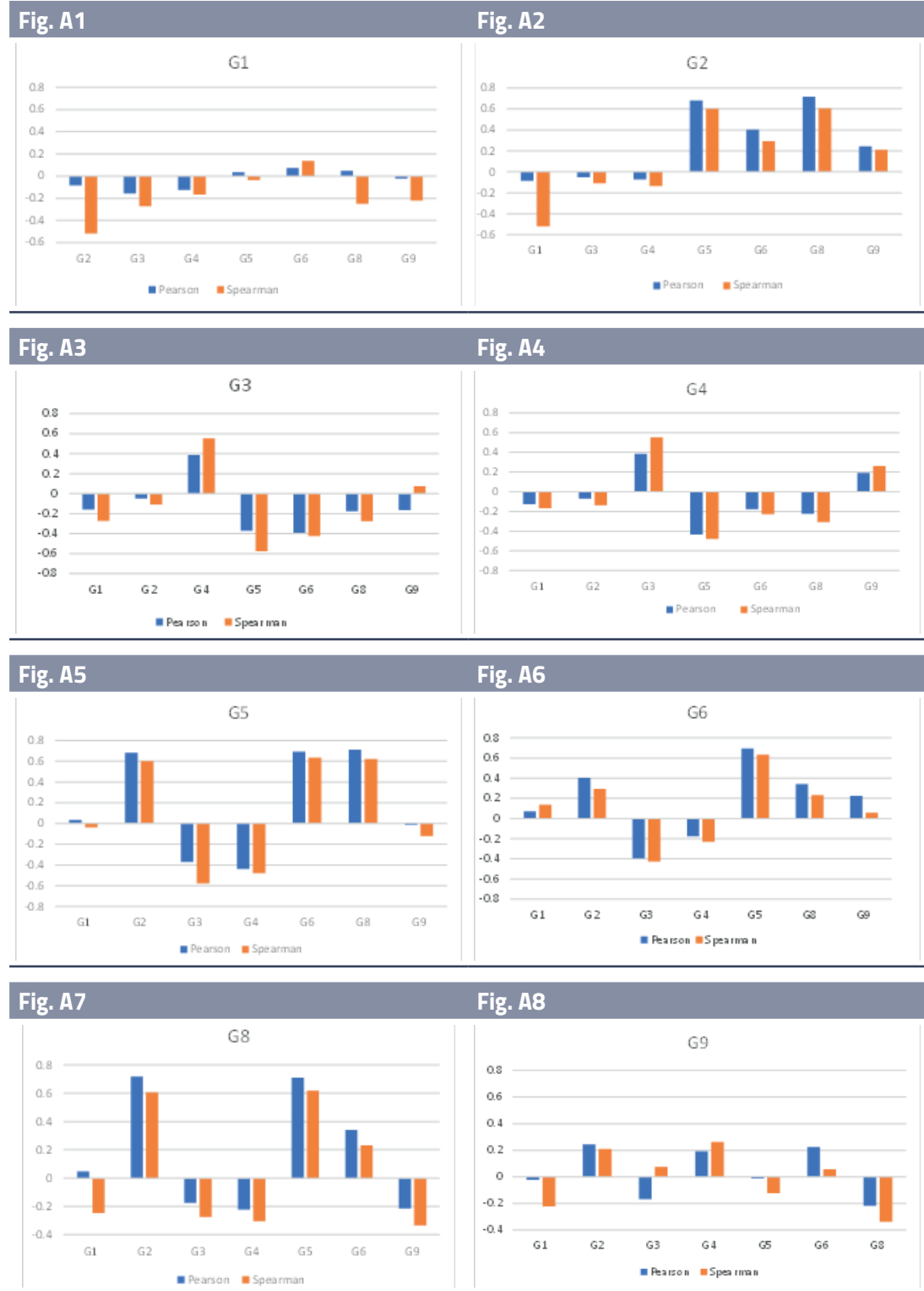
Variable	N	Mean	Std Dev	Median	Minimum	Maximum
G1	30	42.764	8.318	44.331	0.047	48.420
G2	30	24.365	3.194	23.819	18.262	33.029
G3	30	5.676	0.125	5.700	5.233	5.858
G4	30	36.514	3.435	36.025	29.610	45.340
G5	30	2.055	0.344	2.045	1.136	2.865
G6	30	21.546	7.411	21.370	5.870	42.410
G8	30	6.998	0.594	6.889	5.989	8.412
G9	30	2.748	0.206	2.704	2.270	3.258

Tab. A3 Correlation matrix

	G2	G3	G4	G5	G6	G8	G9
G1	-0.0849	-0.1589	-0.1267	0.0336	0.0712	0.0465	-0.0223
G2		-0.0501	-0.071	0.6797	0.4039	0.7178	0.2441
G3			0.3862	-0.3708	-0.3925	-0.1758	-0.1668
G4				-0.4364	-0.1763	-0.2236	0.1916
G5					0.6935	0.7111	-0.0119
G6						0.3414	0.2247
G8							-0.216

Note that few correlations exceed 50%. In particular, the Gulpease Index (G1) correlates poorly with all other variables.

The Pearson correlation data are illustrated together with the Spearman correlations (calculated on ranks) in the graphs in Figs. A1-A8.



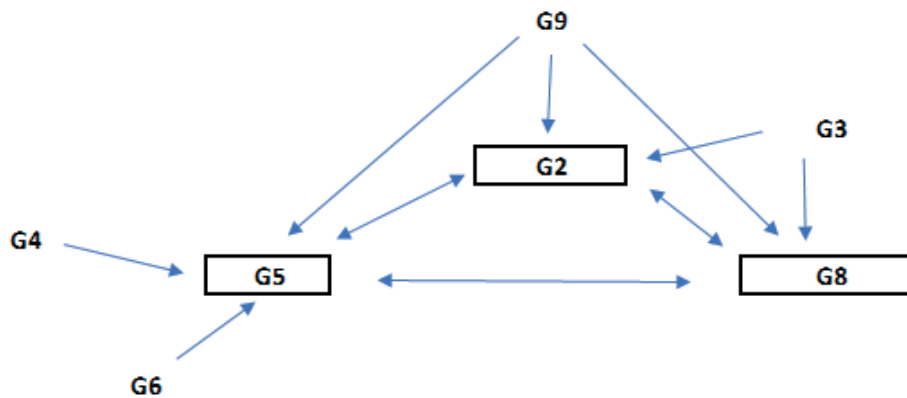
A2. Some multilinear relationships

Regression analysis makes it possible to explain some variables (notably G2, G5 and G8) as a function of these and the remaining ones, excluding G1.

The relationships that emerged from the analysis can be found in Fig. A9 while the coefficients of the joint Seemingly Unrelated Regressions (SUR) are in Tab. A4.

The level of explained variance ($\text{Adj } R^2$) is high at around 70%.

Fig. A9 – Diagram of interrelationships between variables



TAB. A4

Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq
G2	5	25	74.6534	2.9861	1.728	0.7477	0.7073
G5	6	24	0.6326	0.0264	0.1624	0.816	0.7776
G8	5	25	2.8846	0.1154	0.3397	0.7183	0.6732
			SUR Estim	t	Prob > t 		
			G2_0	-64.360	-3.69	0.0011	
			G2_3	6.194	2.32	0.029	
			G2_5	2.619	2.07	0.0487	
			G2_8	4.126	6.33	<.0001	
			G2_9	7.027	4.45	0.0002	
			G5_0	0.752	0.98	0.3368	
			G5_2	0.039	2.49	0.0199	
			G5_4	-0.022	-2.79	0.0102	
			G5_6	0.017	4.23	0.0003	
			G5_8	0.166	1.95	0.0624	
			G5_9	-0.132	-0.73	0.4746	
			G8_0	11.649	3.26	0.0032	
			G8_2	0.161	6.5	<.0001	
			G8_3	-0.927	-1.67	0.1073	
			G8_5	0.152	0.58	0.5655	
			G8_9	-1.323	-4.1	0.0004	

As can be seen, the average sentence length (G2) is explained by the average word length (G3), the number of propositions that make up a period (main and subordinate clauses) and the syntactic structure (G8 and G9).

The number of propositions (G5) is in turn related to the length of the period (G2), the number of subordinates (G6) and the depth of the syntactic tree (G8), while it is inversely related to the number of words not belonging to the basic vocabulary: "difficult" words seem to reduce the articulation of the sentence.

Finally, the depth of the syntactic tree (G8) reflects the length of the period (G2), while it is inversely related to both word length (G3) and, more importantly, the length of dependency relations (G9).

A3. Factor analysis

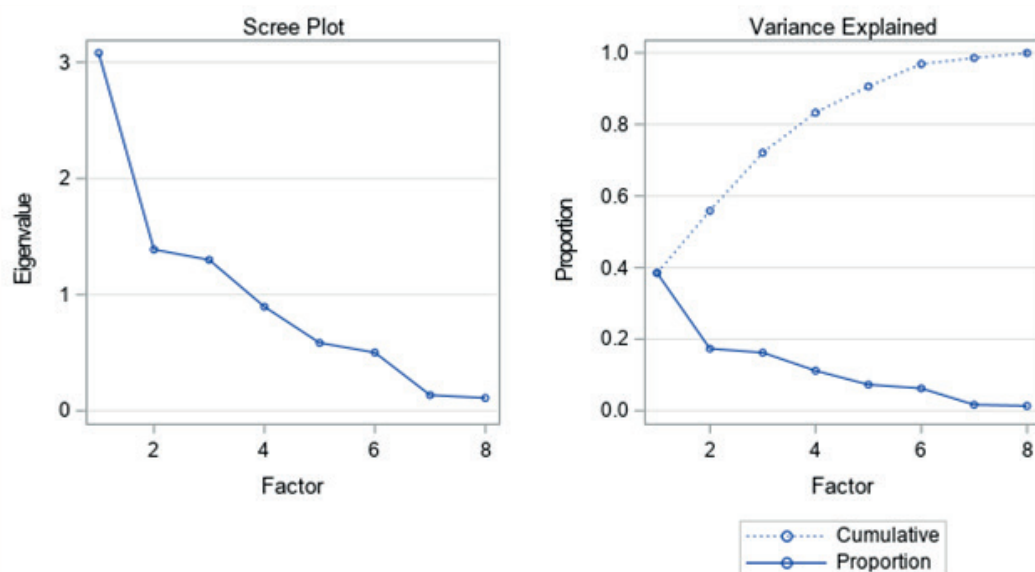
A factor analysis attempts to identify a small number of common factors (3 in the present case) that can explain a significant share of the variability of the 8 observed variables, $G_j, j=1, \dots, 8$

$$G_j = F_1 b_{1j} + F_2 b_{2j} + F_3 b_{3j} + e_j$$

In more detail, the first three common factors explain 72% of the overall variance.

In the present case, the low degree of communality (Fig. A10) indicates that the G_j indicators analysed convey specific information that cannot be comprehensively summarised in a few common factors.

Fig. A10 – Eigenvalues and variance explained



TAB. A5

Initial	The Factor	FACTOR Method:	Procedure Principal	Components
	Eigenvalue	Difference	Proportion	Cumulative
1	3.082	1.692	0.385	0.385
2	1.389	0.089	0.174	0.559
3	1.300	0.404	0.163	0.721
4	0.896	0.311	0.112	0.834
5	0.585	0.083	0.073	0.907
6	0.502	0.366	0.063	0.969
7	0.135	0.025	0.017	0.986
8	0.110	0.014	1.000	
	Factor Pattern			
	Factor1	Factor2	Factor3	
G1	0.09163	-0.51937	0.17354	
G2	0.75451	0.52196	-0.10868	
G3	-0.48925	0.48531	-0.4733	
G4	-0.45952	0.64539	0.12224	
G5	0.94389	0.01062	-0.08696	
G6	0.73254	0.04754	0.35512	
G8	0.78751	0.14119	-0.4453	
G9	0.07637	0.41559	0.82912	

